#### COMMONWEALTH OF KENTUCKY

# BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

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THE APPLICATION OF THOROUGHBRED	)	
GENERATING COMPANY, LLC FOR A	)	CASE NO.
MERCHANT POWER PLANT CONSTRUCTION	)	2002-00150
CERTIFICATE IN MUHLENBERG COUNTY,	)	
KENTUCKY	)	

Before: Martin J. Huelsmann, Chairman

Robert E. Spurlin

Henry List J.R. Wilhite David Rhoades Randall Smith

### ORDER

# PROCEDURAL HISTORY

Thoroughbred Generating Company, LLC (Thoroughbred)<sup>1</sup> filed an application before the Kentucky State Board on Electric Generation and Transmission Siting (the Board) on July 17, 2003 for approval to construct a 1500 MW coal-fueled electric generation facility (the Facility) in Muhlenberg County, Kentucky. Thoroughbred filed an amended application on October 13, 2003, and it was deemed administratively

<sup>&</sup>lt;sup>1</sup> Thoroughbred is a wholly owned subsidiary of Peabody Energy Corporation (Peabody Energy) and is principally located at 701 Market Street, St. Louis, Missouri.

complete on that date by the Board's November 5, 2003 Order.<sup>2</sup> Intervention was granted in this case to Big Rivers Electric Corporation (Big Rivers), Louisville Gas and Electric Company and Kentucky Utilities Company (KU/LG&E), Gary Watrous, and Western Kentucky Energy Corporation (WKE).

On September 3, 2003, Big Rivers filed a Motion to Deny the Thoroughbred Application. Big Rivers argued that Thoroughbred had failed to satisfy the minimum filing requirements set forth in KRS 278.706(2)(g) (requiring a summary of the efforts the applicant has made to locate the Facility on a site where existing generation facilities are located) and 278.706(2)(j) (requiring an analysis of the economic impact the Facility will have upon the region and the state). In support of the argument that Thoroughbred had failed adequately to address the economic impact the Facility would have on the region and the state, Big Rivers pointed out that Thoroughbred revealed only the favorable economic impacts of the Facility and failed to disclose the unfavorable. Big Rivers suggested that emissions and discharges from the proposed Facility could adversely affect the surrounding economy and that, due to a finite limit on certain emissions, future economic development in the region could be negatively affected by construction of the Facility.

<sup>&</sup>lt;sup>2</sup> The application was initially determined to be administratively complete on August 5, 2003. However, when the Board convened a public hearing on October 21, 2003 to consider the application, it was discovered that the public notice required by 807 KAR 5:110, Section 9(1) had not been given. The hearing was recessed and reconvened on November 10, 2003 upon proper public notice. Pursuant to the parties Joint Motion, the statutory deadlines governing this case are predicated upon an administratively complete date of October 13, 2003, although no party has waived its right to object to the sufficiency of the application.

Thoroughbred argued in response that less evidence is necessary to satisfy a minimum filing requirement than is necessary to justify a decision to grant a certificate. Thoroughbred also contended the Board lacks jurisdiction over emissions or discharges from a merchant generating plant, and thus cannot consider the economic impact emissions and discharges would have upon the region and the state. The Board found that the economic impact analysis required by the statute is not limited to analysis of any specific factors. To the extent that emissions and discharges from a merchant generating plant can be shown to have an economic impact on the region and the state, the Board can consider them in reaching its decision on the merits. The Board entered its Order on October 1, 2003 finding that the motion had a factual basis that had not been subject to testing at a hearing, and deferred a ruling on the motion pending conclusion of the evidentiary hearing.

On October 20, 2003, Thoroughbred filed a motion to strike the testimonies of Durham, a witness for Big Rivers, and intervenor Gary Watrous. In support of its motion, Thoroughbred argued that the testimony of both witnesses concerned air quality and emissions issues beyond the jurisdiction of the Board to consider under KRS 278.710, and further that the testimony regarding the economic impact on the region and the state was too speculative for consideration in an administrative proceeding.

By Order issued November 3, 2003 the Board overruled the motion, finding that the objections raised by Thoroughbred were sufficient to affect the weight accorded such testimony but were insufficient to warrant striking it altogether.

An evidentiary hearing on the merits of the application was held on November 10, 2003. During the public hearing, the Board identified several issues as being

appropriate for further written response by the parties. Thoroughbred, Big Rivers, and KU/LG&E responded to questions regarding: (1) cost recovery related to construction of transmission upgrades necessary if the Thoroughbred merchant plant is constructed; and (2) the extent to which the Federal Energy Regulatory Commission (FERC) would be involved in resolving any disputes between the parties that arose with respect to recovery of those costs. Thoroughbred was also asked to respond in writing specifically addressing whether it would waive any rights or claims it might otherwise assert to recovery of the costs through transmission credits, cash refunds, or otherwise. These issues are relevant to the Board's analysis of the impact on Kentucky's electrical grid, on the customers currently served by Big Rivers member cooperatives and KU/LG&E, and the prohibition of subsidies by Kentucky customers of merchant generator expenses pursuant to KRS 278.212. The responses were filed on November 17, 2003. Post-hearing briefs were filed on November 24, 2003.

We now review the evidence presented in this case with regard to the statutory criteria listed in KRS 278.710(1). Moreover, as KRS 278.708(6) authorizes the Board to condition a construction certificate upon the implementation of any mitigation measures deemed appropriate, we order mitigation strategies as necessary. Based upon the following, we conditionally grant the requested certificate.

