

**IN THE
SUPREME COURT OF MISSOURI**

No. SC 83599

UTILICORP UNITED, INC., *et al.*,

Appellants,

v.

DIRECTOR OF REVENUE,

Respondent.

**On Petition for Review from the
Missouri Administrative Hearing Commission
Hon. Willard C. Reine, Commissioner**

REPLY BRIEF OF APPELLANTS

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POINT RELIED ON

THE ADMINISTRATIVE HEARING COMMISSION ERRED IN DENYING APPELLANTS' REFUND CLAIMS BECAUSE, UNDER SECTIONS 621.189 AND 621.193, THAT DECISION IS NOT AUTHORIZED BY LAW OR SUPPORTED BY COMPETENT AND SUBSTANTIAL EVIDENCE IN THAT APPELLANT'S PURCHASES OF MACHINERY AND EQUIPMENT ARE EXEMPT FROM MISSOURI USE TAX UNDER SECTIONS 144.615(3) AND 144.030.2(4) AND (5) BECAUSE THE MACHINERY AND EQUIPMENT IS USED TO MANUFACTURE A PRODUCT WITHIN THE MEANING OF THOSE SECTIONS.

Jackson Excavating v. Administrative Hearing Commission, 646 S.W.2d 48 (Mo. 1983);

West Lake Quarry & Material Company, Inc. v. Schaffner, 451 S.W.2d 140 (Mo. 1970);

City of Louisville v. Howard, 208 S.W.2d 522 (Ky. App. 1947);

Concord Publishing House, Inc. v. Director of Revenue, 916 S.W.2d 186 (Mo. banc 1996);

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Galamet, Inc. v. Director of Revenue, 915 S.W.2d 331 (Mo. banc 1996);

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Northern States Power Co. v. Commissioner of Revenue, 571 N.W.2d 573 (Minn. 1997);

Utah Power & Light Company v. Pfof, 286 U.S. 165 (1932);

Section 144.030.2(4);

Section 144.030.2(5);

Section 144.615(3);

Section 621.189;

Section 621.193;

12 CSR 111.010(4)(I).

ARGUMENT

THE ADMINISTRATIVE HEARING COMMISSION ERRED IN DENYING APPELLANTS' REFUND CLAIMS BECAUSE, UNDER SECTIONS 621.189 AND 621.193, THAT DECISION IS NOT AUTHORIZED BY LAW OR SUPPORTED BY COMPETENT AND SUBSTANTIAL EVIDENCE IN THAT APPELLANT'S PURCHASES OF MACHINERY AND EQUIPMENT ARE EXEMPT FROM MISSOURI USE TAX UNDER SECTIONS 144.615(3) AND 144.030.2(4) AND (5) BECAUSE THE MACHINERY AND EQUIPMENT IS USED TO MANUFACTURE A PRODUCT WITHIN THE MEANING OF THOSE SECTIONS.

Introduction

The issue before this Court is whether devices (collectively, "Machinery and Equipment") Appellants purchased are exempt from Missouri sales and use tax under the manufacturing exemptions in §§144.030.2(4) and 144.030.2(5).¹

The Director's entire brief, including her Jurisdictional Statement and Statement of Facts, miscasts the record and misstates the issue in this case. The issue is not whether "delivery equipment" qualifies as manufacturing equipment or whether transmission or distribution qualify as manufacturing. The record refutes the Director's characterization of the Machinery and Equipment as "delivery equipment" (Dir. Br. 7, 20).

¹ All statutory citations are, unless otherwise indicated, to the 1994 Revised Statutes of Missouri.

The issue, instead, is whether Machinery and Equipment is used to manufacture Appellants' products (L.F. 127).² The Director has conceded (and the Commission held) that high-speed generator conversion of mechanical energy into electricity is manufacturing (L.F. 134; Dir. Br.25). Neither the Commission nor the Director dispute that electricity leaving the generators *is not* the product purchased by the vast majority (all but one) of Appellants' customers. Yet remarkably, the Director argues that Appellants' manufacturing process ends at the generation plant, and that further processing of electricity into the form demanded by customers does not constitute manufacturing because "electricity is electricity." This argument is notwithstanding that the electricity exiting the generators is not the product demanded and used by the customers.

This position is inconsistent with Missouri law providing that manufacturing is complete when the product has been finally altered into the form sold to consumers. This Court has consistently rejected similar arguments that "contaminated water is the same as purified water," "large rocks are the same as small rocks," and "metal appliances are the same as shredded metal." *West Lake Quarry & Material Company, Inc. v. Schaffner*, 451 S.W.2d 140 (Mo. 1970); *Jackson Excavating v. Administrative Hearing Commission*,

² The Director apparently takes no exception to Appellants' claim (App. Br. 27), or the Commission's conclusion (L.F. 127), that the other elements of these manufacturing exemptions are satisfied here.

