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ENERGY AND ENVIRONMENT CABINET

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October 3, 2012

Leonard K. Peters
Secretary

R. Bruce Scott
Commissioner

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P. O. Box 615
Frankfort, KY 40601

Re: PSC Case 2012-00319

Dear Mr. Derouen:

The Department for Environmental Protection (Department) offers the enclosed comments in support of East Kentucky Power Cooperative in response to the Commission's order dated August 22, 2012 regarding Case 2012-00319. The Department is responsible for implementing the waste tire program pursuant to KRS 224.50-850 through 224.50-880.

Waste tires are recycled into various materials that have beneficial uses including energy recovery. Data available indicates that approximately 40% of the annual national scrap tire generation (in the form of tire derived fuel (TDF)) is used as an energy resource through combustion at variety of facilities including electrical generation facilities. TDF material, which contains 20 to 30% fossil fuel, has been proven to be an effective complementary fuel to traditional fuels used at these types of facilities. The use of TDF represents an environmentally sound application and the Department would support actions on behalf of the Commission that would render use of the material more viable for East Kentucky Power Cooperative.

Thank you for this opportunity to comment on the proposal. Please contact George Gilbert at (502) 564-6716 or George.gilbert@ky.gov, if we can provide additional information.

Sincerely,

R. Bruce Scott P.E., Commissioner
Department for Environmental Protection

**Kentucky Department for Environmental Protection
Comments Regarding:
PSC Case 2012-00319**

The following comments are provided by the Department for Environmental in support of East Kentucky Power Cooperative (EKPC) in case 2012-00319.

Market: The Commonwealth of Kentucky primarily depends on Tire Derived Fuel (TDF) as its waste tire reuse market. In 2011, it is estimated that Kentuckians generated 4 million waste tires equivalent to 5.3 million passenger tires, by weight, when considering truck tires.¹

- In 2011, the Departments annual tire report states that 62% of waste tires went to TDF users, the number one market for Kentucky. This is significantly higher than the national average of 40%.²
- Of the 3.4 million tires used as TDF, 1.7 million or 56% is used in-state and 44% out-of-state.³
- Allowing EKPC to use the Fuel Adjustment Clause for TDF as an alternative fuel would increase the amount of TDF used in-state and decrease costs for Kentucky TDF processors to ship product to Louisiana or other states.
- Recently, at least three processors in Kentucky have accumulated large quantities of waste tires which appear to be the result of not having a market for the TDF they have produced. A decision that would make the in-state use of TDF more economically advantageous may assist the abatement of these piles both current and future.

Response 26a, Definition of TDF: The definition of TDF is comparable to that used by DWM.

Response 26e, Maximum amount of TDF that may be used: While EKPC may be permitted to use up to 10% of coal as TDF, history shows that most utility boilers use 2-4%. Ten percent use would be equivalent to 7.75 million tires per year, and the entire state only generates about 5.5 million. The 2-4% level is also adequate to gain the environmental benefits of lowering particulates, SOx and some other constituents in emissions, depending on air permit compliance test results.⁴

Response 26g, Cost of TDF delivered. The cost of \$1.61/MMBtu for TDF is within the normal range of delivered TDF, considering shipping costs.

Response 26h, Comparison of the environmental effect of burning coal. The use of TDF with high-sulfur coal generally lowers the SOx and particulates while increasing zinc emissions. This is because TDF contains lower sulfur, more BTU and more zinc than coal. The specific air permit compliance test contains the exact emission numbers.⁵

Response 26i, Price stability of TDF Mr. Terry Gray is President of T.A.G. Resource Recovery and a consultant to the Commonwealth of Kentucky and 18 other states and nine Canadian

provinces regarding TDF. He states that the price of TDF somewhat follows the spot price of coal.

References:

1. Kentucky's Waste Tire program, A Report to the General Assembly, January 2012, p, 6.
2. *Ibid.* p. 9.
3. *Ibid.* p. 8 & 14.
4. Tire Derived Fuel: Environmental Characteristics and Performance, Terry Gray, T.A.G. Resource Recovery, June 2004. p.4.
5. *Ibid.* p. 5