#### STATUTORY CRITERIA

#### Introduction

Pursuant to KRS 278.706(1), no person shall commence to construct a merchant electrical generating facility until that person has applied for and obtained a construction certificate for the proposed facility from the Board. KRS 278.710(1) directs the Board to

consider the following criteria in rendering its decision: impact on scenic surroundings, property values, and surrounding roads; anticipated noise levels; economic impact upon the affected region and the state; the existence on the proposed site of other generation facilities capable of generating at least 10 MW of energy; local planning and zoning requirements; potential impact upon the electricity transmission system; compliance with statutory setback requirements; efficacy of any proposed measures to mitigate adverse impacts; and history of environmental compliance. We will evaluate the application pursuant to all the statutory criteria herein; however, as two of the statutory criteria were the subject of numerous motions, objections, and extensive testimony, they will be treated first.

# Potential Impact on the Electric Transmission System

Before the Board may grant a merchant plant construction certificate, it is required to consider whether the additional load imposed upon the electricity transmission system by the proposed facility will adversely affect the reliability of service for retail customers of electric utilities regulated by the Kentucky Public Service Commission ( PSC ). It is apparent from a review of the application that the proposed Facility will require certain upgrades to Kentucky's transmission grid if the present level of service reliability to Kentucky's retail electric customers is to be maintained. The fact that there will be an adverse impact on the grid if the Facility is constructed is undisputed.

<sup>&</sup>lt;sup>3</sup> Thoroughbred Application, Section 5, Commonwealth Associates, Inc. Interconnection Impact Study at 5-6.

# Economic Impact: Potential Adverse Effects on Electric Rates

The proposed project will require construction of transmission facilities by PSC-regulated utilities to interconnect the new Facility to Kentucky's transmission grid. The subsequent operation of the Facility will require numerous and significant transmission network upgrades to protect the reliability of the existing transmission grid. While we accept the findings submitted in the Interconnect Impact Study, we are also aware that additional transmission studies will be needed to further define and evaluate necessary transmission system upgrades and additions. We therefore will require Thoroughbred to submit those final transmission interconnect studies within 20 days of their completion.

At issue in this proceeding is the question of who pays the cost of the network upgrades and how those costs will be recovered. Construction of the Thoroughbred Facility will necessitate significant transmission investment, the majority of which would be under the jurisdiction of FERC, not the PSC, with respect to transmission rates and cost recovery. Currently, FERC favors subsidizing the costs of network upgrades by all users of the transmission grid, even though those users do not need additional generation, and even though the upgrades would have been unnecessary but for the generation facility being constructed.<sup>4</sup> Consequently, PSC-regulated utilities would potentially bear transmission costs for the proposed Facility, and those costs would flow through to Kentucky retail customers.

In exercising its jurisdiction over the siting of merchant generation, the Board is obligated to uphold Kentucky law. KRS 278.212 requires that any costs or expenses

<sup>&</sup>lt;sup>4</sup> Order No. 2003, FERC Stats & Regs. § 31, 146(2003) (Order 2003).

associated with upgrading the existing electric transmission grid, as a result of the additional load caused by a merchant electric generating facility, shall be borne solely by the person constructing the merchant electric generating facility and shall in no way be borne by the retail electric customers of the Commonwealth.

Much of the testimony at the hearing concerned the method of recovery of network upgrade costs should Thoroughbred be entitled to recovery of its upfront and initial investment. In their post-hearing responses, Thoroughbred and the intervenors agreed that Thoroughbred should be responsible for the upfront payment of the costs of network upgrades. There is considerable disagreement among the parties as to how and whether Thoroughbred can recover its investments in network upgrades through the use of transmission credits or refunds pursuant to FERC's present policy. The parties were asked to address the issue of this cost recovery mechanism and its effect on each of them.

# Thoroughbred s Response

In its response of November 17, 2003, Thoroughbred indicates that it will comply with all requirements of Kentucky law. It agrees to accept cost responsibility for payment of all costs to Big Rivers and KU/LG&E associated with transmission interconnection and network upgrades. However, Thoroughbred does not waive any rights it has under the Federal Power Act and the FERC rules to collect transmission credits from Big Rivers and KU/LG&E for use of any transmission facilities where Thoroughbred has paid for the network upgrades. Thoroughbred believes that no such waiver is required by Kentucky law.

Thoroughbred argues that if it funds the upgrades, it should be allowed to recover its investment pursuant to FERC's policy of allowing transmission credits. In its November 17, 2003 response to post-hearing data requests, Thoroughbred expressly waived its right under FERC's policy to a cash refund at the expiration of a five-year period. It suggests, however, that instead of the cash refund, it should continue to receive transmission credits until its investment is fully recovered.

# KU/LG&E s Response

KU/LG&E objects to refunding all monies fronted by Thoroughbred regardless of whether Thoroughbred purchases transmission service from KU/LG&E. The construction of the Thoroughbred Facility will require the construction of a 345 kV interconnect between Big Rivers and KU to prevent degradation of KU s present level of service.<sup>5</sup> Thus, while the exact amount of the investment is not known, it is apt to be quite large.

Under its present rule, FERC has decreed that affected systems <sup>6</sup> such as KU must be solely responsible for the payment of these costs. The affected system is responsible for payment of the costs (via the crediting mechanism) even where no means for partially offsetting revenues exist. <sup>7</sup> KU/LG&E argue that the crediting of amounts related to these system upgrades unfairly requires KUs retail customers to subsidize the cost of facilities that would not be required by KU but for the construction

<sup>&</sup>lt;sup>5</sup> KU/LG&E Post Hearing Data Request at 4.

