

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER )  
COOPERATIVE, INC. FOR AN ORDER )  
APPROVING THE ESTABLISHMENT OF A ) CASE NO. 2010-00449  
REGULATORY ASSET FOR THE AMOUNT )  
EXPENDED ON ITS SMITH 1 GENERATING )  
UNIT )

NOTICE OF FILING

Notice is given to all parties that the following materials have been filed into the record of this proceeding:

- The digital video recording of the evidentiary hearing conducted on February 8, 2011 in this proceeding;
- Certification of the accuracy and correctness of the digital video recording;
- All exhibits introduced at the evidentiary hearing conducted on February 8, 2011 in this proceeding;
- A written list of the exhibits introduced at the evidentiary hearing conducted on February 8, 2011 in this proceeding;
- A written log listing, *inter alia*, the date and time of where each witness' testimony begins and ends on the digital video recording of the evidentiary hearing conducted on February 8, 2011.

A copy of this Notice, the certification of the digital video record, exhibit list, and hearing log have been served by first class mail upon all persons listed at the end of this Notice. Parties desiring an electronic copy of the digital video recording of the hearing in Windows Media format may download a copy at [http://psc.ky.gov/av\\_broadcast/2010-00238-00449/2010-00238-00449\\_08Feb11\\_Inter.aspx](http://psc.ky.gov/av_broadcast/2010-00238-00449/2010-00238-00449_08Feb11_Inter.aspx). Parties wishing an annotated

digital video recording may submit a written request by electronic mail to [pscfilings@ky.gov](mailto:pscfilings@ky.gov). A minimal fee will be assessed for a copy of this recording.

The exhibits introduced at the evidentiary hearing may be downloaded at <http://psc.ky.gov/pscscf/2010%20cases/2010-00449/>.

Done at Frankfort, Kentucky, this 15<sup>th</sup> day of February 2011.



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COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:


AN INVESTIGATION OF EKPC'S NEED FOR )  
SMITH 1 FACILITY AND FOR AN ORDER ) CASE NO. 2010-00238  
APPROVING THE ESTABLISHING A ) AND  
REGULATORY ASSET FOR AMOUNT ) CASE NO. 2010-00449  
EXPENDED ON SMITH 1 UNIT

CERTIFICATE

I, Kathy Gillum, hereby certify that:

1. The attached DVD contains a digital recording of the hearing conducted in the above-styled proceeding on February 8, 2011;
2. I am responsible for the preparation of the digital recording;
3. The digital recording accurately and correctly depicts the hearing;
4. All Exhibits introduced at the hearing of February 8, 2011 are attached to this Certificate, as well as the "Exhibit List", which correctly lists all exhibits introduced at the hearing of February 8, 2011.
5. The "Hearing Log" attached to this Certificate accurately and correctly states the events that occurred at the hearing of February 8, 2011 and the time at which each occurred.

Given this 14<sup>th</sup> day of February, 2011.

  
\_\_\_\_\_  
Kathy Gillum, Notary Public  
State at Large

My commission expires: Sept 3, 2013



# Case History Log Report

Case Number: 2010-00238 and 2010-00449\_08Feb11

Case Title: East Kentucky Power Cooperative, Inc.

Case Type: Other

Department:

Plaintiff:

Prosecution:

Defendant:

Defense:

**Date: 2/8/2011**

Location: Default Location

Judge: David Armstrong, Jim Gardner, Charles Borders

Clerk: Kathy Gillum

Bailiff:

Event Time	Log Event	
10:05:40 AM	Case Started	
10:05:47 AM	Preliminary Remarks	
10:06:42 AM	Introductions Note: Kathy Gillum	Mark David Goss for EKPC; Mike Kurtz for Gallatin Steel; Larry Cook for the Attorney General's Office; Robert Ukeiley for Intervenor; Rick Bertelson, Richard Raff and Quang Nguyen for PSC. Counsel acknowledged that Public Notice has been given.
10:07:51 AM	Housekeeping Issues Discussed Note: Kathy Gillum	Joint Motion by the Parties to Accept Settlement Agreement and Motion to Dismiss as Settled in Case No. 2010-00238. Also Motion to Accept Relinquishment of the CPCN.
10:09:01 AM	No Public Comments	
10:09:11 AM	Mark David Goss (EKPC) Note: Kathy Gillum	Affidavit with the Kentucky Press Association and the tear sheets from 3 newspapers. Asked for record to reflect. No objections.
10:10:39 AM	Statement by Robert Ukeiley (Intervenor) Note: Kathy Gillum	Mr. Ukeiley states that he only represents the Intervenor in Case No. 2010-00238
10:11:26 AM	Rick Bertelson (PSC) Note: Kathy Gillum	Requests that counsel make clear which case they are referring to since both cases are being heard concurrently.
10:11:33 AM	Mark David Goss (EKPC) Note: Kathy Gillum	Matters concerning Confidentiality Agreement
10:12:52 AM	Witness, Tony Campbell (EKPC) Note: Kathy Gillum	Witness called to testify by Mark David Goss. Witness adopts pre-filed testimony. Mr. Goss moves to enter pre-filed testimony into the record. No objections.
10:14:31 AM	Examination by Mike Kurtz, (Gallatin) Note: Kathy Gillum	Questions regarding CPCN of the Smith Plant. Questions regarding RUS financing for Smith. Questions regarding projected costs of the Smith plant. Questions regarding canceling of the Smith plant. Questions regarding the Settlement Agreement. Questions regarding the lawsuits against the Smith Plant. Questions regarding re-starting construction on the Smith plant.

