



EAST KENTUCKY POWER COOPERATIVE

September 28, 2007

HAND DELIVERED

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

RECEIVED

SEP 28 2007

PUBLIC SERVICE
COMMISSION

Re: PSC Case No. 2007-00168

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case an original and ten copies of the following responses of East Kentucky Power Cooperative, Inc. ("EKPC") to Staff requests for information made during the September 25, 2007 Informal Conference:

1. A schedule of events expected to have impacts on EKPC rates through 2010.
2. A breakdown of annual operations and maintenance costs for the Barge Mounted Pumps installed or planned at Cooper Station, and the proposed Cooling Tower for Cooper Unit No. 2.

If there are any questions about this information, please contact me at EKPC headquarters.

Very truly yours,

Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Parties of Record

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EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2007-00168

SCHEDULE OF EXPECTED MAJOR RATE IMPACTS
2007-2010

| | |
|--|---------------|
| Spurlock Station Unit 2 Scrubber System- Approved- PSC Case No. 2005-00417 Operation Date- October 2008 Estimated Cost- | \$207,400,000 |
| Spurlock Station Unit 1 Scrubber System- Approved- PSC Case No. 2006-00132 Operation Date- May 2009 Estimated Cost- | \$172,900,000 |
| Spurlock Station SCR Modifications for Year-Round Use (Part of EKPC Acid Rain Settlement, not a new facility) Operation Date- June 2009 Estimated Cost- | \$ 13,500,000 |
| Spurlock Station Unit No. 4 Approved- PSC Case No. 2004-00423 Operation Date- April 2009 Estimated Cost- | \$555,608,000 |
| Smith Station CTs 8-9 Approved- PSC Case No. 2005-00053 Operation Date- June 2009 Estimated Cost- | \$155,798,022 |
| Smith-West Garrard Transmission Line- West Garrard Transmission Substation Approved- PSC Case No. 2006-00463 Operation Date- December 2009 Estimated Cost- | \$ 44,919,000 |

**EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2007-00168**

**OPERATIONS AND MAINTENANCE COSTS FOR COOPER STATION
BARGE MOUNTED PUMPS AND COOLING TOWER**

The attached schedules show that the annual Operations and Maintenance costs, including costs of power for operation and other associated costs, for the Barge Mounted Pumps are estimated at \$1,372,252. Adding the Cooling Tower for Cooper Station Unit 2 would add an additional estimated \$1,362,697 in annual operations and maintenance costs.

East Kentucky Power Cooperative
 John Sherman Cooper Station
 5/17/2007

Low Water Mitigation Plan

Quantitative Analysis

| Scenarios | Estimated Capital Cost | Annual Capital Payment | Annual Capital (\$/MWH) | Annual O&M (\$/Yr) | O&M (\$/MWH) | Annual Total (\$) | Total (\$/MWH) |
|---|------------------------|------------------------|-------------------------|--------------------|--------------|-------------------|----------------|
| 1. Barge Mounted Pumps with Cofferdams (Qty 2) | \$ 17,600,000 | \$ 2,024,000 | \$ 0.940 | \$ 2,924,611.97 | \$ 1.358 | \$ 4,948,612 | \$ 2.298 |
| 2. Barge Mounted directly connected to each existing intake | \$ 13,300,000 | \$ 1,529,500 | \$ 0.710 | \$ 2,924,611.97 | \$ 1.358 | \$ 4,454,112 | \$ 2.069 |
| 3. Mechanical Draft Cooling Towers (Qty 2) and New Intake Structure | \$ 35,600,000 | \$ 4,094,000 | \$ 1.901 | \$ 2,571,155.01 | \$ 1.194 | \$ 6,665,155 | \$ 3.096 |
| 4. Permanent deep water intake | \$ 29,300,000 | \$ 3,369,500 | \$ 1.565 | \$ 1,831,408.62 | \$ 0.851 | \$ 5,200,909 | \$ 2.416 |
| 5. Cooling Tower for Cooper 2 and Barge mounted pumps for Unit 1 | \$ 24,000,000 | \$ 2,760,000 | \$ 1.282 | \$ 2,734,949.68 | \$ 1.270 | \$ 5,494,950 | \$ 2.552 |
| *6. Barge Mounted Pumps for Summer 2007 - High Temp Water Plan | \$ 2,300,000 | \$ 264,500 | \$ 0.123 | \$ 600,606.17 | \$ 0.279 | \$ 865,106 | \$ 0.402 |