<sup>&</sup>lt;sup>6</sup> An affected system, KU/LG&E explains, is a system other than a transmission provider that is affected by the interconnection. KU/LG&E Brief at 3.

<sup>&</sup>lt;sup>7</sup> KU/LG&E point out that there is no guarantee that Thoroughbred will utilize any portion of their system for actual transportation service.

of Thoroughbred's Facility. It also unfairly requires KU's retail customers to subsidize the cost of transmission facilities that are unnecessary to provide or maintain their present level of service.

Although Thoroughbred represents to this Board in its November 17, 2003 response that it will be entitled to transmission credits only to the extent that it receives transmission service, this statement appears to be at odds with KU/LG&E's understanding of FERC's intent. KU/LG&E represent that the affected transmission system must refund to the generator the entire amount of the system upgrades even if the generator has not contracted for transmission service.

KU/LG&E is reasonably assured that FERC will attempt to enforce the provisions of FERC Order 2003 upon KU/LG&E with respect to its future Interconnect Agreement with Thoroughbred. KU/LG&E request the Board to condition any approval of the Thoroughbred Facility upon KU/LG&Es receipt of an Order from FERC waiving the Order 2003 crediting rules or otherwise permitting Thoroughbred to assign back to KU any credits required under FERC Order 2003.

## Big Rivers Response

Big Rivers is a non-public utility under the Federal Power Act and as such is not subject to FERC's jurisdiction. In its data responses, Big Rivers states that the provisions of FERC Order 2003 do not apply to it. It also suggests that Thoroughbred is responsible for all directly-assignable costs incurred to interconnect its generation facility with the Big Rivers system. Thoroughbred has no rights to credits for these

<sup>&</sup>lt;sup>8</sup> KU/LG&E Post Hearing Data Request at 3-4.

<sup>&</sup>lt;sup>9</sup> <u>Id.</u> at 4.

facilities under FERC rules.<sup>10</sup> However, Thoroughbred has indicated in its November 17, 2003 response that it expects to receive transmission credits for the payment of network upgrades consistent with the FERC rules. Thoroughbred goes on to say that it expects the treatment described above.

Big Rivers identifies three options available with respect to the costs of network upgrades. The first option is for Thoroughbred to pay for the upgrades up front; Big Rivers rolls the costs of the upgrades into its transmission rate base; Thoroughbred pays the new transmission rates to Big Rivers and receives transmission credits and a refund of the unamortized amount after five years. This is the same treatment required under FERC's rules for a public utility. According to Big Rivers, this option will not work since any cash payment required at the end of five years is unrecoverable from its ratepayers and it has no other source from which to make the cash refund.<sup>11</sup>

The second option differs from the first only in that Thoroughbred receives no transmission credits and is due no refund at the end of five years. This is the option Big Rivers requests the Board consider as a condition to impose on Thoroughbred if the certificate is granted. The third option involves Thoroughbred and Big Rivers negotiating an Interconnect Agreement in the future that contains elements of the first and second options. That Interconnect Agreement would be subject to approval of the PSC and would have to be consistent with the provisions of KRS 278.212(2).

<sup>&</sup>lt;sup>10</sup> Big Rivers Post Hearing Data Request at 5.

<sup>&</sup>lt;sup>11</sup> Big Rivers Brief at 11.

# Board Discussion of the Concerns of KU/LG&E and Big Rivers Pertaining to Cost Recovery

We agree with KU/LG&E that permitting Thoroughbred to recoup its investment through the use of transmission credits where no transmission service is provided unfairly penalizes KU/LG&E retail customers and clearly violates Kentucky law. Assigning cost liability to the cost-causer is fundamental in utility regulation. Preventing the imposition of costs on captive ratepayers unless a corresponding benefit is received is fair and just in this instance. To rule otherwise would be to acquiesce in a compensatory scheme that is contrary to Kentucky law and which would have adverse economic impact on Kentucky by raising retail electric rates.

Although Thoroughbred has expressed its willingness at this juncture to assume the costs necessary to upgrade the electrical grid in conformity with state law, Interconnect Agreements and other associated contracts and agreements will be filed at FERC. We are concerned that FERC will ignore the interests of the Kentucky ratepayers and the Board's attempt to fashion remedies fair to all concerned and in accordance with state law. We are also concerned that Thoroughbred, when faced with the prospect of obtaining an Order from FERC that is financially advantageous, will have little, if any, incentive to argue convincingly that any promises made to this Board should be honored.

Therefore, as a condition of granting a construction certificate, we will require that Thoroughbred obtain an Order from FERC approving Thoroughbred's assumption of the

<sup>&</sup>lt;sup>12</sup> We have no reason to believe otherwise. <u>See Midwest Independent System Operator, Inc.</u>, Opinion No. 453, 97 FERC § 61,033 (issued Oct. 11, 2001) in FERC dockets ER98-1438, et al.

costs of network upgrades and waiving any entitlement to interest and a cash refund, while its entitlement to transmission credits will extend indefinitely beyond the five-year term. Absent an Order from FERC unequivocally stating its approval of the agreement expressed by Thoroughbred to waive its rights under FERCs current policy, the certificate granted herein is void and Thoroughbred's request to construct is denied.