10:25:26 AM	Examination by Rick Bertelson (PSC) Note: Kathy Gillum	Questions regarding lost load due to economic downturn. Questions regarding Item 18 of PSC 1st DR in Case 2010-00238, page 2. Questions regarding the extent of EKPC's auditors involvement. Questions regarding Section 5 of Settlement Agreement in Case No. 2010-00238, page 8. Questions regarding administrative costs. Questions regarding Demand Side Management Program. Questions regarding testimony of Julie Tucker, page 9.
10:38:51 AM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding annual growth rate. Questions regarding RUS moratorium. Moratorium is now on all fossil fuel.
10:42:54 AM	Questions by Commissioner Borders Note: Kathy Gillum	Questions regarding the spirit of the Collaborative. Questions regarding wind power. Questions regarding Case No. 2010-00449.
10:48:05 AM	Questions by Chairman Armstrong Note: Kathy Gillum	Questions regarding engagement of Board with Collaborative. Questions regarding changes in the Board. Statement regarding changing the future of the company.
10:53:19 AM	Examination by Robert Ukeiley (Intervenor) Note: Kathy Gillum	Questions regarding Settlement Agreement. Questions regarding Wind Studies.
10:54:53 AM	Question by Commissioner Gardner Note: Kathy Gillum	Commissioner Gardner asks if EKPC objects to the Collaborative filing a final report and periodic updates through out the 2 years. Witness replied he had no objection to that.
10:55:16 AM	Witness Excused (Campbell)	
10:55:25 AM	Witness, Mike McNalley (EKPC) Note: Kathy Gillum	Witness called to testify by Mark David Goss. Witness adopts pre-filed testimony (Case No. 2010-00449). Mr. Goss moves for admission of pre-filed testimony into the record. No objections.
10:57:08 AM	Examination by Mike Kurtz (Gallatin) Note: Kathy Gillum	Questions regarding capitalizations. Questions regarding cost of Smith I as of now. Questions regarding equity. Questions regarding regulatory asset. Questions regarding document handed out by Mike Kurtz (page submitted in response to a D.R.) Questions regarding RUS financing. Questions regarding revenue requirement, base rates, load growth and load reduction. Questions regarding sur-charges.
11:14:53 AM	Examination by Rick Bertelson (PSC) Note: Kathy Gillum	Questions regarding sur-charges v. base rates recovery. Questions regarding response to PSC D.R. page 7 .
11:16:49 AM	Exhibit introduced by Mike Kurtz (Gallatin) Note: Kathy Gillum	Mike Kurtz introduces page 7 of EKPC's Response to PSC D.R. as "Gallatin Exhibit 1".
11:17:28 AM	Examination by Rick Bertelson (PSC) continues Note: Kathy Gillum	Questions regarding page 6 of EKPC response to PSC D.R. Questions regarding page 8 of Settlement Agreement. Questions regarding pre-filed testimony, page 3 (Case No. 2010-00449). Questions regarding Item 2(a) of PSC 1st Data Request. Questions regarding Appendix B of the Settlement Agreement. Questions regarding pre-filed testimony, page 8. Questions regarding Response to Item 4 of PSC Supp. D.R.

11:32:00 AM	Data Request by Rick Bertelson (PSC) Note: Kathy Gillum	Summary update on telephone conversation with RUS (to be provided in 7 days)
11:32:15 AM	Examination by Rick Bertelson continues	
11:35:46 AM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding TIER. Questions regarding equity level. Questions regarding interest and IOU's being included as regulatory asset.
11:40:55 AM	Questions by Commissioner Borders Note: Kathy Gillum	Questions regarding interest amounts. Questions regarding Gallatin Exhibit 1.
11:44:42 AM	Re-direct by Mark David Goss (EKPC) Note: Kathy Gillum	Questions regarding Mike McNalley Exhibit 1 and Exhibit G to the application. Clarification of answer to question by Commissioner Borders. Questions regarding EKPC's equity and what is being done to build equity. Questions regarding the cascading effect in the event of denial. Questions regarding conversations with Deloyt. Clarification of answers to questions regarding the collaborative. Questions regarding the status of the collaborative. Questions regarding Settlement Agreement. Questions regarding pre-filed testimony, page 5 (Case No. 2010-00449), line 12.
12:01:53 PM	Re-Examination by Rick Bertelson (PSC) Note: Kathy Gillum	Questions regarding Gallatin Exhibit 1.
12:02:59 PM	Witness Excused (McNalley)	
12:04:02 PM	Mark David Goss Note: Kathy Gillum	Mr. Goss asks that Mr. Campbell and Mr. McNalley be excused. No objections. Witnesses excused.
12:04:59 PM	Lunch Break Note: Kathy Gillum	Lunch Break didn't start until 12:07:46, after admonishment of parties to Settlement Agreement,
12:05:32 PM	Case Recessed	
12:06:06 PM	Case Resumed	
12:06:23 PM	Chairman Armstrong Note: Kathy Gillum	Admonishment of parties to Settlement Agreement.
12:07:46 PM	Case Recessed	
1:18:18 PM	Case Started	
1:18:42 PM	Witness, David Mitchell (EKPC) Note: Kathy Gillum	Witness called to testify by Mark David Goss. Witness adopts pre-filed testimony with 1 correction. (Case No. 2010-00238) Correction needs to be made to witness' title. Current title is Vice President of Construction and Engineering. Mr. Goss moves for admittance into the record.
1:20:42 PM	Examination by Quang Nguyen (PSC) Note: Kathy Gillum	Questions regarding low-income type organization's involvement in the collaborative. Questions regarding how the \$25,000.00 would be spent. Questions regarding expenses.
1:27:15 PM	Data Request by Quang Nguyen (PSC) Note: Kathy Gillum	Mr. Nguyen requested that EKPC provide the response to the question as to whether they expect to file an application for the \$100,000 for the Collaborative.
1:27:24 PM	Examination by Quang Nguyen continues	