646 S.W.2d 48, 51 (Mo. 1983); *Galamet, Inc. v. Director of Revenue*, 915 S.W.2d 331 (Mo. banc 1996).

The record is clear that all of the Machinery and Equipment is absolutely essential to the manufacture of electricity in the form—voltage, frequency and power factor—demanded by customers and required by regulators. The record also shows that if Appellants customers were all located immediately adjacent to the power generators “creating” their electricity, each of the types of Machinery and Equipment would still be required to “create” electricity at the correct frequency and power factor or to transform the voltage of electricity to that demanded by customers and required by regulators.

Because the Machinery and Equipment either controls the generators that directly create electricity or alter electricity to the form required by Appellants’ customers and regulators, the Machinery and Equipment are used directly in manufacturing. Additionally, because each piece of Machinery and Equipment is an integral part of manufacturing electricity into forms demanded by consumers and required by regulators, the Machinery and Equipment are exempt manufacturing equipment under the integrated plant doctrine.

I. Appellants “Directly Used” the Machinery and Equipment to Manufacture Electricity.

A. The Machinery and Equipment are Not “Delivery Equipment”

The Machinery and Equipment consist of power transformers, capacitors, current transformers, and supervisory control and data acquisition (“SCADA”) equipment; no other purchases are at issue (L.F. 29, 41-42; App. Br., Appendix A-2, A-14, A-15 (¶¶ 5, 62-72)).

The Director argues that Machinery and Equipment are “delivery equipment” (Dir. Br. 7, 20). To support that factual conclusion, the Director allegedly relies on two facts in the record: (1) much of the Machinery and Equipment are located in substations *that utilities label* as part of transmission or distribution stages to provide electricity to customers (Dir. Br. 20); and, (2) it is more economical for utilities to transmit and distribute electricity at high voltage and low amperage, because utilities can use thinner wires (Dir. Br. 26-27). These two facts do not demonstrate that the Machinery and Equipment are simply delivery devices and, as explained in detail below, this factual assertion is contrary to the record. The Director also apparently believes that *factual conclusions* in other court and administrative opinions, including *Niagara Mohawk Power Corp. v. Wanamaker*, 286 A.D. 446, 144 N.Y.S.2d 458 (N.Y. App. Div. 1955), are *factually* controlling here (Dir. Br. 28). As §621.193 makes abundantly clear, it is the record before the Commission in this matter, and not the record before some other tribunal in another case, that must support factual findings.

The Director relies on labels used by utilities to describe their stages of operation (generation, transmission, and distribution) (Dir. Br. 20). However, as discussed in our opening brief (App. Br. 43-44), *and unrefuted by the Director*, tax is determined by economic realities of transactions and not by exulting form over substance. *See Scotchman’s Coin Shop v. Administrative Hearing Commission*, 654 S.W.2d 873 (Mo. banc 1983) and *President Riverboat Casino-Missouri, Inc. v. Missouri Gaming Commission*, 13 S.W.3d 635 (Mo. banc 2000). The economic realities show that the

Machinery and Equipment create electricity or change its form, use, identity, and value, and are thus exempt machinery and equipment under §§144.030.2(4) and 144.030.2(5).

All the power transformers at issue are voltage step-down transformers. Utilicorp's high-speed electric generators produce electricity between 12,500 and 22,000 volts (L.F. 35; App. Br., Appendix A-8 (¶ 37)). Sho-Me's hydroelectric generator produces electricity at 2,400 volts. *Id.* The electricity Sho-Me and NW obtain from Associated is at 69,000 or 161,000 volts (L.F. 35; App. Br., Appendix A-8 (¶ 38)). Of Appellants' more than 250,000 customers, only one customer of UtiliCorp purchases electricity at the generation voltage (L.F. 28-29; App. Br., Appendix A-1/A-2 (¶¶ 2-4)). With that one exception, Appellants must alter voltage of generated electricity before electricity is in the form demanded by the customer and required by regulators (L.F. 28-29, 34; App. Br., Appendix A-1/A-2/A-7 (¶¶ 2-4, 31)). The record demonstrates that six of nine classes of UtiliCorp's customers and that four of nine classes of NW's and Sho-Me's customers demand electricity at voltages below the typical generation voltage of 12,500-22,000 volts (L.F. 34-35; App. Br., Appendix A-7/A-8 (¶¶ 35-36)). Thus, Appellants must step down the electricity's voltage to meet the demands of those customers. For a residential customer, a step-down transformer would be required even if the customer were located immediately adjacent to the power plant. ***Therefore, whether or not there is even any need for transmission or***

*distribution of the electricity, it must be stepped down for those classes of customers.*³

Thus, the step-down transformers are not “delivery equipment.” While it is economically preferable to transmit and distribute electricity at high voltage because smaller wires can be used (L.F. 31; App. Br. App. A-4 (¶ 17)), that fact does not convert an otherwise required product transformation into a mere delivery function.

Capacitors perform two functions. They correct the reactive component of electricity and, like power transformers, transform voltage. For example, large electric motors cause a reactive component that lowers the electricity’s power factor (by causing its voltage cycle to lag its current cycle) and make it less capable of doing work; it is thus less valuable, usable and marketable. Capacitors synchronize the voltage and current cycles and thereby increase electricity’s power factor much like a refiner would increase octane levels of gasoline. To effectively use capacitors, Appellants must apply them in close proximity to customers’ loads creating reactive components of the electricity. The need for capacitors is a function of the number of electric motors in use on the load. Because the loads are constantly changing as large motors are turned on and off, the need for the capacitors constantly changes. As a consequence, capacitors are electronically cycled on and off in response to the changes in the load’s impact on electricity’s reactive component. (L.F. 30-31, 33, 38-39; App. Br., Appendix A-3/A-4/A-6/A-11, A-12 (¶¶ 13, 29, 51-52)).