With respect to the concerns of Big Rivers, we agree that its second option eliminates much of our concern regarding ratepayer subsidization with respect to the crediting mechanism in FERC's Order 2003. Accordingly, Thoroughbred and Big Rivers are put on notice that any agreement negotiated between them regarding transmission interconnect issues shall comply in all respects with KRS 278.212(2). Thoroughbred shall hold Big Rivers, KU and LG&E harmless for costs of any and all interconnection and network upgrade costs. Kentucky ratepayers may not be required to subsidize Thoroughbred's investment contrary to the provisions of KRS 278.212(2) and contrary to this Board's mandate to ensure economically favorable results when reviewing an application to construct a merchant power plant. Moreover, Thoroughbred shall agree to pay its fair allocated share of operating and maintenance costs of the transmission system. Failure to comply in all respects with this condition shall render the certificate granted herein void.

# Economic Impact: Depletion of Emissions Allowances on the Affected Region

KRS 278.710(1)(c) requires the Board to consider the economic impact that the proposed facility will have on the affected region and the state. Big Rivers has alleged that Thoroughbred presented only the favorable economic consequences of the project to the Board. Those favorable consequences, however, are considerable.

Thoroughbred submitted with its application a report prepared by its economic consultant KPMG LLC (KPMG). In that report, KPMG examined the economic impact of the project over a 17-county region referred to as the Thoroughbred Community. 14

The project, it is estimated, will create an average of \$98 million in new spending on an annual basis.<sup>15</sup> Construction of the plant, scheduled to occur over a four-and-one-half-year period, will create an average of 1,500 jobs, with a maximum peak of 2,900.<sup>16</sup> Approximately 450 workers will be employed full-time once the plant is operational. KPMG estimates that of the 450 full-time workers, approximately 402 can be expected to be residents of the Commonwealth.<sup>17</sup>

Approximately \$3.345 billion in cumulative new spending can be expected to occur over the construction and operating life of the project. Once the plant is operational, it is expected that \$11 million will be spent on an annual basis for locally provided goods and services. Coincidentally, the average operating payroll is estimated to be \$11 million annually, and \$4 million of that income will go to employees

<sup>&</sup>lt;sup>13</sup> Thoroughbred Application, Section 6.

<sup>&</sup>lt;sup>14</sup> The counties are: Butler, Caldwell, Christian, Crittenden, Daviess, Hancock, Henderson, Hopkins, Logan, Lyon, McClean, Muhlenberg, Ohio, Todd, Trigg, Union and Webster.

<sup>&</sup>lt;sup>15</sup> KPMG Report at 4.

<sup>&</sup>lt;sup>16</sup> Thoroughbred Application, Section 6.

<sup>&</sup>lt;sup>17</sup> KPMG at 4.

<sup>&</sup>lt;sup>18</sup> Thoroughbred Application, Section 6.

<sup>&</sup>lt;sup>19</sup> KPMG Report at 10.

residing in Muhlenberg County.<sup>20</sup> KPMG estimates that for every dollar spent for construction and operation, 54 cents in additional spending will be generated in the Commonwealth; 74 cents of additional income will be generated in the Commonwealth for every dollar paid in wages; and 1.7 additional jobs will be created in the Commonwealth for each worker hired.<sup>21</sup>

Big Rivers and Intervenor Gary Watrous raised significant issues related to the unfavorable economic consequences occurring as a result of the generation facility s emissions and discharges. Specifically, Big Rivers argues that it, and the retail ratepayers served by its three distribution cooperatives, will suffer economic detriment as a result of the Thoroughbred plant's consumption of virtually all of the available air resources in the region.<sup>22</sup> Because the Facility will be located in a Class I area, few emissions are permitted; and Thoroughbred's emissions modeling was done to give itself maximum flexibility to emit without exceeding the limits of the Clean Air Act. 23 Thus, the plant is projected to consume all available emissions allowances (particularly as the exaggerated level of emissions used in the modeling will have to be computed into any new source modeling required for a permit until two years after Thoroughbred is actually in operation possibly a decade from now). Other economic development projects that will be new sources of emissions will be foreclosed or will be forced to expend huge amounts to mitigate emissions. This may discourage economic growth in

<sup>&</sup>lt;sup>20</sup> <u>Id.</u>

<sup>&</sup>lt;sup>21</sup> <u>Id.</u> at 12.

<sup>&</sup>lt;sup>22</sup> Prefiled Direct Testimony of Mick Durham at 6-8.

<sup>&</sup>lt;sup>23</sup> <u>Id.</u> at 7-10.

the region as EPA-related expenses increase. Moreover, Big Rivers asserts that it might have to expend a great deal of money to bring emissions from its Wilson I generating plant under control as a result of the Thoroughbred plant. It also faces greatly increased expense if it wishes to go ahead with its own project to build a second generator (Wilson II). This will create adverse economic impacts upon captive ratepayers served by Big Rivers member cooperatives.

These issues raise the very real possibility of potentially severe economic impacts to the region and must be considered when weighing whether Thoroughbred should receive a construction certificate. However, we note that, other than Big Rivers, no one from the region intervened in opposition to the Facility. When weighed against the potential for an economic boon to the local economy, we conclude that the Facility is more likely to aid the region economically than to harm it. This is particularly true since we cannot say that the potential for economic harm in the area as a result of Thoroughbred s consumption of Class I increment is a certainty. On the contrary, the evidence presented is contingent and speculative. We are presented with no concrete evidence that new sources plan to locate in the affected region in the near future. Big Rivers future plans for Wilson II are tentative at best. If Wilson II is built before Thoroughbred has been in operation for two years, Big Rivers could certainly feel the effect of the unavailability of additional Class I increment. However, weighed against the evidence of a favorable impact upon the local economy, and the overwhelming local support demonstrated at the hearings, we find sufficient evidence in the record on this issue to support granting the certificate.