1:27:56 PM	Data Request by Quang Nguyen (PSC) Note: Kathy Gillum	Mr. Nguyen asks that EKPC provide the answer to the question of "Will EKPC still spend the money for the Collaborative if the Commission doesn't approve the \$100,000.
1:28:06 PM	Examination by Quang Nguyen continues Note: Kathy Gillum	Questions regarding the Vice Chair for the collaborative. Questions regarding Response to Item 2 of PSC 2nd D.R. Part 2 (b). Questions regarding the mitigation process to date. Questions regarding quarterly status reports.
1:32:27 PM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding land fill gas.
1:33:06 PM	Questions by Chairman Armstrong Note: Kathy Gillum	Questions regarding consumer interests.
1:33:35 PM	Mark David Goss (EKPC) Note: Kathy Gillum	Mr. Goss asked Commissioner Gardner if that needed to be a post hearing data request.
1:33:45 PM	Commissioner Gardner Note: Kathy Gillum	Answered yes. Data Requested: "Why was landfill gas excluded from the items that the Collaborative will examine?" Response will be provided by both EKPC and the Intervenors.
1:34:34 PM	Re-Direct by Mark David Goss (EKPC) Note: Kathy Gillum	Questions regarding McNalley's Exhibit MM1 and Exhibit G.
1:36:15 PM	Re-Examination by Quang Nguyen (PSC) Note: Kathy Gillum	Questions regarding land fill gas generation. Witness states that EKPC currently has 4 facilities. Craig Johnson
1:38:07 PM	Data Request by Quang Nguyen (PSC) Note: Kathy Gillum	Data Requested: "EKPC will answer whether it's landfill gas projects have been successful and cost effective."
1:38:26 PM	Examination by Quang Nguyen continues	
1:38:53 PM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding Switch Grass Program Project and biomass.
1:39:41 PM	Witness Excused (Mitchell)	
1:39:52 PM	Witness, Julie Tucker (EKPC) Note: Kathy Gillum	Witness called to testify by Mark David Goss. Witness adopts pre-filed testimony. (Case No. 2010-00238) Mr. Goss moves for admittance into the record.
1:41:15 PM	Examination by Robert Ukeiley (Intervenors) Note: Kathy Gillum	Questions regarding utility scale Wind Farms. Questions regarding Wind Resource Map.
1:43:23 PM	Examination by Mike Kurtz (Gallatin) Note: Kathy Gillum	Questions regarding load growth. Questions regarding the Settlement Agreement, page 5. Counsel passed document out for questioning.
1:45:19 PM	Exhibit introduced by Mike Kurtz (Gallatin) Note: Kathy Gillum	Mike Kurtz introduced copy of Application of EKPC in Case No. 2005-____ as Gallatin Exhibit 2
1:45:25 PM	Examination by Mike Kurtz continues Note: Kathy Gillum	Questions regarding Gallatin Exhibit 2.
1:51:54 PM	Examination by Quang Nguyen (PSC) Note: Kathy Gillum	Questions regarding wind power cost. Questions regarding Gallatin Exhibit 2, IRP, page 7-8. Questions regarding load forecast. Questions regarding need of Smith I to entire system. Questions regarding decrease in load growth. Questions regarding the Settlement Agreement Appendix B.



2:00:01 PM	Data Request by Quang Nguyen (PSC) Note: Kathy Gillum	Data Requested is "What 12 month period does Appendix B reflect".
2:00:24 PM	Examination by Quang Nguyen continues Note: Kathy Gillum	Questions regarding load forecast. Questions regarding data sets used for forecast.
2:05:32 PM	Data Request by Quang Nguyen (PSC) Note: Kathy Gillum	Data Requested: A schedule showing a summary of each of the energy and peak demand forecasts by year for the 16 distribution co-ops. Both coincident and non-coincident peak demand information, if available.
2:06:57 PM	Examination by Quang Nguyen (PSC) Note: Kathy Gillum	Questions regarding EKPC's 2010 Load Forecast.
2:08:13 PM	Data Request by Quang Nguyen (PSC) Note: Kathy Gillum	Mr. Nguyen requested a Copy of Load Forecast submitted to RUS
2:08:33 PM	Examination by Quang Nguyen continues Note: Kathy Gillum	Questions regarding Response to Item 3 of PSC D.R. Questions regarding page 3, lines 18-20 of pre-filed testimony, Exhibit JT1-2. Questions regarding projected growth rate and economic downturn. Questions regarding page 4 of pre-filed testimony. Questions regarding to Item 4, PSC 1st D.R. Questions regarding 2009 IRP. Questions regarding Response to Item 6 of PSC 1st D.R. Questions regarding Response to PSC Supplemental D.R. Item 2(b), page 8. Questions regarding pre-filed testimony page 9, line 17-18. Questions regarding DSM Programs. Questions regarding Exhibit 2 to pre-filed testimony.
2:33:24 PM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding DSM Programs. Questions regarding Page 5 of pre-filed testimony.
2:35:06 PM	Data Request by Commissioner Gardner Note: Kathy Gillum	Commissioner Gardner requests info on the programmable thermostats. "How many homes have programmable thermostats?"
2:35:27 PM	Questions by Commissioner Gardner continues Note: Kathy Gillum	Questions regarding Load Forecast. Questions regarding page 6 of pre-filed testimony. Questions regarding ratings. Questions regarding RUS ban on financing fossil fuel.
2:41:50 PM	Questions by Commissioner Borders Note: Kathy Gillum	Questions regarding page 3, line 18 of pre-filed testimony.
2:45:08 PM	Re-Direct by Mark David Goss (EKPC) Note: Kathy Gillum	Clarification of growth rate answer. Questions regarding DSM programs. Questions regarding EKPC's efforts to promote participation in DSM programs that EKPC does with the co-ops.
2:49:49 PM	Examination by Robert Ukeiley (Intervenor) Note: Kathy Gillum	Questions regarding page 6 of PSC Order in Case 2009-00545.
2:51:03 PM	Objection by Mark David Goss (EKPC) Note: Kathy Gillum	Mr. Goss objects stating that the price was in a case involving Ky Power and not EKPC, and the witness is not qualified to testify to that.
2:51:41 PM	Robert Ukeiley (Intervenors)	
2:52:00 PM	Mike Kurtz (Gallatin)	
2:52:25 PM	Chairman Armstrong Note: Kathy Gillum	Chairman Armstrong asked the witness if she had knowledge of this.