*Summer 2007 only

East Kentucky Power Cooperative
 John Sherman Cooper Station
 5/17/2007

Low Water Mitigation Plan
 Quantitative Analysis

| | Pumps/Barges | | | | | | Cooling Tower | |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|----------------------|----------------------|
| | Plan 1 | Plan 2 | Plan 3 | Plan 4 | Plan 5 | Plan 5 | Plan 5 | Plan 6 |
| Assumptions: | | | | | | | | |
| Electrical Consumption internal charge rate, Cooper O&M | \$ 27,357 | \$ 27,357 | \$ 27,357 | \$ 27,357 | \$ 27,357 | \$ 27,357 | \$ 27,357 | \$ 27,357 |
| Capital Carrying Cost(interest, dep, taxes, insurance) | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 |
| Power Consumption, KW | 6,700 | 6,700 | 4,750 | 3,750 | 3,680 | 2,600 | 1,700 | 1,700 |
| Power Consumption, KWH | 154,000 | 154,000 | 114,000 | 90,000 | 80,000 | 62,400 | 26,800 | 26,800 |
| Capacity Charge /Demand Charge, based on Gilbert, \$/KWY | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| Generation, Net MWH | 2,153,046 | 2,153,046 | 2,166,712 | 2,173,720 | 2,155,990 | 2,155,990 | 2,188,086 | 2,188,086 |
| 80% capacity factor, Cooling Tower, 70% Pumps | | | | | | | | |
| Operations | \$ 50,000 | \$ 50,000 | \$ - | \$ - | \$ 50,000 | \$ - | \$ - | \$ - |
| Maintenance | \$ 63,875 | \$ 63,875 | \$ 330,330 | \$ 220,231 | \$ 63,875 | \$ 220,231 | \$ 150,000 | \$ 10,000 |
| Water Treatment | \$ - | \$ - | \$ 200,000 | \$ - | \$ - | \$ - | \$ 498,466 | \$ - |
| Power Consumption, \$ | \$ 1,537,737 | \$ 1,537,737 | \$ 1,138,325 | \$ 898,677 | \$ 559,177 | \$ 494,000 | \$ 267,606 | \$ 267,606 |
| Capacity Chg. @ \$190/KW*Yr, \$ | \$ 1,273,000 | \$ 1,273,000 | \$ 902,500 | \$ 712,500 | \$ 699,200 | \$ 494,000 | \$ 323,000 | \$ 323,000 |
| Total O&M | \$ 2,924,611.97 | \$ 2,924,611.97 | \$ 2,571,155.01 | \$ 1,831,408.62 | \$ 1,372,252.08 | \$ 1,362,697.60 | \$ 600,606.17 | \$ 600,606.17 |

\$ 2,397,548.50
 \$ 2,734,949.68

East Kentucky Power Cooperative
 John Sherman Cooper Station
 3/30/2007

Low Water Mitigation Plan
 Quantitative Analysis

Notes:

| | |
|--|--|
| Assumptions: | |
| Electrical Consumption internal charge rate, Cooper O&M | Based on 2006 yearly report Production Operation & Maintenance Costs |
| Capital Carrying Cost(interest, dep, taxes, insurance) | Based on rate supplied from Finance March 29, 2007 |
| Power Consumption, KW | per Stanley study Cooper Station Circulating Water Intake Study March 2007 |
| Power Consumption, KWH | per Stanley study Cooper Station Circulating Water Intake Study March 2007 |
| Capacity Charge /Demand Charge, based on Gilbert, \$/KWY | Based on Gilbert Unit Spurlock for next increment of baseload power |
| Generation, Net MWH | Historical generation for Cooper Station minus power consumption for each scenario |
| O&M | |
| Operations | Budget number for account |
| Maintenance | Pump maintenance from Godwin, temporary pump experts |
| Water Treatment | Based on Spurlock Cooling tower costs scaled to (1) tower 242 MW and (2) towers 366 MW |
| Power Consumption, \$ | Cooper process only cost per kWh times power consumption for each scenario |
| Capacity Chg, @\$190/KW*Yr, \$ | Capacity chg rate from Gilbert times power consumption demand for each scenario. |