

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

JOHN A. PATTERSON, M.D., MSPH, FR. JOHN  
RAUSCH, WENDELL BERRY, MIKE HANNON,  
SIERRA CLUB, KENTUCKY ENVIRONMENTAL  
FOUNDATION AND, KENTUCKIANS FOR THE  
COMMONWEALTH,

)  
)  
)  
)  
)  
) No. 2009-00426

MAR 25 2010  
PUBLIC SERVICE  
COMMISSION

Complainants,

v.

EAST KENTUCKY POWER COOPERATIVE, INC.

Defendant.

)  
)  
)  
)  
)  
)  
)  
)  
)

**FIRST AMENDED COMPLAINT**

1) Pursuant to K.R.S §§ 278.260, 278.280(1) and 807 K.A.R. 5:001 § 12, John A. Patterson, M.D., MSPH, Father John Rausch, Wendell Berry, Mike Hannon, the Sierra Club, Kentucky Environmental Foundation, and Kentuckians for the Commonwealth request that the Public Service Commission (“Commission”) revoke the Certificate of Public Convenience and Necessity (“Certificate”) the Commission granted to East Kentucky Power Cooperative for the J.K. Smith Unit 1. J.K. Smith Unit 1 is a proposed coal-fired circulating fluidized bed (“CFB”) boiler (“Smith CFB”). As explained below, events have unfolded since the Commission’s granting of the Certificate and since the Commission’s last review of the Certificate that make it very clear that the Smith CFB will not serve the public convenience, is not necessary and is unjust, unreasonable, unsafe, improper, inadequate or insufficient. To begin with, EKPC does not need the Smith CFB because its total energy requirement, that is the number of kilowatt-hours it needs per year, has decreased dramatically and will continue to be significantly lower than EKPC’s forecasts. Furthermore, changes in the “all in” costs of coal-fired

generation versus other sources of generation, including natural gas, renewable and efficiency measures make it clear that the Smith CFB is the wrong choice from the point of view of keeping EKPC's rates low. A host of other factors indicate that EKPC constructing the Smith CFB is unreasonable and not consistent with the public interest. Finally, the Certificate has expired.

## **I. PARTIES**

2) Complainant John A. Patterson, M.D., MSPH, is an EKPC customer.<sup>1</sup> Dr. Patterson practices medicine in Estill County where a large percentage of his patients are EKPC customers. Dr. Patterson is active in Kentucky medical associations. Dr. Patterson is a member of the Kentucky Environmental Foundation's Health Advisory Team.

Dr. Patterson's address is:

John A. Patterson, M.D., MSPH  
Marcum & Wallace Memorial Hospital  
Mercy Health Clinic II  
105 Main Street  
Irvine, KY 40336

3) Complainant Father John S. Rausch is an EKPC customer. A Glenmary priest living in Stanton, Kentucky, he directs the Catholic Committee of Appalachia. Over the years, he taught with Coady International Institute, Antigonish, Nova Scotia, the Appalachian Ministries Educational Resource Center, Berea, Kentucky, plus organized the Mountain Management Institute to serve the business needs of Appalachian cooperatives. Having a masters degree in economics and a masters of divinity degree, he

---

<sup>1</sup> By customer of EKPC, we mean a customer of a distribution cooperative which receives its power and is a member of EKPC.

writes a monthly syndicated column called "Faith and the Marketplace" that appears in 20 Catholic diocesan newspapers. Fr. Rausch is a member of Kentuckians for the Commonwealth. Fr. Raush who ultimately is a customer of EKPC, has authorized Kentuckians for the Commonwealth to file this complaint under KRS 278.260 on his behalf.

Father Rausch's address is:

Fr. John S. Rausch,  
P.O. Box 1393,  
Stanton, KY 40380

4) Complainant Wendell Berry is an EKPC customer. Mr. Berry farms near Port Royal, Kentucky on the banks of the Kentucky River not far from where it flows into the Ohio River and downstream from the proposed Smith CFB. Mr. Berry is a prolific author of novels, short stories, poems, and essays. Mr. Berry is a member of Sierra Club and Kentuckians for the Commonwealth. Mr. Berry, who ultimately is a customer of EKPC, has authorized Kentuckians for the Commonwealth and Sierra Club to file this complaint under KRS 278.260 on his behalf.