# OTHER STATUTORY CRITERIA UNDER KRS 278.710

Impact on Scenic Surroundings, Property Values, Adjacent Property, and Surrounding Roads

KRS 278.710(1)(a) directs the Board to consider the impact of a proposed merchant power plant on scenic surroundings and property values before deciding whether to grant or deny a construction certificate. The statute also requires the Board to consider the impact that the Facility will have on surrounding roads and adjacent properties.

Thoroughbred intends to construct and operate a 1500 MW electric generating facility fueled with pulverized coal. The Facility will be located on 4,100 acres owned or controlled by Peabody Development Company and Peabody Coal Company, which are both wholly owned subsidiaries of Peabody Energy. Thoroughbred and the two other subsidiaries have executed an Access and Use Agreement that permits Thoroughbred to begin construction. After all necessary approvals, permits, and financing are obtained, the property will be conveyed to Thoroughbred.<sup>24</sup>

The proposed site is approximately one-and-one-half miles northeast of Central City and is adjacent to the Peabody Coal Company Gibraltar Mining Complex.<sup>25</sup> The Thoroughbred mine, located on-site, will be producing coal from Kentucky seams #8 and #9 and Thoroughbred will utilize coal from this site. Consequently, no analysis was performed of the impacts of utilizing delivery modes, such as trucks, barges, or rail, to deliver off-site coal to the proposed Facility.

<sup>&</sup>lt;sup>24</sup> Thoroughbred Response to Board Data Request filed October 14, 2003.

<sup>&</sup>lt;sup>25</sup> Prefiled Direct Testimony of Diana Tickner at 4.

Two units will be built capable of generating a total 1500 MW from the pulverized coal. Both generators will utilize state-of-the-art emissions technology including low nitrous oxide burners, selective catalytic reduction, and both wet and dry electrostatic precipitators.<sup>26</sup>

Thoroughbred proposes to locate its generating facility on land that has previously been disturbed by both surface and underground mining.<sup>27</sup> Much of the property adjacent to the site has been used for surface mining and related activities and Peabody Energy owns over half the adjacent tracts.<sup>28</sup> Most of the land surrounding the site is wooded or dedicated to agricultural uses. No residential areas are located within a one-and-one-quarter-mile radius of the site. Only twelve total properties were identified in the application as residential and adjacent to the proposed plant site and four of the twelve were vacant at the time the compilation was made.<sup>29</sup>

The base elevation of the power plant and stack is 450 feet mean sea level (msl) and the top of the stack will be approximately 1,090 feet msl. Site line profiles from the Green River, Western Kentucky Parkway, and Central City reveal topography and vegetation of sufficient height to essentially block views of the power plant and the landfill area that will be developed over the life of the plant.<sup>30</sup> According to MACTEC, a consultant retained by the Board to evaluate the site assessment report, there are no

<sup>&</sup>lt;sup>26</sup> Thoroughbred Application, Section 8.

<sup>&</sup>lt;sup>27</sup> Thoroughbred Application, Section 8.1.

<sup>&</sup>lt;sup>28</sup> <u>Id.</u>, Section 8.2.1.

<sup>&</sup>lt;sup>29</sup> <u>Id.</u>; July 9, 2003.

<sup>&</sup>lt;sup>30</sup> MACTEC Report at 20.

direct views to the proposed site and the vegetation and topography render the proposed site compatible with its scenic surroundings. Thoroughbred has selected a color scheme for the stack and plant that blends well with the typical background conditions and foliage. Should that color scheme change, Thoroughbred should notify the Board.

With respect to the potential for change in the value of adjacent properties, the Board agrees with MACTEC that the construction of such a plant on land previously unclaimed from surface and strip mining is an improvement over the previously unclaimed land.<sup>31</sup> The plant will be approximately centered on the site and the surrounding vegetation and topography of the site will act as a buffer. The Board agrees with MACTECs assessment that there will be little if any effect on property values. We further recognize the possibility that due to the influx of workers needed over the construction life of the plant, property values may likely increase temporarily.

Additional traffic will be generated during the construction and operation phases of the project. There should not be a significant impact on U.S. 62; however, a new access road will be built into the property between mile markers 20 and 21. Thoroughbred's plans regarding staggering arrivals and departures for construction crews is sound and will minimize the impact construction activity will have on the site. Thoroughbred should monitor the traffic situation to determine if manual traffic controls are needed.

<sup>31</sup> <u>Id.</u> at 5.

# **Anticipated Noise Levels**

KRS 278.710(1)(b) requires the Board to consider the anticipated noise levels expected to result from the construction and operation of the Facility. The Facility could substantially increase baseline noise levels within the immediate vicinity due to certain activities likely to occur throughout the construction and operation phases. These activities include heavy equipment use, increased vehicular traffic, and facility operations.

MACTEC reviewed the noise evaluation study filed by Thoroughbred and found that the construction and operation of the Thoroughbred plant and operation of the adjacent mine site would have minimal impacts upon any nearby residences or other sensitive receptors. MACTEC did recommend, and we adopt that recommendation herein, that Thoroughbred use silencers during start-up steam blows since that activity would result in the greatest noise levels.<sup>32</sup>

# Existence of Other Generation Facilities

KRS 278.710(1)(d) requires the Board to consider whether a merchant power plant is proposed for a site upon which facilities capable of generating 10 MW or more of electricity are located. Thoroughbred provided little detail of its efforts to locate the Facility on a site with existing generation when it initially filed its application. However, during the course of the proceeding it became apparent that Thoroughbred had met with Big Rivers on several occasions to discuss utilizing available land at the Wilson generating plant, yet the meetings yielded little progress. Thoroughbred began its site

<sup>&</sup>lt;sup>32</sup> MACTEC Report at 31.