³ For the other classes of customers, Appellants must increase the voltage to the level demanded. However, there are no step-up power transformers at issue in this case.

Therefore, whether or not there is even a need for transmission or distribution of electricity, Appellants require capacitors to produce electricity in the form (power factor) demanded by customers as a result of the number of large electric motors in the load. If a large assembly plant were located immediately adjacent to the generators, Appellants would require capacitors to offset the reactive component of power caused by the assembly plant's use of large electric motors to provide electricity at the proper power factor. Consequently, capacitors are not "delivery equipment."

The current transformers take measurements of current and voltage at various locations within the utility's system and send that information to remote terminal units ("RTUs"). RTUs collect this data and send it to other parts of the utility's control equipment, including SCADA equipment. SCADA equipment collects data from multiple RTUs, combines it, and passes the same to the automated generation control system ("AGC") that, in turn, controls the high-speed electric generators supplying electricity to the system (L.F. 39-40; App. Br., Appendix A-12/A-13(¶¶ 53-60)). Additionally, SCADA equipment electronically controls capacitors by connecting or disconnecting them from the system, electronically connects or disconnects inductors and controls variable power transformers (load-tap changing transformers) (L.F. 39-40; App. Br., Appendix A-12/A-13(¶¶ 53-60)).

The current transformers and SCADA equipment are an integral part of the production of the electricity sold to consumers because they: (1) control the generators so that they produce no more or less electric energy than demanded, thereby assuring that the

electricity has the *correct frequency* of sixty cycles per second; (2) apply capacitors to the power system to reduce or eliminate the reactive component of electricity caused by large motors of the load; and, (3) control variable power transformers (load-tap changing transformers) so that the voltage of electricity meets the requirements of consumers and regulators. *Id.* ***Whether or not Appellants must even transmit or distribute the electricity they produce, they must still employ the Machinery and Equipment to produce electricity of the desired frequency, voltage and power factor*** because: (1) the need to transform electricity is a function of the demand by all but one of Appellants' customers for electricity at other than the generation voltage; (2) matching supply and demand is required because production of electricity is the ultimate just-in-time manufacturing process (L.F. 33, App. Br. App. A-6 (¶ 25)); and, (3) the need to correct the reactive component of electricity is a function of the number of large motors used in the load (L.F. 33, 38-39; App. Br. App. A-6/A-11/A-12 (¶¶ 29, 52)). Consequently, current transformers and SCADA equipment are not "delivery equipment."

B. Even if the Machinery and Equipment Were "Delivery Equipment," That Would not Prevent Them From Qualifying as Manufacturing Equipment

The Director implicitly assumes, without citing any authority, that if Machinery and Equipment perform a delivery function or "facilitate delivery," they are precluded from exemption as manufacturing equipment (Dir. Br. 28). Nothing in §§144.030.2(4) or (5) contain any such preclusion. Additionally, such a position is directly contrary to the

Director's regulation 12 CSR 111.010(4)(I), which acknowledges that concrete mixing trucks are used directly in manufacturing even though they obviously serve a delivery function. In this case, the Machinery and Equipment do not transport anything; rather, the Machinery and Equipment create electricity or change its voltage, frequency, or power factor to make it marketable and usable, and therefore, are used in manufacturing.

C. The Machinery and Equipment Perform a Manufacturing Function

1. Step Down Power Transformers

The bulk of the Director's argument focuses on Appellants' step-down power transformers. The Director argues that the power transformers are "delivery equipment," and used merely to "facilitate delivery" (Dir. Br. 7, 28). The Director assumes that because utilities can more efficiently transmit and distribute electricity at higher voltages (smaller wires), the only reason a utility would increase voltage from the generation voltage (normally 12,500 volts to 22,000 volts) is for efficient transmission. In advancing that theory, the Director conveniently ignores the fact that many of Appellants' classes of customers demand electricity at voltages substantially greater than the generation voltage and *an increase in voltage is required to produce the product being purchased* (L.F. 34-35; App. Br., Appendix A-7/A-8 (¶¶ 35-36)).

Likewise, and of more relevance because step-down power transformers are the only power transformers at issue, the Director reasons that because of her assumption that utilities step up the voltage only to aid in efficient transmission and distribution, they necessarily step down electricity only because they no longer need efficiency that smaller wires provide. Assuming, *arguendo*, that the Director's assumption is correct, she has

failed to explain why any utilities *ever* buy power transformers to step down the voltage of electricity. If utilities' only concern is efficient transmission, stepping down the voltage only makes its subsequent transmission and distribution more expensive because larger wires are required. The fact that utilities purchase step-down transformers at all demonstrates that the Director's assumption is inconsistent with the utilities' operations.