Mr. Berry's address is:

Wendell Berry  
P.O. Box 1  
Port Royal, KY 40058

5) Complainant Mike Hannon is an EKPC customer. Mr. Hannon is retired from working for the Kentucky Division for Air Quality. He has been an EKPC customer for over 20 years. Mr. Hannon is a member of the Board of Directors of KEF and has been for over 20 years. Mr. Hannon, who ultimately is a customer of EKPC, has authorized

Kentucky Environmental Foundation to file this complaint under KRS 278.260 on his behalf.

Mr. Hannon's address is:

Mike Hannon  
248 Apache Dr.  
Paint Lick, KY 40403

6) Complainant Sierra Club is a national grassroots nonprofit conservation organization formed in 1872. Sierra Club has over 750,000 members nationally and over 4,000 members in Kentucky. Many of Sierra Club's members are EKPC customers. The Sierra Club has a statewide chapter in Kentucky called the Cumberland Chapter and five groups including a Northern Kentucky Group and a Bluegrass Group.

The Cumberland Chapter's address is:

Sierra Club  
Cumberland Chapter  
PO Box 1368  
Lexington, KY 40588-1368

Sierra Club Nation headquarters' address is:

Sierra Club  
85 Second Street, 2nd Floor  
San Francisco, CA 94105

7) Complainant Kentucky Environmental Foundation ("KEF") is a non-profit corporation organized under the laws of Kentucky, and maintains its offices in Berea, Kentucky. Many of KEF's members and supporters are EKPC customers. KEF has worked for over 18 years to ensure the safe disposal of the Army's stockpile of outdated chemical weapons which are stored in Richmond, Kentucky and 7 other sites throughout the nation. KEF also works to ensure that Kentucky has clean energy and that Kentuckians' exposure to toxic chemicals is minimized.

KEF's address is:

Kentucky Environmental Foundation  
128 Main Street  
Berea, KY 40403

8) Complainant Kentuckians for the Commonwealth ("KFTC") is a membership-led organization that believes in the power of people, working together, to challenge injustices and improve the quality of life for all Kentuckians. Begun in 1981 with about 25 people, KFTC has grown to nearly 6,000 members in 2008. Many of KFTC's members are EKPC customers. Its membership is mostly middle- and low-income folks from the mountains and other rural communities, small towns, and urban centers of our state. KFTC helps individuals organize to win change on a broad range of issues, including restoring voting rights, promoting sustainable economic development policies, reducing environmental destruction, and advancing sustainable energy policies and practices. The organization has nearly 2,000 dues paying members who live in counties served by East Kentucky Power Cooperative's member co-ops.

KFTC's main address is:

KFTC  
P.O. Box 1450  
London, KY 40743

9) Defendant East Kentucky Power Cooperative is a non-profit Generation and Transmission Cooperative that is owned by and serves 16 distribution cooperatives in Kentucky. EKPC generates almost all of its electricity from old-fashion, inefficient coal-fired power plants. Thus, it is no surprise that EKPC is one of the most polluting utilities in the country. In 2006, EKPC ranked as the 67<sup>th</sup> largest producer of electricity in the

country.<sup>2</sup> EKPC ranked as having the 5<sup>th</sup> worst sulfur dioxide emission rate out of the top 100 electricity producers as well as the 17<sup>th</sup> worst carbon dioxide (“CO<sub>2</sub>”) emission rate and the 27<sup>th</sup> worst nitrogen oxides emission rate in 2006. Benchmarking Report at 32. 2006 is the most recent data available but EKPC’s ranking is probably even worse for more recent years because of the strides other utilities have made in reducing their emission rates by using renewable energy and natural gas-fired generation.

10) It is important to recall that sulfur dioxide and nitrogen oxides pollution is an issue that directly impacts customers’ electric bills. This is because sulfur dioxide and nitrogen oxides are regulated under programs which make the right to emit these pollutants into a commodity for which EKPC and ultimately its customers have to pay. The cost of emitting these pollutants is very likely to rise dramatically in the next three to seven years because of the implementation of more stringent environmental regulations.

11) Furthermore, it is extremely likely that greenhouse gas emissions, including carbon dioxide, will have a price put on them. Right now there are 83 other large electricity producers for which this almost certain eventuality will have less of an impact on them than EKPC. For example the utility Duke is only ranked the 58<sup>th</sup> worst in terms of its carbon dioxide emission rate.