<sup>&</sup>lt;sup>33</sup> Thoroughbred Application, Section 9.

selection process a full two years prior to the passage of KRS 278.700 et seq. creating this Board. Thoroughbred selected the Muhlenberg County site for its proximity to coal reserves, its proximity to the Green River for cooling water and barge access, and its proximity to rail transportation to assist in the delivery of construction and operation materials. It is Thoroughbred's opinion, and we concur in this instance, that the installation of the plant on this former mine site will have little detrimental impact on it and will have a positive impact on the land use of the unreclaimed site.

The legislature's intent in requiring the applicant to disclose its efforts to locate a proposed plant on the site of an existing generation plant was to limit the proliferation of such facilities around the Commonwealth. The lack of local objection, the rural location for the plant, and the fact that Thoroughbred will actually improve the land from its present state further the legislative objectives.

# Compliance with Local Planning and Zoning Requirements

KRS 278.710 (1)(e) requires the Board to consider whether the Facility will meet local planning and zoning requirements that existed on the date the application was filed. Thoroughbred submitted with its application at Section 3 a letter from the County Judge/Executive stating that the project is in compliance with Muhlenberg County's Comprehensive Plan and that no zoning ordinances, orders, laws or regulations, including noise ordinances, have been adopted with regard to this project site. <sup>34</sup> We accordingly find that Thoroughbred has met this statutory requirement.

<sup>&</sup>lt;sup>34</sup> Letter dated June 17, 2003, set forth in Thoroughbred Application, Section 3.1.

# Compliance with Statutory Setback Requirements

KRS 278.706(2)(e) requires the Board to consider whether the exhaust stack of a proposed merchant plant is at least 1,000 feet from the property boundary of an adjoining property owner and 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility. There are no such facilities within 2,000 feet of the exhaust stack and the proposed location of the stack is more than 1,000 feet from the nearest adjoining property owner s boundary.<sup>35</sup>

### Efficacy of Proposed Mitigation Measures

KRS 278.710(1)(h) requires the Board to consider the efficacy of measures proposed to mitigate any adverse impact that the proposed Facility may have on the affected region. Pursuant to this statute, the Board has reviewed and considered the measures that MACTEC has recommended to mitigate any negative impacts on the Central City/Muhlenberg County area. Those specific mitigation measures involve security and access controls, noise abatement during start-up steam blows, and land-based transportation.

MACTEC recommends that Thoroughbred enhance its access control and security measures to include a fenced, lighted plant perimeter; locked storage buildings for hazardous or dangerous materials; adequate training for on-site personnel in safety and security induction; use of proper identification by employees and subcontractors working at the site; use of a gated entrance controlled by security personnel; discretionary security searches of vehicles entering and leaving the site; and posting speed limit signs reflecting safe and appropriate speeds for access roads and roads

<sup>&</sup>lt;sup>35</sup> Thoroughbred Application, Section 8.2.7.

throughout the site. We find these recommendations reasonable and adopt them herein.

The use of silencers during start-up steam blows is recommended by MACTEC to reduce the noise impact. That recommendation is a reasonable mitigation measure and we adopt it herein. MACTEC has further recommended in mitigation related to land-based transportation that arrival and departure times be maintained as planned staggered over a two-hour period, especially during times of heaviest construction. MACTEC recommends using two inbound lanes in the morning and two outbound lanes in the afternoon on U.S. 62 and the new access road during the heaviest construction. Thoroughbred should be required to monitor the new access road and U.S. 62 to determine the need for manual traffic control. Finally, MACTEC recommends that Thoroughbred pursue roadway modifications with the Kentucky Transportation Cabinet, District 2, to eliminate pavement from a westbound turn lane and to consider wider lanes for the new access road.<sup>36</sup> These mitigation measures are reasonable and are hereby adopted by the Board.

Having identified certain measures that will mitigate any negative impacts of this Facility, we also remind Thoroughbred that it should implement all access control and security plans in a manner consistent with industry standards. Thoroughbred is also cautioned that, as many of its plans are not finalized, it must file an annual report with the Board summarizing the status of the project and a summary of its effects on the affected region. We are responsible for ensuring that the Facility is constructed as

<sup>&</sup>lt;sup>36</sup> MACTEC Report at 44-45.

Thoroughbred has represented throughout this proceeding and will continue to monitor Thoroughbred's compliance through review of these annual reports.

# <u>History of Environmental Compliance</u>

KRS 278.710(1)(i) directs the Board to consider whether the applicant has a good environmental compliance history. As no evidence to the contrary has been presented to the Board, we accept Thoroughbred's representations that both it and Peabody Energy Corporation, its parent, have no past violations of federal or state environmental laws, rules or administrative regulations and that there are no pending judicial or administrative actions for environmental violations.

# **CONCLUSION**

After carefully considering the criteria outlined in KRS 278.700 et seq., the arguments of counsel and the evidence of record, we find, subject to the conditions outlined herein and the mitigation measures identified, that Thoroughbred has presented sufficient evidence to obtain a certificate to construct the Facility. Accordingly, the Board conditions its approval upon the implementation of the measures described herein and listed in Appendix A to this Order, as well as the strictures outlined in this Order pertaining to measures used to pay for network interconnection and upgrades.