Furthermore, the record in this case does not require this Court to make any assumptions as to why utilities step down voltage. They step down voltage to produce electricity in the form customers demand. Simply put, electricity exiting the high-speed generators demands a reduction in voltage for the majority of Appellants' customers (L.F. 34-35; App. Br., Appendix A-7/A-8 (¶¶ 35-36)) or the electricity will be of the wrong form. Providing sticks of dynamite will not do if the customers expect firecrackers. Providing cottage cheese will not do if the customers demand milk. Similarly, providing electricity at 12,500 volts or higher will not do if customers (and regulators) require 110/220 volt electricity. These are fundamentally different products, just as firecrackers and milk are different than, respectively, dynamite and cottage cheese. *See Mid-America Dairymen, Inc. v. Director of Revenue*, 924 S.W.2d 280 (Mo. banc 1996) (equating "manufacturing" and "processing," and determining that an "output" with a new use, market value, and

identity was a different manufactured product even if it was not marketed in the original form).⁴

As explained in Appellant’s opening brief, this Court in *West Lake Quarry & Material Company, Inc. v. Schaffner*, 451 S.W.2d 140 (Mo. 1970), adopted a definition for “manufacturing” borrowed from a Kentucky case, *City of Louisville v. Howard*, 208 S.W.2d 522 (Ky. App. 1947). There, as here, the issue was whether step-down power transformers were used directly in manufacturing. The Kentucky court called the electricity leaving the power plant an “uncivilized force” that was “unfit to enter a home or place of business.” *Id.* at 527. The court indicated that after “transformer training” the electricity was, however, a “subdued servant.” *Id.* This Court characterized that holding as follows:

[The Kentucky court held that] an electrical company’s substations and transformers which changed generated electricity so it could be used in homes and places of business constituted machinery used in manufacturing[.]

West Lake Quarry, 451 S.W.2d at 143.⁵ The Kentucky court’s analysis is entirely consistent with the record here: electricity, without transformation, is not the product

⁴ Cottage cheese and milk, among other products, were before the Court in *Mid-America Dairymen*.

⁵ This Court has cited *City of Louisville* case in five other decisions: *Galamet, Inc. v. Director of Revenue*, 915 S.W.2d 331, 333 (Mo. banc 1996); *Unitog Rental Services v.*

customers demand and regulators require and has the capacity to harm Appellants' customers' appliances and cause fires! (L.F. 36; App. Br. App. A-9, ¶ 40).⁶ The Kentucky court's analysis is also consistent with that in *Curry v. Alabama Power Company*, 8 So.2d 521 (Ala. 1942); *Northern States Power Co. v. Commissioner of Revenue*, 571 N.W.2d 573 (Minn. 1997); and *Maine Yankee Atomic Power Co. v. State Tax Assessor*, 690 A.2d 497 (Me. 1997).

The Director cites an eighteen-year old Commission case, *Empire District Electric Co. v. Director of Revenue*, No. RS-79-0249 (Mo. Admin. Hrg. Comm. 1983) in which the Commission determined that a step-up voltage transformer *was exempt* because it was used to start the generators. However, the Commission also concluded that the transformer's step-up function was not manufacturing because the step-up function merely facilitated distribution of electricity. The Director argues, with no support from the record, that the Director and the industry have, since that decision, "understood" that only equipment

Director of Revenue, 779 S.W.2d 568, 569 (Mo. banc 1989); *Jackson Excavating Company v. Administrative Hearing Commission*, 646 S.W.2d 48, 50 (Mo. 1983); *State ex rel. AMF Inc. v. Spradling*, 518 S.W.2d 58, 61 (Mo. 1974); and, *GTE Automated Electric v. Director of Revenue*, 780 S.W.2d 49, 51 (Mo. banc 1989).

⁶ That fact demonstrates the absurdity of the Director's statement that voltage is irrelevant (Dir. Br. 26). Appellants cannot sell something their customers will not buy and why would customers buy electricity in a form that destroys their appliances, offices and homes?

bearing the “generation” label qualifies as manufacturing (Dir. Br. 22). Notwithstanding the Director’s purported “understanding,” *Empire District* involved a step-up power transformer. It is hardly a basis for anyone to conclude that step-down power transformers, or the other Machinery and Equipment, are not used in manufacturing. Indeed, *Empire District* held the step-up transformer exempt. A more plausible explanation is that after *Westlake Quarry*’s acceptance of *City of Louisville*, the industry and the Director understood that step-down power transformers manufactured electricity.

The Director compares the process of reducing voltage to the unpackaging of a box of widgets (Dir. Br. 24-25). This analogy is misplaced. The use, value, and identity of the widget does not change merely because it is placed in a box; nor does its use, value, and identity change when it is removed from a box. By contrast, electricity is of no use, and may be harmful, unless it is in the proper form (voltage). The Director’s argument is akin to saying that there is no difference between purified water and contaminated water because the consumer could simply unpackage the contaminated water by removing its contaminants by use of a filter; an argument contrary to *Jackson Excavating, supra*. Likewise, under the Director’s theory, a 12 volt car battery is the same product as a 1.5 volt flashlight battery, but just packaged differently. But they are clearly different products with different uses, values, and identities.