12) EKPC is also in a dire financial position which is largely driven by its crushing debt burden, its lack of diversity in fuel sources, its violation of environmental laws, its poor technology choices and its substandard operations and maintenance of its existing generation units. EKPC has come before the Commission several times recently stating

---

<sup>2</sup> See Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States, May 2008 (“Benchmarking Report”) at 1, available at: <http://www.nrdc.org/air/pollution/benchmarking/default.asp>.

that it was on the edge of financial ruin. Despite the relief the Commission has provided EKPC, EKPC remains in a financially weak position. According to EKPC's 2008 Annual Report, three significant measures of the cooperative's financial health declined between 2007 and 2008. The three financial/credit reporting measures are:

- The Cooperative's TIER Rating. It declined from a 2007 level of 1.43 to a 2008 level of 1.25. This credit report measure represents the relative ability of the cooperative to pay its long-term interest payments. The higher the rating, the stronger the financial health of the cooperative. When EKPC was compared to other comparable cooperatives in the country on this measure, it scored last. According to EKPC's own experts the cooperative was in danger of losing its creditworthiness.
- The DSC measure – or Debt Service Coverage ratio – is simply another credit measure, and it too has deteriorated. In 2007 the cooperative scored 1.17; in 2008 that score dropped to 1.04.
- Another important measure is 'net margin,' an accounting tool used to show generally the amount of cash available after all expenses and needs are met. The higher the margin, the healthier the cooperative. It too has declined since 2007. In 2007 EKPC's (restated) Net Margin was \$44.493 million; in 2008 it was \$27.872 million.

This means that EKPC is not in a position to take on significant more amounts of long term debt to finance an inefficient, capital intensive generating unit like a coal-fired power plant.

EKPC's address is:

East Kentucky Power Cooperative  
4775 Lexington Road  
Winchester, KY 40391

## **II. JURISDICTION**

13) The Commission's authority to determine whether there is a continued need for the certificated generation that EKPC plans to construct derives from KRS 278.260(1), which confers upon the Commission the authority to conduct an investigation as to

whether ‘any regulation, measurement, practice or act affecting or relating to the service of the utility or any service in connection therewith is unreasonable, unsafe, insufficient or unjustly discriminatory ... .’ Likewise, KRS 278.280(1) provides the statutory criteria for conducting this investigation:

Whenever the Commission ... finds that the rules, regulations, practices, equipment, appliances, facilities or service of any utility subject to its jurisdiction, or the method of manufacture, distribution, transmission, storage or supply employed by such utility, are unjust, unreasonable, unsafe, improper, inadequate or insufficient, the commission shall determine the just, reasonable, safe, proper, adequate or sufficient rules, regulations, practices, equipment, appliances, facilities, service or methods to be observed, furnished, constructed, enforced or employed, and shall fix the same by its order, rule or regulation.

*See also* Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky. 1952).

*Re: East Kentucky Power Cooperative*, Case No. 2006-564, 2007 WL 1529683, ) at \*2 (Ky.P.S.C.) at \*2

### **III. FACTS**

#### **A. PROCEDURAL HISTORY OF THE CERTIFICATE**

14) On August 29<sup>th</sup>, 2006 the Commissions issued a Certificate of Public Convenience and Necessity (Certificate) to EKPC for a 278 megawatt (MW) coal-fired circulating fluidized bed (CFB) unit at the Smith Station (Smith CFB). *See* Case No. 2005-53, August 29, 2006 Order (2006 Order). The Commission issued the 2006 Order granting a Certificate for the Smith CFB based in part on the understanding that a new distribution cooperative, Warren Rural Electric Cooperative (Warren) would be joining EKPC and thus EKPC needed to have sufficient electricity to serve its existing 16 distribution cooperatives as well as Warren.



15) Subsequently, Warren decided not to join EKPC. The Commission therefore initiated an investigation as to whether EKPC should still go ahead with construction of the Smith CFB. *See* Case No. 2006-264, May 11, 2007 Order (2007 Order). The Commission explained:

The loss of Warren's load in the midst of EKPC's ambitious construction program and deteriorating financial condition led the Commission to conclude that this proceeding was necessary to determine that EKPC's certificated generation was still needed and in the public interest.

2007 Order.

16) At the end of that proceeding, the Commission decided to allow EKPC to keep its Certificate for the Smith CFB. The Commission explained:

EKPC asserts that growing demand in its native base load continues to be the principal purpose behind Smith No. 1. . . .

EKPC estimates that the cost of canceling Smith No. 1 would be approximately \$50 million.

2007 Order at \*3.

17) The Commission found:

Again, there is sufficient evidence within the record to demonstrate that the addition of this generation unit to EKPC's fleet, as with the Spurlock No. 4 unit, is needed to serve EKPC's growing native load, ease demand for more expensive purchased power, and improve the overall system reliability.

