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May 13, 2005

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HAND DELIVERED

RECEIVED

Ms. Beth O'Donnell
Executive Director
Public Service Commission of Kentucky
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602-0615

MAY 13 2005

PUBLIC SERVICE
COMMISSION

RE: P.S.C. Case No. 2005-00090

Dear Ms. O'Donnell:

Please find enclosed and accept for filing the original and ten copies of Kentucky Power Company's responses to the Staff's Second Data Request dated April 28, 2005.

A copy is being served on all parties of record. Please do not hesitate to contact me if you have any questions.

Sincerely yours,

STITES & HARBISON, PLLC

Mark R. Overstreet

cc: All Parties of Record

KE057:KE179:12488:1:FRANKFORT

COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY

RECEIVED

MAY 13 2005

PUBLIC SERVICE
COMMISSION

IN THE MATTER OF

**AN ASSESSMENT OF KENTUCKY'S
ELECTRIC GENERATION, TRANSMISSION
AND DISTRIBUTION NEEDS**

)
) **ADMINISTRATIVE**
) **CASE NO. 2005-00090**

KENTUCKY POWER COMPANY

RESPONSES TO COMMISSION'S SECOND SET OF DATA REQUESTS

May 13, 2005

Kentucky Power Company

REQUEST

Explain how the development of Regional Transmission Organizations ("RTO") and the possibility of greater competition in the wholesale market has impacted your planning decisions. Also, provide a discussion of how RTOs have affected your strategy regarding making off-system sales and your ability to arbitrage.

RESPONSE

As part of the long-term planning process, AEP continues to develop expansion plans for the local systems to ensure reliability. AEP's entry into PJM did not fundamentally change the planning process for the local areas of the AEP East transmission system. FERC Order 2000 requires RTOs to implement a stakeholder-driven open regional planning process to develop an expansion plan for the bulk transmission system within its footprint. PJM, in cooperation with the stakeholders, undertakes this task and develops the PJM Regional Transmission Expansion Plan (RTEP) on an annual basis.

AEP and PJM will coordinate the planning of various activities on a "bottoms up/top down" approach. AEP will continue to plan and develop expansion plans for the load areas of the AEP transmission system to meet the applicable reliability criteria. PJM will consolidate AEP's expansion plans with those of other PJM member utilities and then collectively evaluate the expansion plans as part of the RTEP process. The PJM assessment will ensure consistent and coordinated expansion of the overall bulk transmission system within its footprint. In accordance with this process, AEP will continue to be responsible for the planning of its local system and will coordinate the expansion of the AEP EHV System with the PJM Stakeholders through the PJM RTEP process.

By way of the PJM RTEP process, the transmission expansion plans for the bulk transmission system are developed for the entire RTO footprint via a single regional planning process, assuring a consistent view of needs and expansion timing while minimizing expenditures. The RTEP will identify bulk transmission system requirements for the PJM footprint. PJM will then determine the individual member's responsibility as related to construction and costs to implement this transmission expansion plan. This process identifies the most appropriate, reliable and economical integrated transmission reinforcement plan for the entire region while blending the local expertise with a regional view and formalized open stakeholder input.

AEP's planning criteria is consistent with the NERC Planning Standards and ECAR Document 1. In addition, expansion of the AEP transmission system resulting from the PJM RTEP process will also be consistent with the NERC Planning Standards, ECAR Documents, as well as the specific AEP criteria. The AEP planning criteria are filed with FERC annually as part of AEP's FERC Form 715 filing. Using these criteria, limitations, constraints and future potential deficiencies on the AEP transmission system are identified. Remedies are identified and budgeted as appropriate to ensure that system enhancements will be timed to address the anticipated deficiency.

The RTO also coordinates its regional expansion plan on behalf of the member utilities with the neighboring utilities and/or RTOs to ensure inter-regional reliability.

AEP's entry into PJM is not expected to impact significantly AEP's internal transmission planning process. Transmission reinforcements to serve AEP's own load areas will continue to be developed by AEP and then coordinated with PJM. Expansion of the bulk transmission system will be coordinated via the PJM RTEP process to ensure compatibility of the various local expansion plans and to ensure that the bulk transmission system expansion is both reliable and economical.