The Director cites the West Virginia formula, watts (power) = volts (force) x amps (current), and argues that because transformers do not change power (watts), the electricity is not a different product after transformation (Dir. Br. 28-30). As this record makes abundantly clear, power is not the only characteristic of electricity. It has a voltage, a

frequency, and a power factor. Simply because one characteristic remains unchanged does not mean that the product is not in a new or different form as demonstrated by the record applied to the Director's example. Suppose 220 volt electricity is delivered to a state office building at 10 amps. Under the West Virginia formula, the building is receiving 2,200 watts of power (220×10); all appliances operate effectively and the customer is happy. If, however, a step-down power transformer malfunctions, 22,000 volt electricity may be provided to the office building at 1/10 amp. While the building still receives power at 2,200 watts ($22,000 \times 1/10$), all of the appliances have been destroyed and the building has caught fire. Clearly, electricity at 22,000 volts is a fundamentally different product, with a different use, value and identity, than 220 volt electricity.

The Director also implies that unless the laws of physics dictate the form of a product that consumers demand, changes in form are not manufacturing (Dir. Br. 31). This claim is patently absurd. Are whole milk, two percent milk and skim milk all the same product? If so, then a dairy company's separation of fat from milk is not manufacturing. No law of physics demands that skim milk be manufactured with 0.5% fat. No law of physics dictated the size of scrap metal shreds in *Galamet*, but this Court concluded that the shredding was manufacturing. The Director cites no provision of Missouri's sales tax law restricting the manufacturing exemption to transformations dictated by the laws of physics because, of course, there is no such restriction.

Because the step-down power transformers transform electricity to the form demanded by consumers and required by regulators, and because that form has a different

use, value and identity than the electricity prior to transformation, the step-down transformers are manufacturing equipment.

2.

Capacitors, Current Transformers, and SCADA Equipment

The Director argues that the capacitors, current transformers, and SCADA equipment are not manufacturing equipment because they are used for “maintenance of standards during delivery” (Dir. Br. 35-37). She compares those items of Machinery and Equipment to refrigeration units on delivery trucks and to cleaning and inspection equipment, *citing Wetterau, Inc. v. Director of Revenue*, 843 S.W.2d 365 (Mo. banc 1992) and *L & R Egg Co. v. Director of Revenue*, 796 S.W.2d 624 (Mo. banc 1990) (Dir. Br. 36). Contrary to the Director’s argument, capacitors, current transformers, and SCADA equipment alter electricity’s form to that demanded by consumers and regulators; they alter its voltage, frequency, or power factor.

Capacitors alter electricity’s voltage and power factor. They do this for two reasons, neither of which relate to delivery: (1) because customers demand electricity at a certain voltage, a voltage that in almost every case is not the generation voltage; and (2) because customers demand electricity without the reactive component caused by electric motors in the load. As explained above, transforming electricity’s voltage to that demanded by consumers and regulators is a manufacturing function. Likewise, the capacitors’ removal of the reactive component of electricity caused by the load is performed to provide electricity of the demanded power factor. This is a quality control function only in the same sense that Jackson Excavating’s purification of water was a quality control function. Removing

electricity's reactive component is a fundamental operation undertaken to produce the product in the form demanded by purchasers.

The current transformers and SCADA equipment perform a number of important manufacturing functions, none of which relate to delivery. Current transformers and SCADA equipment, working directly with other equipment, monitor the electric system and control variable power transformers and capacitors so that electricity is of the voltage and power factor demanded by consumers and regulators. Working directly with other equipment, they also regulate the output of the high-speed electric generators to match supply and demand to produce electricity of the correct form: sixty cycles per second. Electricity at the wrong frequency is not the product consumers or regulators require because, among other things, it will not allow electric clocks to function properly.

Unlike refrigeration equipment or egg-cleaning equipment, the capacitors, current transformers and SCADA equipment collectively alter the form of the product; they change electricity's power factor, voltage and frequency to that demanded by consumers and regulators.

D. The Machinery and Equipment are Part of the Integrated Manufacturing Plant

In *Floyd Charcoal Company, Inc. v. Director of Revenue*, 599 S.W.2d 173 (Mo. 1980), this Court adopted the integrated plant approach to manufacturing. The integrated plant approach is a practical rule that courts apply to give weight to the policies underlying the exemption of machinery and equipment used in manufacturing—to avoid double taxation and to encourage the location and expansion of industry. *Id.* at 177. The integrated

plant approach recognizes that manufacturing is designed to operate on an integrated basis. Accordingly, the manufacturing equipment exemptions are not limited to machinery and equipment that physically change the product. Here, the Machinery and Equipment either directly (power transformers and capacitors) or, working with other equipment (current transformers and SCADA equipment), physically change electricity to the form demanded. In addition, however, each item is essential to Appellants' continuous and largely indivisible electricity manufacturing systems.