Specifically, in order to demonstrate compliance with the commitments and representations it has made to this Board, Thoroughbred must file with this Board an Order from FERC approving interconnection agreement terms that will, pursuant to the specifications contained in this Order, ensure that Kentucky retail ratepayers pay no share of the costs necessary for Thoroughbred to transmit electricity.

Within ten days of the date of this Order, Thoroughbred shall file with the Board a written statement indicating whether it accepts each and every condition and commitment set forth herein and in the attached Appendix A.

IT IS SO ORDERED.

Done at Frankfort, Kentucky, this 5<sup>th</sup> day of December, 2003.

By the Board

ATTEST:

**Executive Director** 

**Public Service Commission** 

on behalf of The Kentucky State Board on Electric Generation and Transmission Siting

# DISSENTING OPINION OF COMMISSIONER ROBERT E. SPURLIN

I applaud the Board for its heroic attempts to ensure that this Plant will not have an adverse economic impact on the region in which it will be placed, or upon our Commonwealth. However, because I believe that adverse economic impacts will inevitably result from the construction of this plant, and that they will outweigh the advantages urged upon us by citizens of Muhlenberg County, I must dissent.

Big Rivers, Kentucky Utilities, and Mr. Watrous have all offered cogent arguments against the building of this plant. Big Rivers arguments are simply unanswerable. Both the depletion of emissions allowances and the interconnection policies of FERC make this plant a net economic loss for Kentucky.

First, I would deny this application on the basis of the adverse economic effect on Kentucky's ratepayers that will commence when they are called upon, as they will inevitably be, to subsidize the Thoroughbred Plant. Thoroughbred claims it is willing to forego some of the privileges conferred upon it by FERC, such as scheduled refunds, with interest, of the money it must pay the utilities up front to build the transmission upgrades it needs. But it says it will not agree to forego the credits for use of the transmission system, even though the crediting system permits merchants to use utility transmission lines without paying a fair share of operating and maintenance costs. Thoroughbred even contends that, in the absence of the refund, it is entitled to these credits until it has received back all the money to which it is entitled under FERC rules.

As Kentucky Utilities points out, only a FERC order accepting even this minimal Thoroughbred waiver of its rights under FERC rules will provide assurance that our utilities, our ratepayers, and our Kentucky businesses will not be left with even more of

the bill for the Thoroughbred venture. I do not expect FERC to issue such an order. It is far more likely that FERC will act to preempt the Board and Kentucky's statute, KRS 278.212. The result will be that the electricity rates of Kentucky's customers will rise.

Next, I would hold that we can, in fact, conclude from the evidence that the new plant will deplete emissions allowance for the area, thereby ultimately limiting economic expansion. The explanation offered by Big Rivers of the ultimate effects of the depletion of emissions allowances is no more speculative than Thoroughbred's promises to improve the economics of the affected region.

Big Rivers establishes that the plant will be built in a Class I area, in which fewer emissions are allowed. Big Rivers also establishes that Thoroughbred's emissions, as modeled, will consume almost all emissions for the area. In order to provide itself with the greatest flexibility possible, Thoroughbred posited in its modeling higher emissions than it expects to produce. Under federal law, until two years after Thoroughbred's new plant has begun operating, future sources of emissions in the area will be forced to use Thoroughbred's high, modeled emissions in establishing that the cumulative effect of its emissions, together with Thoroughbred's, will not exceed the emissions cap. It is hardly speculative to conclude that new sources will locate elsewhere as long as this is the case. And how long will this curb against new sources exist? Approximately seven or eight years. Thoroughbred does not anticipate bringing its facility on line until 2010 or 2011. It is not speculative to conclude that new industry will be kept not only from Muhlenberg County, but from the surrounding counties.

Nor is it speculative to believe that the new plant will be a stumbling block to Big Rivers, a Kentucky utility whose reasonable rates and dependable service has had a great deal to do with Kentucky's economic development potential. The depletion of the emissions allowances for the area cannot help but affect Big Rivers own plans to construct a plant to serve Kentucky's homes and businesses. If our utilities must begin to buy on the open market the power they need to serve their customers, rather than building plants to produce that power themselves, our electricity rates will rise. As surely as night follows day, Kentucky's ability to attract new electricity-consuming industries will be adversely affected.

Finally, I must state my concern for the future of electricity service in this state. Currently, our statutes prohibiting retail electricity competition protect our ratepayers from high costs, market vagaries and unnecessary duplication of facilities. *See* KRS 278.016. However, implications that FERC considers prohibitions against retail competition discriminatory worry me. In short, I am concerned that the Thoroughbred plant might eventually cause Big Rivers to deal with the problem of displaced power. These concerns remain speculative; but only a few days ago, the possibility that FERC might act to preempt another Kentucky statute KRS 278.218 was speculative as well. Now speculation has become reality. *See* 105 FERC 61, 251 (Docket No. ER03-262-009)(Order issued November 25, 2003).

Against this disheartening catalog of economic problems, we have the support offered by citizens of Muhlenberg County, who have testified before us that the plant will create jobs and re-energize a moribund local economy. I hope those citizens, with whom I am not unsympathetic, are correct. I fear, however, that this plant will prove an economic albatross.

Accordingly, I must respectfully dissent.

Robert E. Spurlin, Commissioner

ATTEST:

**Executive Director** 

**Public Service Commission** 

on behalf of The Kentucky State Board on Electric Generation and Transmission Siting

#### APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2002-00150 DATED December 5, 2003

# MONITORING PROGRAM AND REPORTING REQUIREMENTS

The following monitoring program is to ensure that a proposed merchant plant is constructed as the applicant has represented throughout the siting process.