2:52:35 PM	Witness, Julie Tucker Note: Kathy Gillum	Witness stated that she did not of this particular project.
2:52:44 PM	Robert Ukeiley (Intervenors) Note: Kathy Gillum	Stated that the question was, was Smith's cost more than \$43.00 per megawatt hour?
2:52:51 PM	Witness, Julie Tucker Note: Kathy Gillum	Witness stated that it would not be a simple yes or no answer.
2:53:17 PM	Examination by Robert Ukeiley continues Note: Kathy Gillum	Questions regarding Spurlock II.
2:54:48 PM	Examination by Larry Cook (OAG) Note: Kathy Gillum	Questions regarding DSM programs. Questions regarding examination or study of EKPC's rate-design.
2:58:56 PM	Objection by Mark David Goss Note: Kathy Gillum	Mr. Goss objected stating that the testimony was not that each co-op was not examined.
2:59:09 PM	Chairman Armstrong Note: Kathy Gillum	Chairman Armstrong asked the witness if she recalled her testimony.
2:59:20 PM	Witness, Julie Tucker Note: Kathy Gillum	Witness stated that "we review it from the East Ky system as a whole, each member system is responsible for evaluating their individual systems."
2:59:30 PM	Examination by Larry Cook (OAG) continues Note: Kathy Gillum	Questions regarding IOUs
3:01:19 PM	Questions by Commissioner Borders Note: Kathy Gillum	Clarification of early testimony.
3:02:07 PM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding production costs.
3:03:53 PM	Witness Excused (Tucker)	
3:04:08 PM	Witness Gary Stansberry (EKPC) Note: Kathy Gillum	Witness called to testify by Mark David Goss. Witness adopts pre-filed testimony. Mr. Goss moves to admit pre-filed testimony.
3:05:44 PM	Examination by Mike Kurtz (Gallatin) Note: Kathy Gillum	Questions regarding assumptions. Questions regarding RUS financing. Questions regarding coal prices and gas prices. Witness stated that 7.52 was the discount rate. Questions regarding Page 9 of pre-filed testimony. Questions regarding financial forecasting.
3:13:09 PM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding Ms. Tucker's testimony regarding contract expiration.
3:14:06 PM	Question to Mr. Goss by Commissioner Gardner Note: Kathy Gillum	Commissioner Gardner asks Mr. Goss to answer his question about asking the witness questions from a redacted copy of a document.
3:14:35 PM	Mark David Goss (EKPC) Note: Kathy Gillum	Answered yes.
3:15:04 PM	Questions by Commissioner Gardner continues Note: Kathy Gillum	Questions regarding cost of construction for a combined cycle turbine v. Smith plant. Questions regarding ratio of the costs of gas to coal. Questions regarding CO2 Legislation. Questions regarding DSM program costs v. producing electricity.
3:23:43 PM	Questions by Commissioner Borders Note: Kathy Gillum	Questions regarding DSM.

3:24:47 PM	Questions by Commissioner Gardner Note: Kathy Gillum	Questions regarding when model was done.
3:27:53 PM	Mike Kurtz (Gallatin) Note: Kathy Gillum	Questions regarding assumptions about CO2.
3:28:48 PM	Witness Excused (Stansberry)	
3:29:00 PM	Chairman Armstrong Note: Kathy Gillum	Stated that there was a 7 day response time on data requests.
3:30:01 PM	Mark David Goss (EKPC) Note: Kathy Gillum	Discussion regarding briefs. Parties agreed briefing not necessary.
3:30:27 PM	Mike Kurtz Note: Kathy Gillum	Mr. Kurtz asks Mr. Goss to clarify the timeframe for PSC Order to be issued.
3:32:11 PM	Chairman Armstrong	
3:32:49 PM	Case Recessed	
3:36:45 PM	Case Stopped	



# Exhibit List Report

Case Number: 2010-00238 and 2010-00449\_08Feb11

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Case Title: East Kentucky Power Cooperative, Inc.

Department:

Plaintiff:

Prosecution:

Defendant:

Defense:

<b>Name</b>	<b>Description</b>
Gallatin Exhibit 1	Page 7 of EKPC's Response to PSC 1st Data Request (consisting of 2 pages)
Gallatin Exhibit 2	Copy of Application of EKPC in Case No. 2005-_____

Scenario 1 - Mitigation at Scrap Values

East Kentucky Power Cooperative, Inc.  
Billing Analysis  
Billing Units - Projected 2011 as presented in 2010-00167