The current transformers and SCADA equipment are actually part of the controls on the high-speed generators that the Commission concluded, and the Director concedes, are used directly in manufacturing electricity. The transformers and capacitors, individually and collectively, physically change the form of electricity to that demanded by consumers and required by regulators. This Machinery and Equipment is "essential to and a part of the manufacturing ... of the [electricity] into final products." *See Noranda Aluminum, Inc. v. Director of Revenue*, 599 S.W.2d 1, 4 (Mo. 1980).

The Director does not dispute that all of the Machinery and Equipment are essential to produce electricity in the form demanded by Appellants' customers, and she apparently concedes that UtiliCorp is a manufacturer. Rather, she continues her assault on the record by arguing that none of the Machinery and Equipment is "production" equipment because it is all "delivery" equipment and therefore not eligible for treatment under the integrated plant doctrine (Dir. Br. 38-39). However, the record demonstrates that: (1) ***whether or not there is any need to transmit or distribute electricity***, current transformers and SCADA equipment are needed to match supply and demand to manufacture the correct amount of

electricity at the correct frequency and to control capacitors and transformers; (2) *whether or not there is any need to transmit or distribute electricity*, transformers are required to transform the voltage of electricity to the various forms demanded by the various classes of customers; and (3) *whether or not there is any need to transmit or distribute electricity*, capacitors are required to produce electricity of the correct power factor.

Additionally, the Director argues that NW and Sho-Me cannot rely on the integrated plant doctrine because NW owns no power generators, and Sho-Me's hydroelectric generating facility does not produce most of its power (Dir. Br. 38-39). She reasons that without generators one cannot manufacture electricity. This reasoning is at odds with *Galamet*, 915 S.W.2d 331 (Mo. banc 1996), in that Galamet did not generate or create the scrap metal; it changed its form by reducing it to metal shreds having a new use, value and identity. NW and Sho-Me do the same when they buy electricity from Associated and, *by use of transformers and capacitors*, change its form (voltage and power factor) to that demanded by their customers.

As for Sho-Me's and NW's current transformers and SCADA equipment, the Director argues that the integrated plant doctrine is inapplicable because they directly control the output of another company's generators. But, in making this argument, the Director forgets that those items also control Sho-Me's and NW's power transformers and capacitors. In addition, even if those items controlled only Associated's generators, that would still be an exempt function. In *DST Systems, Inc. v. Director of Revenue*, 43 S.W.3d 799 (Mo. banc 2001), citing *Concord Publishing House, Inc.*, 916 S.W.2d 186, 192 (Mo.

banc 1996), this Court applied the integrated plant doctrine to two corporate entities “so long as both businesses work together to manufacture a single product.” Although both cases involved separate, but related, entities, there is nothing in the sales tax law, *Concord*, or *DST*, that provides any basis for holding the integrated operations of related companies eligible for exemption while unrelated companies are ineligible. Because there is no doubt that Sho-Me, NW and Associated work together to manufacture a product, the Director’s argument is misplaced.

The Director argues that Appellants’ construction will not further the goals of exemption because manufacturers producing electricity for sale in Missouri must locate the Machinery and Equipment in Missouri anyway in order to do business here (Dir. Br. 42). This argument is incorrect because the exemption is intended to encourage industries to locate in Missouri. If one state offers exemptions for the Machinery and Equipment, and Missouri does not, all other things being equal, industry will locate in that other state. With deregulation of the electric utility industry, these considerations are more prominent since electric companies will no longer be restricted to serving customers in their immediate geographic area.

Last, the Director argues the exempt status of numerous types of machinery and equipment not before this Court (Dir. Br. 42-43). Then, having expanded this case, the Director argues, with utterly no support in the record, that the loss of revenue will be “enormous.” *Id.* The issue before this Court is the taxability of current and power transformers, capacitors and SCADA equipment. Furthermore, this Court’s function is not to determine whether a loss in sales/use tax revenue because of an exemption will, as the

legislature assumed, be offset by the increase in income, employment and franchise taxes as a result of industry's migration to Missouri. Nor is this Court's function to second guess the policy of preventing multiple taxation (by charging tax on machines manufacturing taxable products and then taxing the sale of the product). In any event, it is equally likely that a decision exempting the purchase of the Machinery and Equipment will induce more electricity manufacturers to locate in Missouri, thereby generating a net increase in Missouri revenues based upon additional income, employment and franchise taxes, a result intended by the manufacturing exemption.

II. The Weight of Authority From Outside of Missouri Supports Appellants

A. Appellants' Authorities

The Director challenges Appellants' outside authorities because the courts therein "became too distracted by the trees and lost sight of the forest" (Dir. Br. 43). If by "trees" the Director means "facts in the record" and by "forest" the Director means "facts in another record and assumptions of fact," then those courts stand convicted.

In the recent decision of *Northern States Power Company v. Commissioner of Revenue*, 571 N.W.2d 573 (Minn. 1997), the Minnesota Supreme Court concluded that "manufacturing" under Minnesota's statutory scheme was defined as a process that ends when the completed state of the product is achieved. *Id.* at 575. It noted that the record in that case showed that electricity was not in its final state or in a form usable by the customers in the absence of voltage reduction by step-down power transformers. Accordingly, it held the transformers exempt.