...

With regard to the Smith No. 1 unit, there are two alternatives to consider. The Commission might order EKPC to purposefully delay the construction of Smith No. 1 to guarantee that its native load requirements are sufficient to support the addition of the generating unit. This course of action, however, would result in the levying of significant contractual penalties on EKPC and increase its exposure to escalating costs for labor and materials in the future. On the other hand, the Commission might allow EKPC to proceed with construction of the Smith No. 1 unit and run the risk that EKPC's native load growth might not grow as quickly as forecasted - potentially resulting in EKPC having excess generation capacity. While neither situation is ideal, the latter position is clearly

preferred under the specific facts of this case. In the long run, EKPC's ratepayers and the public interest at large will be best served by allowing EKPC to complete the construction of Smith No. 1 and avoid unnecessary penalties and cost escalations associated with a lengthy delay. Any risk of reaching a situation where EKPC has excess generation capacity should be mitigated by EKPC's careful development and implementation of a mechanism for making off-system sales.

2007 Order at \*4.

18) A lot has changed since the Commission issued the 2007 Order two and a half years ago.

**B. FINANCING FOR THE SMITH CFB**

19) In the 2006 Order, the Commission stated:

EKPC intends to finance the facilities through long-term indebtedness which will be subject to the supervision and control of the Rural Utilities Service (“RUS”), an agency of the federal government. This financing will be exempt from review by the Commission under KRS 278.300(10).

2006 Order.

20) This is no longer true with regard to the Smith CFB. EKPC does not intend and will not finance the Smith CFB through long-term indebtedness from RUS.

The Commission has previously held that financing from CoBank is not exempt under KRS 278.300(10). *See e.g.* In the Matter of: APPLICATION OF KENERGY CORP. FOR AUTHORIZATION TO ASSUME OBLIGATIONS OR LIABILITIES IN RESPECT TO EVIDENCES OF INDEBTEDNESS, Case No. 2007-556, June 10, 2008 Order, 2008 WL 2406482 (Ky.P.S.C.). Yet, CoBank is subject to control by the Farm Credit Administration. Thus, the Commission has interpreted KRS 278.300(10) to only exempt financing directly from federal agencies.

21) EKPC will not get financing for the Smith CFB directly from a federal agency.

22) EKPC's non-RUS financing of the Smith CFB will be more expensive than the financing would have been had it come from RUS.

**C. CHANGES SINCE THE CERTIFICATE WAS GRANTED AND CONFIRMED**

**1. ENERGY DEMAND HAS DROPPED AND WILL CONTINUE TO DROP**

23) EKPC does not need the 278 MW of base load capacity that the Smith CFB would provide. EKPC's projections of its electricity requirements have turned out to be much higher than its actual electricity requirements. This will continue to be the case in the future. A change in the economic situation is only one minor reason for this change.

24) EKPC's 2009 Integrated Resource Plan (IRP) demonstrates EKPC's historic over-estimation of energy needs. For example, page 5-5 of the 2009 IRP shows that EKPC's forecast for its energy requirements in 2020 decreased between its 2004 prediction and its 2008 prediction by 2,273,498 mwh per year or almost 12%. This is approximately how much energy the Smith CFB would produce in a year.

25) Even EKPC's most recent prediction of its energy requirements, which EKPC conducted after the 2007 Order, is an over-prediction. EKPC's actual total energy requirement for 2008 was 12,948,091 mwh. *See* 2009 IRP at 7-2. The 2009 IRP predicts that the total requirement for 2009 will be 13,647,057 mwh. This represents a predicted 5.4% increase in total requirements between 2008 and 2009. However, looking at the 2009 data that EKPC has supplied for actual energy requirements, thus far in 2009 EKPC has experienced a 5.8% decrease in total energy requirements.

26) There are additional reasons to think that EKPC 2009 IRP projection of future energy requirements are significant over-estimations. EKPC's 2009 forecast, which is significantly lower than the forecast the Commission used in issuing the 2006 Order and 2007 Order, fails to consider mandatory improvements in the efficiency of various appliances, including such large energy users as supermarket refrigeration, commercial HVAC systems and small electric motors.

27) In addition, federal stimulus funding is being used in Kentucky to greatly expand weatherization programs for low income people. This funding became available after the 2007 Order.

## **2. CAPITAL COST OF THE SMITH CFB HAS INCREASED**

28) The 2006 Order stated that the estimated installed cost of the Smith CFB was \$533 million.