Description	Current 2010-00167		Remove \$9 Mill fm base rates		5.5% Interest Private Placement				3.5% Interest RUS Financing							
	Billing Units	Rate	Current \$	Rate	Proposed \$	Per Year Principal	Per Year Interest	TIER	Rate	Proportional \$	\$ Increase	% Incr	Rate	Proportional \$	\$ Increase	% Incr
<b>RATE E - 16 Customers</b>																
Melting Point Charge	3,783	\$ 144	\$ 545,974	\$ 143	\$ 540,243	143	540,243	-	143	540,243	-	-	143	540,243	-	-
Substation 1,000 - 2,999 kVA	36	\$ 1,088	39,176	\$ 1,077	38,765	1,077	38,765	-	1,077	38,765	-	-	1,077	38,765	-	-
Substation 3,000 - 7,499 kVA	504	\$ 2,737	1,379,381	\$ 2,708	1,364,904	2,708	1,364,904	-	2,708	1,364,904	-	-	2,708	1,364,904	-	-
Substation 7,500 - 14,999 kVA	2,583	\$ 3,292	8,503,332	\$ 3,257	8,414,085	3,257	8,414,085	-	3,257	8,414,085	-	-	3,257	8,414,085	-	-
Substation > 15,000 kVA	588	\$ 5,310	3,122,545	\$ 5,255	3,089,772	5,255	3,089,772	-	5,255	3,089,772	-	-	5,255	3,089,772	-	-
Demand Option 1 (Own)	2,259,000	\$ 7.99	18,038,489	7.90	17,848,165	7,900	17,848,165	-	7,900	17,848,165	-	-	7,900	17,848,165	-	-
Demand Option 2	20,846,000	\$ 6.02	125,393,074	5.95	124,077,005	5,950	124,077,005	-	5,950	124,077,005	-	-	5,950	124,077,005	-	-
On-Peak Energy (Option 1)	554,132,000	\$ 0.051522	28,550,114	0.050981	28,250,465	0.050981	28,250,465	2,780,618	0.05098	28,250,465	2,780,618	3.28%	0.05098	28,250,465	2,323,530	2.74%
Off-Peak Energy (Option 1)	515,058,000	\$ 0.050944	26,239,053	0.050409	25,963,660	0.050409	25,963,660	19,329,237	0.05040	25,963,660	19,329,237	3.28%	0.05040	25,963,660	16,151,828	2.74%
On-Peak Energy (Option 2)	4,409,487,241	\$ 0.050669	283,106,599	0.050042	280,345,151	0.050042	280,345,151	-	0.05004	280,345,151	-	-	0.05004	280,345,151	-	-
Off-Peak Energy (Option 2)	4,228,468,759	\$ 0.050944	215,415,522	0.050409	213,154,619	0.050409	213,154,619	-	0.05040	213,154,619	-	-	0.05040	213,154,619	-	-
Sub-Total - Base Rates			680,333,258		683,087,633		683,087,633			705,197,688	22,109,855	3.28%		701,563,191	18,475,358	2.74%
Total Billings Incl FAC, ES			\$ 681,526,609		\$ 674,281,184		\$ 674,281,184			\$ 696,391,039	\$ 22,109,855	3.28%		\$ 692,756,542	\$ 18,475,358	2.74%
<b>RATE B - 10 Customers</b>																
Minimum Demand	1,367,930	\$ 7.17	\$ 9,813,540	7.10	\$ 9,710,541	9,710	9,710,541	-	9,710	9,710,541	-	-	9,710	9,710,541	-	-
Excess Demand	169,070	\$ 9.98	1,686,674	9.87	1,668,972	1,668,972	1,668,972	-	1,668,972	1,668,972	-	-	1,668,972	1,668,972	-	-
Energy Charge All kWh	823,361,000	\$ 0.049272	45,495,891	0.048755	45,018,387	0.048755	45,018,387	11,223,280	0.04875	45,018,387	11,223,280	3.28%	0.04875	45,018,387	1,264,076	2.74%
Sub-Total - Base Rates			56,996,105		56,397,900		56,397,900			56,170,648	1,772,748	3.28%		57,879,238	1,481,338	2.72%
Total Billings Incl FAC, ES			\$ 55,000,468		\$ 54,408,263		\$ 54,408,263			\$ 56,181,011	\$ 1,772,748	3.28%		\$ 55,889,601	\$ 1,481,338	2.72%
<b>RATE C - 5 Customers</b>																
Demand Chg All kW	485,000	\$ 7.17	\$ 3,335,913	7.10	\$ 3,300,901	3,300,901	3,300,901	-	3,300,901	3,300,901	-	-	3,300,901	3,300,901	-	-
Energy Charge All kWh	292,305,000	\$ 0.049272	14,402,487	0.048755	14,251,305	0.048755	14,251,305	3,815,129	0.04875	14,251,305	3,815,129	3.28%	0.04875	14,251,305	429,698	2.74%
Sub-Total - Base Rates			17,738,381		17,552,207		17,552,207			18,066,435	514,228	3.05%		17,981,904	429,698	2.55%
Total Billings Incl FAC, ES			\$ 17,068,047		\$ 16,881,873		\$ 16,881,873			\$ 17,396,102	\$ 514,228	3.05%		\$ 17,311,571	\$ 429,698	2.55%
<b>RATE G - 2 Customers</b>																
Meter Pt Charge	12	\$ 144	\$ 1,732	\$ 143	\$ 1,714	1,714	1,714	-	1,714	1,714	-	-	1,714	1,714	-	-
Substation Chg >15,000 kVA	12	\$ 5,310	63,725	5,255	63,057	63,057	63,057	-	63,057	63,057	-	-	63,057	63,057	-	-
Demand Charge All Kw	564,000	\$ 6.98	3,939,194	6.91	3,897,850	3,897,850	3,897,850	-	3,897,850	3,897,850	-	-	3,897,850	3,897,850	-	-
Energy Charge All kWh	338,237,000	\$ 0.047237	15,977,228	0.046741	15,809,538	0.046741	15,809,538	4,505,073	0.04674	15,809,538	4,505,073	3.21%	0.04674	15,809,538	507,406	2.68%
Sub-Total - Base Rates			19,981,879		19,772,158		19,772,158			20,379,381	607,223	3.21%		20,279,564	507,406	2.68%