Two versions of the exemption were in existence during the tax period under examination in *Northern States*, June 1, 1990 through March 31, 1994. The first version exempted “equipment used for ‘manufacturing ... a product to be sold at retail.’” *Id.* at 574. The Court’s inquiry under the first version was “whether the transformers are used to manufacture electricity.” *Id.* at 575. Another version of the exemption, effective for 1993 and after, exempted “equipment used for ‘manufacturing ... tangible personal property, or for the generation of electricity or steam, to be sold at retail.’”

The Director asserts that, based upon the language of the amendment, the Court should have found against the utilities (Dir. Br. 44-45), an argument without basis for distinguishing the *Northern States* case. The statutory amendment is irrelevant because it is markedly different from Missouri’s exemption. The original version is relevant because it mirrors Missouri’s exemption. On facts comparable to the facts in this record, the Minnesota Supreme Court correctly reasoned that the original version of the Minnesota exemption applied to power transformers because they converted the product to its final state and made the electricity usable.

The Director also argues that the record here differs from that of *Northern States* in that there is no stipulation that the electricity is not usable as it exits Appellants’ generators (Dir. Br. 45). This record demonstrates that only one customer buys power at the generation voltage. If the other customers, over 250,000 of them, used power at the generation voltage, they would purchase it at that voltage. Apparently, the Director believes that, for instance, residential customers demanding 110 volt electricity can use 22,000 volt electricity even though that form of electricity may destroy their appliances and start fires.

Similarly, in *Maine Yankee Atomic Power v. State Tax Assessor*, 690 A.2d 497 (Me. 1997), the Maine Supreme Court held that step-up power transformers qualified for the manufacturing exemption. As here and in *Northern States*, the court noted that the utility's customers demanded electricity at different voltages than produced by the generators. The court held that because the transformers changed the form, character and composition of the electricity and because usable electricity could not be produced without the transformers, the transformers were both an essential and integral part of the production process. *Id.* at 500. Thus, the court held that the purchases of the transformers were exempt from Maine sales tax.

The Director attempts to distinguish *Maine Yankee* by arguing that the record here does not establish that the Machinery and Equipment change the “form, composition or character” of electricity because, to paraphrase the Director, “watts are watts” (Dir. Br. 46). That is akin to saying that one ton of boulders is the same as one ton of lime, a contention this Court rejected in *West Lake Quarry*. It is a simple fact that electricity of the wrong form is not the product demanded by customers, and may harm their appliances and buildings. The Director also argues that Missouri's definition of manufacturing is more restrictive than Maine's (Dir. Br. 47) even though Missouri borrowed its definition of manufacturing from *City of Louisville*, a decision holding that step-down power transformers were used in manufacturing. As explained above, the Machinery and Equipment, including the power transformers, meet Missouri's definition of manufacturing.

In *Curry v. Alabama Power Company*, 8 So.2d 521 (Ala. 1942), a decision of the approximate vintage of the most recent non-Missouri authorities the Director cites, the

Alabama Supreme Court held that transformers are “processing machines” entitled to Alabama’s manufacturing equipment exemption because transformers convert electricity into a marketable form which is usable. *Id.* at 526. The Director argues that *Curry* “only concerned whether generation of electricity was the manufacture of tangible personal property” (Dir. Br. 47-48). The holding in *Curry* was not so limited; the court expressly concluded that transformers were processing machines because they “change the voltage of electricity to suit the use of the customer.... The purpose of the transformer is to put electricity in a form which is usable. Energy is transformed in order to make it marketable to domestic users.” *Id.* at 526.

The Director also challenges the decision because the Director believes the court found that transformers “generate” electricity (Dir. Br. 48), presumably based upon the court’s characterization of expert witness testimony that “the electricity generated by the transformer is new electricity or electric current generated upon the same principle as in the first instance by the use of the generator,” *id.* at 523, even though it is obvious that the court intended the word “generated” in its generic sense. The Director also challenges the decision because the Court did not consider whether transmission and distribution were manufacturing (Dir. Br. 47). But as explained above, that is not the issue before this Court and, therefore, is no basis for distinguishing *Curry*.

B. The Director’s Authorities

The Director’s non-Missouri authorities do not address capacitors, current transformers or SCADA equipment and, as explained below, are not persuasive.

The Director, like the Commission, relies heavily on *Niagara Mohawk*, but more for its factual conclusions rather than its legal analysis (Dir. Br. 28, 35). The *Niagara* court made a key ***factual conclusion regarding power transformers***: that distribution is the only reason for voltage transformation. The record in this case demonstrates that this is not true for Appellants' operations. The product is not complete until the electricity is transformed to customer specifications and whether there was even a need for distribution, the Machinery and Equipment is required. The Director is bound by the record in this matter. Section 621.193.

The Director also cites *Niagara* for the legal conclusion that because power transformers do not “create” more electricity, they are not engaged in manufacturing (Dir. Br. 35; *Niagara*, 286 A.D. at 450-51). This legal conclusion, that a device must “create” the raw product to be engaged in manufacturing, is contrary to *Galamet*, *West Lake Quarry*, and *Jackson Excavating*. In none of those cases did the machinery and equipment at issue create the raw products (scrap metal, rock, or water).