29) At one point, EKPC estimated that the Smith CFB would cost \$804 million.

30) EKPC recently estimated that the Smith CFB would cost up to \$921.435 million. This is well over a third of a billion dollar increase in the estimated capital cost.

31) This 73% price increase makes the Smith CFB a fundamentally different project than the one for which the Commission issued the Certificate.

## **3. OFF SYSTEM SALES ARE GOING TO BE MUCH HARDER IF NOT IMPOSSIBLE TO ACCOMPLISH**

32) In the 2007 Order, the Commission stated:

Any risk of reaching a situation where EKPC has excess generation capacity should be mitigated by EKPC's careful development and implementation of a mechanism for making off-system sales.

- 33) Subsequent to the issuance of the 2007 Order, Ohio passed a renewable portfolio standard requiring utilities operating in Ohio, which includes Duke and AEP, to have a certain percentage of the electricity they sell come from renewable sources.
- 34) Missouri, Illinois and Virginia also have renewable portfolio standards.
- 35) It is very likely that Congress will pass a national renewable portfolio standard.
- 36) E.ON's Trimble 2 750 MW coal-fired unit should be coming on line shortly.
- 37) Thus, even ignoring costs, a number of factors that occurred after the 2007 Order indicate it will be more difficult, if not impossible, for EKPC to make off-system sales of excess electricity from the Smith CFB.

**4. ENVIRONMENTAL REGULATIONS HAVE BECOME  
MORE STRINGENT AND WILL CONTINUE TO DO SO**

- 38) Since the 2007 Order, there have been changes in environmental regulations and there will continue to be changes in environmental regulations that will make the Smith CFB much more expensive to operate, if it will be able to operate at all.
- 39) For example, the United States Environmental Protection Agency has stated that it will regulate coal combustion waste, most probably as a hazardous waste. This regulation is likely to be promulgated in the next year or two.
- 40) EKPC's current plan is to place its coal combustion waste on the ground, at least for the first decade or so of operations, and claim that the coal combustion waste is "structural fill."
- 41) EKPC having to properly dispose of the coal combustion waste from the Smith CFB as a hazardous waste would be much more expensive than simply putting the coal combustion waste on the ground.

- 42) Coal-fired CFBs produce significantly more coal combustion waste than other types of coal-fired power plants such as pulverized coal units.
- 43) It is also almost certain that greenhouse gas emissions will be regulated by the time the Smith CFB would come on line.
- 44) The American Clean Energy and Security Act (ACES), which passed the House of Representatives, requires 50% reduction in greenhouse gas emissions in the future for sources permitted after January 1, 2009. The Smith CFB will be permitted after January 1, 2009.
- 45) There is no commercially available technology to capture and sequester greenhouse gas emissions from a coal-fired CFB.
- 46) In 2008, the United States Environmental Protection Agency (US EPA) revised the national ambient air quality standard for ozone, which is commonly referred to as smog, to 75 parts per billion. In September, 2009 the Kentucky Division for Air Quality issued an emergency order requiring major sources of nitrogen oxide air pollution emissions, such as the Smith CFB, to determine if they will cause or contribute to a violation of the national ambient air quality standard for ozone and comply with other new requirements.
- 47) Subsequently, the US EPA determined that it needed to reconsider the 75 parts per billion to determine if it needs to be more protective.
- 48) If US EPA revises the national ambient air quality standard for ozone to 70 parts per billion, the metropolitan Lexington area, which may include Clark County where the Smith CFB is proposed for, would likely be designated as a non-attainment area. If this happens, the Smith CFB would have to comply with much more stringent environmental

regulations. These would include obtaining emission offsets which EKPC may or may not be able to obtain.

49) The US EPA recently objected to the air pollution permit for E.ON's Trimble 2 coal-fired power plant. One of the reasons for the objection is the Kentucky Division for Air Quality's failure to consider particulate matter that is less than 2.5 microns in diameter.

50) The Smith CFB air pollution permit application does not consider particulate matter that is less than 2.5 microns in diameter. Thus, it is likely that the US EPA will object to the air pollution permit for the Smith CFB if and when it is eventually issued.