Total Billings Incl FAC, ES			\$ 19,133,948		\$ 18,924,228		\$ 18,924,228			\$ 19,531,451	\$ 607,223	3.21%		\$ 19,431,634	\$ 507,406	2.68%
<b>Large Special Contract</b>																
Firm Demand	180,000	\$ 6.92	\$ 1,245,748	6.85	\$ 1,232,673	1,232,673	1,232,673	-	1,232,673	1,232,673	-	-	1,232,673	1,232,673	-	-
Interruptible Demand	1,740,000	\$ 8.92	12,042,231	8.85	11,915,841	11,915,841	11,915,841	-	11,915,841	11,915,841	-	-	11,915,841	11,915,841	-	-
Interruptible Demand Credit	1,440,000	\$ (6.22)	(8,956,800)	(6.22)	(8,956,800)	(8,956,800)	(8,956,800)	-	(8,956,800)	(8,956,800)	-	-	(8,956,800)	(8,956,800)	-	-
10-Min Interruptible Demand	300,000	\$ (4.20)	(1,260,000)	(4.20)	(1,260,000)	(1,260,000)	(1,260,000)	-	(1,260,000)	(1,260,000)	-	-	(1,260,000)	(1,260,000)	-	-
Energy Charge	240,697,818	\$ 0.048195	11,841,190	0.048879	11,716,910	0.048879	11,716,910	192,031	0.04879	11,716,910	192,031	0.44%	0.04879	11,716,910	160,464	0.36%
Energy On-Peak kWh	728,262,182	\$ 0.045767	33,330,522	0.045287	32,980,700	0.045287	32,980,700	-	0.045287	32,980,700	-	-	0.045287	32,980,700	-	-
Energy Off-Peak kWh			48,242,891		47,629,325		47,629,325			47,821,358	192,031	0.44%		47,789,789	160,464	0.36%
Sub-Total - Base Rates			48,242,891		47,629,325		47,629,325			44,320,185	192,031	0.44%		44,288,618	160,464	0.36%
Total Billings Incl FAC, ES			\$ 44,741,721		\$ 44,128,154		\$ 44,128,154			\$ 44,320,185	\$ 192,031	0.44%		\$ 44,288,618	\$ 160,464	0.36%
<b>Special Contract - Pumping Stations - 2 Customers</b>																
Demand Charge All Kw	444,000	\$ 1.75	\$ 777,000	1.75	\$ 777,000	777,000	777,000	-	777,000	777,000	-	-	777,000	777,000	-	-
Energy On-Peak	78,274,400	\$ 0.038407	2,929,457	0.038407	2,929,457	0.038407	2,929,457	-	0.038407	2,929,457	-	-	0.038407	2,929,457	-	-
Sub-Total - Base Rates	89,539,600	\$ 0.031459	2,816,824	0.031459	2,816,824	0.031459	2,816,824	-	0.031459	2,816,824	-	-	0.031459	2,816,824	-	-
Total Billings Incl ES			6,523,281		6,523,281		6,523,281			6,523,281		-		6,523,281		-
Sub-Total - Base Rates			7,026,315		7,026,315		7,026,315			7,026,315		0.00%		7,026,315		0.00%
Total Billings Incl FAC, ES			\$ 7,026,315		\$ 7,026,315		\$ 7,026,315			\$ 7,026,315		0.00%		\$ 7,026,315		0.00%
<b>Steam Service - 1 Customer</b>																
Steam Adj	0.975							-			-	-			-	-
Demand Per MMBTU	4,080	\$ 577.15	\$ 2,295,821	571.10	\$ 2,271,824	2,271,824	2,271,824	-	2,271,824	2,271,824	-	-	2,271,824	2,271,824	-	-
Equip kW 492,000								-			-	-			-	-
Energy Per MMBTU	2,310,364	\$ 5.195	11,701,317	5.140	11,578,505	11,578,505	11,578,505	353,914	5.140	11,578,505	353,914	3.28%	5.140	11,578,505	295,737	2.74%
Equip kW 262,699,000								-			-	-			-	-
Sub-Total - Base Rates			13,997,238		13,850,329		13,850,329			14,204,244	353,914	2.73%		14,146,066	295,737	2.28%
Total Billings Incl FAC, ES			\$ 13,127,854		\$ 12,980,945		\$ 12,980,945			\$ 13,334,859	\$ 353,914	2.73%		\$ 13,276,682	\$ 295,737	2.28%
<b>Total Base Rate Revenue EKPC Members</b>																
Total FAC			853,813,033		844,813,033		844,813,033			870,383,033	25,550,000	3.08%		866,163,033	21,350,000	2.58%
Total ES			(113,501,089)		(113,501,089)		(113,501,089)			(113,501,089)		-		(113,501,089)		-
Total EKPC Member Revenue Incl FAC and ES			\$ 740,311,944		\$ 731,311,944		\$ 731,311,944			\$ 756,881,944	\$ 25,550,000	3.08%		\$ 752,661,944	\$ 21,350,000	2.58%
<b>Proposed Total</b>																
E			674,281,184		674,281,184		674,281,184			696,391,039	22,109,855	3.28%		692,756,542	18,475,358	2.74%
B			54,408,263		54,408,263		54,408,263			56,181,011	1,772,748	3.28%		55,889,601	1,481,338	2.72%
C			16,881,873		16,881,873		16,881,873			17,396,102	514,228	3.05%		17,311,571	429,698	2.55%
G			18,924,228		18,924,228		18,924,228			18,531,451	607,223	3.21%		18,431,634	429,698	2.55%
Gallatin			44,128,154		44,128,154		44,128,154			44,320,185	192,031	0.44%		44,288,618	160,464	0.36%
Pumping			7,026,315		7,026,315		7,026,315			7,026,315		0.00%		7,026,315		0.00%
Steam			12,980,945		12,980,945		12,980,945			13,334,859	353,914	2.73%		13,276,682	295,737	2.28%
Firm Demand Only Revenue			164,008,932		164,008,932		164,008,932			164,008,932		0.00%		164,008,932		0.00%