The Director mentions *Utah Power & Light Company v. Pfof*, 286 U.S. 165 (1932) (Dir. Br. 21, 23). There, the United States Supreme Court addressed a challenge to an Idaho tax on the transfer of electricity ***generated, manufactured, or produced*** in Idaho. The taxpayer argued that the tax impermissibly burdened interstate commerce because its entire electric utility system was the generating plant and various parts of the system were located across state lines. The Court concluded that the electricity was “***generated***” at the location of the generators, which were in Idaho. The issue here is not whether the

Machinery and Equipment “generate” electricity. Furthermore, the record in *Utah Power* does not enable one to determine if any of the taxpayer’s customers bought and used electricity in a form different from that exiting the generators. In fact, the taxpayer’s chief engineer testified that “this process of transformation is complete at the generator.” *Id.* at 286 U.S. 181. In this case, with one exception, none of Appellants’ customers buys and uses power in the form it exits the generator.

The Director cites *Forrester v. North Georgia Electric Membership Corporation*, 19 S.E.2d 158 (Ga. Ct. App. 1942) (Dir. Br. 23) in which a divided Georgia Court of Appeals determined that an electric cooperative’s power transformers, poles and wires did not qualify for an exemption that applied to “any person ... who ... establish[es] or enlarg[es] a plant ... for the production or development of electricity” because the cooperative had no generators. Against a strong dissent, the court held that the taxpayer did not “develop” electricity at a “plant” because it did not create electricity, but rather converted it after purchasing it from the Tennessee Valley Authority. Thus, the Georgia court addressed a different issue than presented here, as it acknowledged: “the cases we have examined [relating to manufacturing electricity] do not furnish a precedent for the question here presented.” *Id.* at 162.

The Director cites *People’s Gas & Electric Company v. State Tax Commission*, 28 N.W.2d 799 (Iowa 1947) (Dir. Br. 23-24), in which a divided Iowa Supreme Court held that transformers, poles, and wires were not used to manufacture electricity because manufacturing was complete at the generators. The *Peoples’ Gas* rationale is directly contrary to the Missouri Supreme Court’s decision in *West Lake Quarry* in which the

limestone was not in its final state until it had been ground to West Lake's customers' specifications. The dissent in *Peoples' Gas* reflects the realities of the contribution transformers make to the manufacturing of electricity:

It seems immaterial whether this transmission and transforming operation be called 'manufacturing' of new electricity or 'servicing' of the original energy. It is in neither case comparable to the use of a knife 'to slice off the part of a load (of unpackaged commodity) for customer use' as said by the majority opinion. In fact it has no analogy or reference to quantity. It is rather a process necessary in order to change the nature of the 'commodity' or to make it over into a new 'commodity' suitable for consumer use. Its connection with the problem of distribution is incidental.

Id. at 815.

Last, the Director cites *Kentucky Electric Co. v. Buechel*, 146 Ky. 660, 143 S.W.2d 58, 62 (1912) (Dir. Br. 22) in which the Kentucky Supreme Court concluded that "the ground upon which the manufacturing plant was located, the building erected thereon, and the machinery and appliances used therein in generating or manufacturing the electricity" were exempt manufacturing plant under an exemption from property tax for new manufacturing plants locating in Louisville. It concluded that "poles, wires, conduits, and other property outside of its factory proper" were not exempt. *Id.* at 61-62. The court's analysis centered on whether generating electricity from mechanical energy was manufacturing; there is no discussion of the specific machinery and equipment located in

the plant. Likewise, there was no indication whether exemption was even claimed for power or current transformers, capacitors, or SCADA equipment.

By her citation of the above authorities, the Director apparently assumes that this Court would not have allowed West Lake the exemption if the grinding operations had been conducted at a separate West Lake facility, or would not have allowed the exemption to another taxpayer if it purchased the mined limestone from West Lake and performed the grinding operations itself. But such an assumption commands no support from Missouri law. Galamet did not create the scrap metal, but this Court allowed it the manufacturing exemption. In summary, the Director's authorities are inapposite or contrary to established Missouri law.

CONCLUSION

Based on the foregoing and the arguments set forth in Appellants' Opening Brief, Appellants respectfully request that this Court reverse the Commission and remand with instructions to sustain Appellants' refund claims.

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CERTIFICATE OF SERVICE

I hereby certify that two true and accurate copies of the foregoing, as well as a labeled disk containing the same, were mailed first class, postage prepaid or hand-delivered this _____ day of August 2001, to Todd Iveson, Deputy General Counsel, Missouri Department of Revenue, P.O. Box 475 Jefferson City, Missouri 65105-0475.

CERTIFICATE REQUIRED BY SPECIAL RULE 1(C)

I hereby certify that the foregoing reply brief includes the information required by Supreme Court Rule 55.03 and complies with the limitations contained in Supreme Court Special Rule 1(b). The foregoing brief, excluding the cover page and certifications, contains 7,619 words.

The undersigned further certifies that the disk simultaneously filed with the briefs filed with this Court under Supreme Court Rule 84.05(a) has been scanned for viruses and is virus-free.