- A. Thoroughbred shall file an annual report throughout the duration of the construction of its Facility. The initial report shall be filed within 1 year of the date of this Order. Subsequent reports shall be filed annually.
- B. The report shall be filed in the form of a letter to the Chairman of the Kentucky State Board on Electric Generation and Transmission Siting. The report shall contain the following sections:

Overview Thoroughbred shall provide a short narrative summary of the projects progress or any changes that have occurred since the last report. Thoroughbred shall also identify the primary contractor(s) responsible for the largest portion of the construction effort, if applicable.

Implementation of Site Development Plan Thoroughbred shall describe: (1) the implementation of access control to the site; (2) any substantive modifications to the proposed buildings, transmission lines and other structures; (3) any substantive modifications to the access ways, internal roads and railways serving the site; and (4) development of utilities to service the site. A map must accompany any change in the above four items.

Local Hiring and Procurement Thoroughbred shall describe its efforts to encourage the use of local workers and vendors. At a minimum, Thoroughbred shall include a description of the efforts made by it and by contractors and vendors to use local workers and local vendors to build and operate this project. Thoroughbred shall also include, at a minimum, an informed estimate of the proportion of the construction and operational workforce that resided in the region (e.g., 50-mile radius) of the plant site prior to coming to work at the site.

Public Comments and Responses Thoroughbred shall provide a summary of any oral, telephone, e-mail or other written complaints or comments received from the public during the intervening period since the last report. Thoroughbred shall also summarize the topics of public comments, the number of comments received, and its response to each topic area. Original complaints and comments should be attached in their original form, including telephone transcriptions.

<u>Specific Mitigation Conditions</u> Thoroughbred shall provide a brief narrative response to indicate its progress, any obstacles encountered, and plans to fulfill each condition or mitigation requirement required by the Board.

C. Within 6 months after the conclusion of construction, Thoroughbred shall schedule a final site visit from the Board, its staff and its consultants, to review and ascertain that the constructed facility followed the description provided by Thoroughbred in its site assessment report and that the mitigation conditions imposed by the Board were successfully implemented. Thoroughbred shall also submit as-built plans in the form of maps that illustrate the implementation of the Site Development Plan.

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# SPECIFIC CONDITIONS IMPOSED

- D. Thoroughbred shall provide access control and security that meet industry standards suitable to its particular operation. Listed below are industry standards that the Board considers appropriate. If Thoroughbred subsequently determines that there is a preponderance of industry standards which suggest an exception to these standards, it may request and substantiate such an exception in its periodic compliance reports.
  - 1. Employees must have approved parking areas.
  - 2. The plant perimeter must be fenced and lighted.
  - 3. Access to waste disposal areas must be locked.
- 4. Storage buildings with hazardous or dangerous chemicals must be locked.
- 5. Only personnel who have attended an induction course are permitted to work on-site.
- 6. All employees and subcontractors working at the site must have a site security pass which must be carried at all times.
- 7. Entry to the site will be controlled, and only persons approved for work on the site will be allowed access. Access for site personnel will be via a security gate controlled by site security.
- 8. Commercial vehicle drivers delivering or removing materials to or from the site must first register with Thoroughbred.

- 9. Documentation of all drivers will be subject to examination and only those holding the necessary documents for the type of vehicle, plant or equipment to be driven will be allowed on the site.
- All vehicles entering/leaving the site shall be subject to search by Thoroughbred security.
- 11. Vehicle speeds on site shall not exceed 15 kilometers per hour unless there are signs indicating other limits.
- E. Thoroughbred shall ensure that the building contractors responsible for the facility's construction select neutral background colors for the stack and facility that will minimize contrast with existing surroundings. Industry standards for accomplishing this permit condition should be applied.
- F. Thoroughbred shall instruct its contractors to design the relevant facilities to meet established noise criteria and minimize offsite noise impacts to the extent practicable, following industry standards.
- G. Thoroughbred shall encourage and support the Commonwealth of Kentucky, Muhlenberg County, and any other parties in their effort to design, construct, operate, and maintain traffic control and highway changes at the intersection of the site access road and U.S. 62.
- H. Thoroughbred shall make reasonable efforts to hire workers, vendors, and contractors from the local area. A worker hired from the local area is one that can commute daily to the plant site from his or her primary residence that existed prior to employment at the Thoroughbred site. Typically, workers, vendors or contractors living

within a 50-mile radius of the site prior to their association with Thoroughbred may be considered local.

- I. Thoroughbred shall include language in its contracts, and shall provide training for its hiring agents and purchasing agents, that indicate the preference for such local hiring and local expenditure patterns to the maximum extent practicable. Such provisions would not be considered practicable if they directly threatened the ability to construct or operate the project or to obtain financing.
- J. During the construction phase of the proposed project, Thoroughbred shall implement dust control measures consistent with industry standards.
- K. Thoroughbred shall comply fully with KRS 278.212 by paying all costs or expenses associated with upgrades to the existing electricity transmission grid that are required as a result of the additional load placed on the grid by its Facility.
- L. Thoroughbred shall obtain an Order from FERC approving Thoroughbred's assumption of the costs of network upgrades and waiving any entitlement to interest and refunds.
- M. All Interconnection Studies subsequently prepared with respect to construction of this Facility shall be submitted to the Board.
  - N. Thoroughbred shall utilize Kentucky coal as represented in its application.