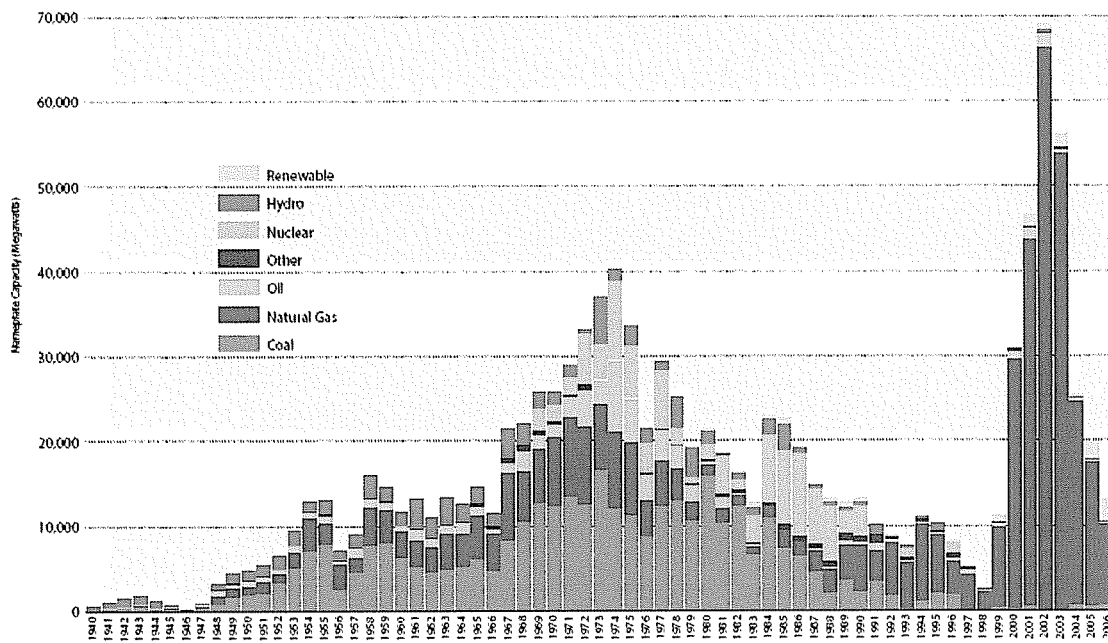
51) The US EPA recently completed a study of wastewater discharges from the steam electric power generating industry to determine whether to revise the effluent guidelines regulations, which were last updated in 1982. In September, EPA announced plans to revise the effluent guidelines, concluding that the current regulations have not kept pace with changes that have occurred in the industry over the last three decades.

## **5. NATURAL GAS PRICES HAVE DROPPED**

52) As Table 1 and 2 demonstrate, natural gas-fired power plants have been the dominant type of new power plants in the United States for the past decade. Table 1 and 2 also demonstrate that wind power has been a close second to natural gas-fired power plants in terms of installed capacity for the past two years.

**TABLE 1**

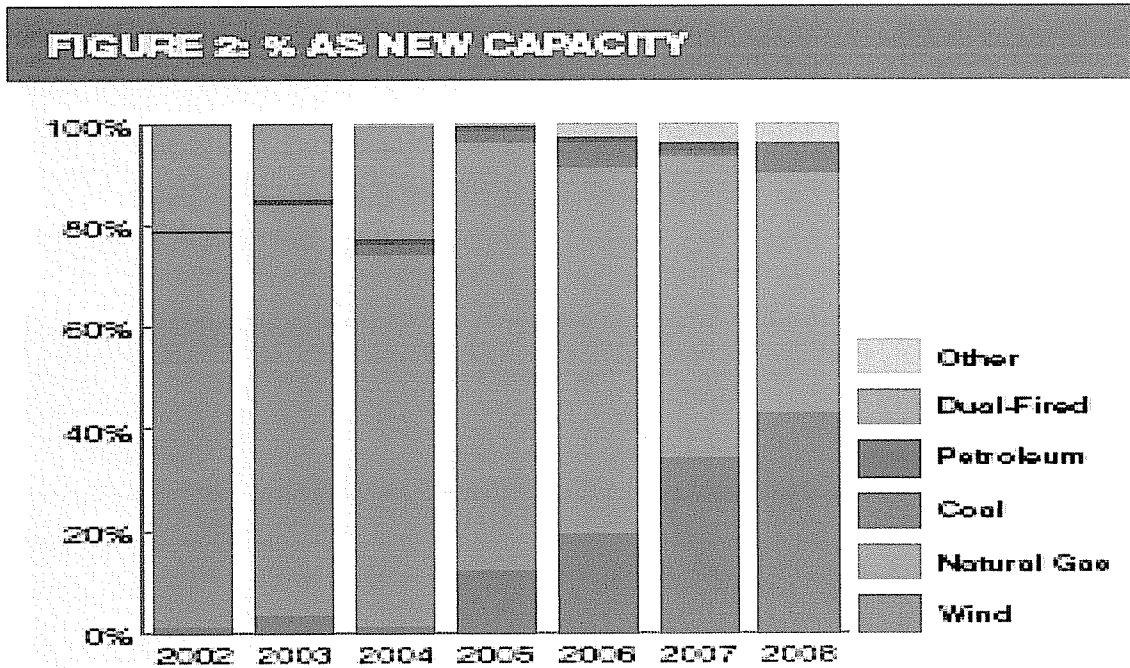
**FIGURE 1**  
**U.S. Electric Generating Capacity by In Service Year**