AEP's overall strategy concerning off-system sales has not changed with its membership in PJM. AEP continues to maximize its off system sales through its energy marketing efforts and its part in the PJM RTO.

WITNESS: Errol Wagner

Kentucky Power Company

REQUEST

Describe the manner in which increasing prices for coal and natural gas have impacted your generation resource decisions. Include in the response a discussion of how the increase in prices has impacted your consideration of new generation technologies.

RESPONSE

AEP uses the Strategist tool to formulate long-term generating capacity plans. Strategist combines forecasts of operation and fixed costs to determine the total cost of each of numerous plans for the system. These plans can be compared for robustness, practicality, and total cost across various input scenarios. Among the most critical inputs to the model are fuel costs and generating unit costs and operating characteristics. The optimal mix of capacity, resulting in the lowest expected cost to the ratepayers, usually is one that provides most of the energy requirements from lower cost fuels while providing required reliability from lower capital cost, higher fuel cost capacity, units that operate only when needed during peak load or emergency conditions.

Higher prices for both coal and natural gas may not have a great impact on the resulting generation mix, if the increases are proportional. If natural gas prices increase to a higher degree than coal prices, this might result in a plan with slightly more coal-fired capacity, and vice-versa. However, since the AEP East Zone, of which Kentucky Power is a member, has a high proportion of coal-fired capacity, gas-fired units tend to be dispatched very little, and a higher relative price for natural gas typically has very little impact on the resulting total cost of a plan.

Increasing fuel prices, in general, are weighed against the higher capital costs associated with more efficient generating capacity. Higher fuel prices tend to drive planning decisions toward more fuel-efficient technology choices, including IGCC.

WITNESS: Errol Wagner

Kentucky Power Company

REQUEST

Explain to what extent the availability or possible availability of merchant power has impacted your generation resource decisions.

RESPONSE

The availability of merchant power has impacted our generation resource decisions for many years. In the last decade or so, merchant power has been readily available, and at low cost, within the ECAR region, and AEP/Kentucky Power has taken advantage of it by deferring decisions on new construction. The current perception, based on ECAR data and new environmental regulations, is that the availability of merchant power will decline significantly by about 2010. This was a consideration in both AEP's decision to rely on the market for incremental capacity until about 2010 and its decision to build an IGCC unit by that year.

WITNESS: Errol Wagner

Kentucky Power Company

REQUEST

Refer to Item 6 of Kentucky Power's response to the Commission's March 10, 2005 Order. From 2000-2003, the cost of Kentucky Power's purchases of firm capacity ranged from \$25.74 to \$25.92 per MWh. Presumably, all, or a large portion, of these purchases were from members of the AEP-East Power Pool. Explain why the cost of capacity purchases increased by nearly 10 percent, to \$28.36 per MWh, in 2004.

RESPONSE

The increase in the cost of capacity purchases for 2004 over prior years can be attributed to increased capacity costs under the cost-based agreement and fewer MWh delivered.

Year	MWhs	Capacity Purchase \$	\$/MWh
2000	2,691,467	69,321,899	25.76
2001	2,635,806	68,316,398	25.92
2002	2,496,876	64,266,304	25.74
2003	2,696,833	69,886,570	25.91
2004	2,555,156	72,465,855	28.36

Fewer megawatt hours were delivered due to an extended planned outage of the Rockport #2 unit in early 2004. During this outage, existing burners were replaced with low NOx burners and installed overfire air.

WITNESS: Errol Wagner

Kentucky Power Company

REQUEST

Refer to Item 11 of Kentucky Power's response to the Commission's March 10, 2005 Order, which discusses the potential future capacity needs and capacity additions of both Kentucky Power and the AEP-East system. The last statement in the response indicates that Kentucky Power's obligation for additional capacity could be as much as 500 Mw by the year 2015. Depending on the type of capacity to be added, when would Kentucky Power need to begin planning in order to have new capacity in service in 2015?

RESPONSE

Planning for the AEP East Zone, of which Kentucky Power is a member, is on-going. Any decision to build baseload capacity, such as a coal-fired unit, for service in 2015, should be made in about the 2008 to 2009 time frame, to leave time for permitting and construction. If peaking capacity is to be built, the final decision could be delayed until about 2011.

WITNESS: Errol Wagner