GALLATIN EXHIBIT

<b>Current Rates</b>	<b>Remove \$9,000,000 from Base Rates</b>	<b>Add \$21,350,000 by Surcharge</b>	<b>Net Increase to Current Rates</b>
\$837,630,963	\$828,630,963	\$849,980,963	\$12,350,000 or 1.474%

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF:**

THE APPLICATION OF EAST KENTUCKY POWER )  
COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC )  
CONVENIENCE AND NECESSITY, AND A SITE )  
COMPATIBILITY CERTIFICATE, FOR THE ) CASE NO. 2005-  
CONSTRUCTION OF A 278 MW (NOMINAL) )  
CIRCULATING FLUIDIZED BED COAL FIRED UNIT )  
AND FIVE 90 MW (NOMINAL) COMBUSTION )  
TURBINES IN CLARK COUNTY, KENTUCKY )

**APPLICATION**

1. Applicant, East Kentucky Power Cooperative, Inc., hereinafter referred to as "EKPC", Post Office Box 707, 4775 Lexington Road, Winchester, Kentucky 40392-0707, files this Application for a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for the construction of a 278 MW coal-fired generating unit ("Smith CFB 1") utilizing a circulating fluidized bed ("CFB") boiler, and five 90 MW combustion turbines ("Smith CTs 8-12") at the J. K. Smith Power Station located in Clark County, Kentucky, on the Kentucky River near Trapp, Kentucky.

2. This Application is made pursuant to KRS §278.020, 278.216 and related statutes, and 807 KAR 5:001 Sections 8, 9, and related sections.

3. A copy of Applicant's restated Articles of Incorporation and all amendments thereto was filed with the Public Service Commission (the "Commission") in PSC Case No. 90-197, the Application of East Kentucky Power Cooperative for a Certificate of Public Convenience and Necessity to Construct Certain Steam Service Facilities in Mason County, Kentucky.

4. A copy of the resolution from Applicant's Board of Directors approving the

forecasts in developing construction work plans, long range work plans, and financial forecasts. EKPC uses the load forecast in such areas as marketing analysis, transmission planning, power supply planning, and financial forecasting.

Historical and projected total energy requirements, seasonal peak demands, and annual load factor for the EKPC system are presented in Tables 1-1 through 1-3. Internal demand refers to EKPC's peak demand unadjusted for interruptible loads, and net demand refers to EKPC's firm peak demand, taking all adjustments into account. Both are based on coincident hourly-integrated demand intervals. Load Factor is calculated using net peak demand and energy requirements.

EKPC's load forecast indicates that total energy requirements are projected to increase by 3.6 percent per year over the 2004 through 2024 period. Net winter peak demand will increase by approximately 2,400 MW, and net summer peak demand will increase by approximately 2,100 MW. Annual load factor projections are slightly declining to around 53 percent.

Energy projections for the residential, small commercial, and large commercial classifications indicate that during the 2004 through 2024 period, sales to the residential class will increase by 3.6 percent per year, small commercial sales will increase by 3.6 percent per year, and large commercial sales will increase by 4.5 percent per year. Class sales are presented in Tables 1-4. Please note the energy use projection for Gallatin Steel in Table 1-4. EKPC and Owen Electric (Gallatin Steel's electric provider) expect Gallatin Steel to use 1,000,000 MWh per year, adjusted by 360 hours of interruption each

#### Load Forecast Growth Rates

	2004-2009	2004-2014	2004-2024
Total Energy Requirements	6.5%	4.6%	3.6%
Residential Sales	5.6%	4.2%	3.6%
Small Commercial Sales	6.7%	4.8%	3.6%
Large Commercial Sales	11.5%	7.0%	4.5%
Firm Winter Peak Demand	6.8%	4.8%	3.7%
Firm Summer Peak Demand	7.0%	4.8%	3.7%