SOURCE: ENERGY INFORMATION ADMINISTRATION, ANNUAL ELECTRIC GENERATOR REPORT, FORM EIA-860 (2006).  
<http://www.eia.doe.gov/cna/nl/mc/mr/page/are60.html>



TABLE 2



53) Since the 2007 Order, the price of natural gas has dropped considerably. Most experts believe that this is a structural change in the price, meaning it is going to be with us a long time.

54) The capital cost of a base load natural gas-fired power plant is much less than the capital cost of a coal-fired CFB power plant.

55) Base load natural gas-fired power plants have much lower air pollution emissions than the Smith CFB will have, which means a natural gas-fired power plant would have to purchase fewer air pollution emission credits.

56) Base load natural gas-fired power plants do not generate coal combustion waste or any other significant amount of solid waste.

57) Base load natural gas-fired power plants use much less water than will be used by the Smith CFB.

58) EKPC's 2009 IRP provides that East Kentucky Power Cooperative will increase its consumption of coal for every year from 2009 to 2023 with the exception of a slight decrease between 2020 and 2021. See 2009 IRP at 8-121. In 2023, the final year covered by the 2009 IRP, it forecasts that EKPC will get over 86% of its electricity from burning coal. See 2009 IRP at 8-120.

59) If EKPC needed base load generating capacity, a base load natural gas power plant would result in lower bills for EKPC customers. It would also provide more diversity in EKPC generation fleet which is a hedge against future uncertainties.

**6. EKPC CAN MEET ITS FUTURE NEEDS THROUGH DEMAND SIDE MANAGEMENT AND RENEWABLE ENERGY**

60) EKPC can meet its future needs for electricity in a cost-effective and reliable way with energy efficiency measures and renewable energy sources such as wind, small-scale hydro and solar.

61) The cost, availability and regional experience with renewable energy has changed dramatically since the 2007 Order.

62) For example, in 2007, Indiana had no commercial scale utility wind generation in 2007. Today, Indiana has 530 megawatts of utility scale wind generation in operation and another 604 megawatts under construction.

63) E.oN, the parent company of Kentucky Utilities and Louisville Gas and Electric, is currently seeking approval for utility scale wind generation to serve Kentucky customers. E.oN estimates that this will cost the average customer 92 cents per month.

64) AEP, the parent company of Kentucky Power, recently submitted an Integrated Resource Plan (IRP) to the Commission that includes considerable amounts of solar and wind power.

65) Costs of utility scale solar photovoltaics have come down fast. Eighteen months ago, a utility scale PV facility cost around \$6,000/kW. Today that cost is closer to \$3,500/kW.

66) There have also been recent advances in hydro power. For example, Hydro Green Energy LLC of Houston, Texas, is partnering with the city of Hastings, Minn., to add two hydrokinetic units capable of generating up to 250 kW at the 4.4 MW Mississippi Lock and Dam No. 2 project. The dam, on the Mississippi River, is owned by the U.S. Army Corps of Engineers. The hydrokinetic units are based on the patented technology of Hydro Green Energy. In December 2008, the Federal Energy Regulatory Commission (FERC) amended the operating license for the 4.4 MW Mississippi Lock and Dam No. 2 project, allowing the licensee, the city of Hastings, Minn., to install two hydrokinetic units, suspended from a barge in the tailrace of the dam. This marks the first installation of a hydrokinetic power device at an existing U.S. hydroelectric project.

**7. MORE EFFICIENT CFBs ARE NOW COMMERCIALY AVAILABLE AND PROVEN**

67) EKPC's plan is to build the Smith CFB as a sub-critical unit.

68) Sub-critical means the water in the boiler is at a sub-critical stage. The majority of coal-fired power plants built in the United States in recent times have been super-critical units. This means the water in the boiler is at a super-critical stage. All else being equal, super-critical coal-fired units are more efficient than sub-critical coal-fired units. This means a super-critical unit has to purchase less fuel per unit of electricity

generated, and is thus less expensive to operate, than an equivalent sub-critical unit. This also means that a super-critical unit emits less pollution, including greenhouse gas pollution, per unit of electricity generated, than a sub-critical unit.

69) When the Commission issued the 2006 Order and 2007 Order, there were no super-critical CFBs in commercial operations.

70) There is now a super-critical CFB in commercial operation.

71) All of EKPC's CFBs operate at below 38% efficiency and EKPC predicts this to continue into the foreseeable future. A super-critical CFB operates at close to 45% efficiency.

72) Thus, even if building a coal-fired CFB was the best option for EKPC, the proposed Smith CFB is not the best coal-fired CFB option for EKPC.

#### **IV. CLAIMS FOR RELIEF**

##### **CLAIM ONE (MULTIPLE CHANGES IN THE SITUATION)**

73) Plaintiffs incorporate by reference paragraphs 1 – 72.

74) Numerous changes since the Commission issued the Certificate and reconfirmed it in 2007 indicate that the construction of the Smith CFB is not needed or convenient.

These include:

1. ENERGY DEMAND HAS DROPPED AND WILL CONTINUE TO DROP
2. THE CAPITAL COST OF THE SMITH CFB HAS INCREASED
3. OFF SYSTEM SALES ARE GOING TO BE MUCH HARDER IF NOT IMPOSSIBLE TO ACCOMPLISH

4. ENVIRONMENTAL REGULATIONS HAVE BECOME MORE STRINGENT AND WILL CONTINUE TO DO SO
5. NATURAL GAS PRICES HAVE DROPPED
6. EKPC CAN MEET ITS FUTURE NEEDS THROUGH DEMAND SIDE MANAGEMENT AND RENEWABLE ENERGY
7. MORE EFFICIENT CFBs ARE NOW COMMERCIALY AVAILABLE AND PROVEN

75) Therefore, the construction of the Smith CFB will result in wasteful duplication.

76) EKPC cannot now establish substantial inadequacies of its existing generating and transmission system to justify the Smith CFB.

**CLAIM TWO  
(ONE YEAR EXPIRATION)**

77) Plaintiffs incorporate by reference paragraphs 1 –72.

78) K.R.S. § 278.020(1) provides:

Unless exercised within one (1) year from the grant thereof, exclusive of any delay due to the order of any court or failure to obtain any necessary grant or consent, the authority conferred by the issuance of the certificate of convenience and necessity shall be void, but the beginning of any new construction or facility in good faith within the time prescribed by the commission and the prosecution thereof with reasonable diligence shall constitute an exercise of authority under the certificate.

79) It has been more than one year since EKPC received its Certificate for the Smith CFB.

80) EKPC has not commenced construction on the Smith CFB.

81) EKPC has not exercised the Certificate for the Smith CFB.

82) No court order has delayed EKPC's exercise of its authority pursuant to the Certificate for the Smith CFB.

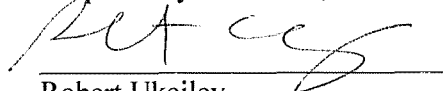
83) EKPC has not obtained financing for the building of the Smith CFB. Therefore, EKPC would not have exercised its authority pursuant to the Certificate for the Smith CFB even if it had obtained all necessary grants and consents.

84) Therefore, the Smith CFB Certificate is void.

**V. PRAYER FOR RELIEF**

85) Therefore, for the reasons stated above, the Complainants respectfully request that the Commission revoke the Certificate for the Smith CFB and provide all other relief that is just and proper.

Respectfully submitted,



Robert Ukeiley  
Law Office of Robert Ukeiley  
435R Chestnut Street, Suite 1  
Berea, KY 40403  
Tel: (859) 986-5402  
Fax: (866) 618-1017  
Email: [rukeiley@igc.org](mailto:rukeiley@igc.org)

Michael R. Campbell  
Campbell, Rogers & Hill, PLLC  
Attorneys At Law  
154 Flemingsburg Road  
Morehead, KY 40351  
(606) 783-1012  
Facsimile No. (606) 713-0500  
[mrcampbell@windstream.net](mailto:mrcampbell@windstream.net)

Counsel for Dr. John Patterson, Fr. John Rausch, Wendell Berry, Sierra Club, KEF and KFTC

Dated: March ~~23~~<sup>24</sup>, 2009