**Table 1-4  
- 2004 Load Forecast  
Total Member System Retail Energy Sales**

Year	Residential Sales (MWh)	Seasonal Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Gallatin Steel (MWh)	Other Sales (MWh)	Total Retail Sales (MWh)
1990	3,483,232	9,652	813,371	22,879	653,502	0	3,736	4,986,373
1991	3,755,282	9,791	868,032	25,182	722,743	0	4,029	5,385,059
1992	3,798,270	10,100	913,599	26,549	775,544	0	4,305	5,528,366
1993	4,213,871	10,478	980,290	30,060	970,137	0	5,081	6,209,917
1994	4,268,682	10,591	1,014,549	30,347	1,029,178	0	4,156	6,357,502
1995	4,575,282	11,355	1,098,885	33,261	1,119,902	279,070	5,042	7,122,797
1996	4,857,938	12,629	1,082,019	34,242	1,243,107	640,756	5,552	7,876,243
1997	4,883,875	12,075	1,163,683	33,267	1,258,816	755,279	5,663	8,112,659
1998	5,091,880	11,650	1,230,451	34,263	1,349,895	696,051	5,601	8,419,790
1999	5,303,413	11,652	1,337,008	34,947	1,415,803	901,686	5,757	9,010,267
2000	5,607,950	12,648	1,493,650	38,061	1,498,745	917,983	6,160	9,575,197
2001	5,777,378	12,954	1,490,670	39,197	1,686,653	992,711	6,545	10,006,107
2002	5,946,686	14,703	1,571,381	40,725	1,790,693	1,005,493	6,860	10,376,541
2003	6,156,774	15,487	1,581,188	42,689	1,906,861	1,007,676	7,087	10,717,762
2004	6,497,216	14,307	1,630,602	45,531	1,968,664	961,632	7,694	11,125,647
2005	6,682,941	14,825	1,694,044	46,612	2,132,344	960,781	7,949	11,539,497
2006	6,918,457	15,524	1,757,692	47,856	2,261,427	960,951	8,213	11,970,119
2007	7,183,613	16,294	1,822,141	49,201	2,379,982	960,435	8,483	12,420,150
2008	7,963,634	17,003	2,129,583	50,512	3,137,941	961,056	12,482	14,272,210
2009	8,526,792	17,680	2,257,539	51,802	3,394,380	962,376	14,205	15,224,774
2010	8,769,805	18,327	2,328,603	53,030	3,504,926	962,267	14,639	15,651,597
2011	9,005,166	18,968	2,399,739	54,245	3,589,580	960,119	15,077	16,042,894
2012	9,277,560	19,711	2,467,666	55,471	3,689,892	960,160	15,522	16,485,982
2013	9,568,763	20,495	2,534,710	56,735	3,776,751	960,424	15,968	16,933,848
2014	9,849,132	21,220	2,602,619	58,006	3,876,151	961,931	16,418	17,385,477
2015	10,132,987	21,930	2,670,899	59,279	3,959,598	961,610	16,869	17,823,172
2016	10,418,609	22,671	2,738,146	60,548	4,054,635	959,992	17,326	18,271,927
2017	10,734,638	23,534	2,808,274	61,895	4,130,033	959,696	17,787	18,735,857
2018	11,060,111	24,472	2,880,072	63,309	4,220,103	959,191	18,251	19,225,508
2019	11,411,147	25,495	2,952,552	64,796	4,306,388	959,462	18,717	19,738,557
2020	11,759,902	26,543	3,025,190	66,179	4,397,448	961,566	19,194	20,256,022
2021	12,101,252	27,556	3,096,179	67,552	4,480,296	961,698	19,669	20,754,203
2022	12,447,462	28,578	3,166,734	68,928	4,575,322	959,323	20,150	21,266,497
2023	12,811,267	29,677	3,239,421	70,277	4,650,017	959,018	20,637	21,780,314
2024	13,194,533	30,814	3,314,701	71,684	4,740,172	959,015	21,129	22,332,048



EAST KENTUCKY POWER COOPERATIVE

RECEIVED

OCT 20 2006

PUBLIC SERVICE  
COMMISSION

# Integrated Resource Plan

Case No. 2006-~~00017~~ 00471

REDACTED

October 21, 2006

## 6. SIGNIFICANT CHANGES.

All integrated resource plans, shall have a summary of significant changes since the plan most recently filed. This summary shall describe, in narrative and tabular form, changes in load forecasts, resource plans, assumptions, or methodologies from the previous plan. Where appropriate, the utility may also use graphic displays to illustrate changes.

### Major Differences Between EKPC's 2006 and 2004 Load Forecasts

There are three major changes in the 2006 Load Forecast: 1.) Gallatin Steel will be interrupted 360 hours each year as a result of contract negotiations. The 2004 forecast assumed 500 hours. 2.) Based on the most recent End-Use Survey, the assumption for electric furnace saturation is higher than in the 2004 Load Forecast. 3.) Household growth is growing at a more moderate rate than in the 2004 forecast.

**Table 6-1**

Forecast Comparison 2006 Versus 2004				
	2006	2004	Difference	
<b>Residential Sales, MWh</b>				
2007	6,865,831	7,183,613	-317,783	
2012	8,660,448	9,277,560	-627,113	
2017	9,681,304	10,734,638	-1,053,334	
<b>Total Commercial and Industrial Sales, MWh</b>				
2007	4,102,027	4,202,123	-100,096	
2012	5,917,350	6,157,558	-240,208	
2017	6,603,307	6,938,307	-335,000	
<b>Gallatin Steel, MWh per Year</b>				
2007-2017	982,000	980,000	22,000	
<b>Residential Customers</b>				
2007	477,298	486,697	-9,399	
2012	580,588	600,127	-19,539	
2017	635,513	666,258	-30,745	
<b>Firm Winter Peak, MW</b>				
2007	2,773	2,838	-65	
2012	3,595	3,753	-158	
2017	4,031	4,305	-274	
<b>Firm Summer Peak, MW</b>				
2007	2,213	2,300	-87	
2012	2,907	3,089	-182	
2017	3,225	3,519	-294	

Note: Warren becomes member in April 2008.

through 2026 period. Net winter peak demand will increase by approximately 2,400 MW, and net summer peak demand will increase by approximately 1,700 MW. Annual load factor projections are remaining steady at approximately 53 percent. Sales to the residential class are projected to increase by 2.9 percent per year, commercial and industrial sales are projected to increase by 3.6 percent per year. These growth rates do include Warren RECC as a new member beginning April 2008.

**Projected Energy and Peak Demand Growth  
Compound Annual Rates of Change**

	Historical Growth Rates			With Warren			Without Warren		
	2000-2005	1995-2005	1985-2005	2006 Forecast Growth Rates			2006 Forecast Growth Rates		
				2006-2011	2006-2016	2006-2026	2006-2011	2006-2016	2006-2026
Total Energy Requirements	3.6%	6.3%	7.2%	5.6%	3.9%	3.0%	2.8%	2.5%	2.3%
Firm Winter Peak Demand	4.6%	5.3%	4.5%	6.3%	4.2%	3.2%	3.5%	2.9%	2.6%
Firm Summer Peak Demand	2.3%	3.7%	5.3%	5.8%	3.9%	3.0%	2.7%	2.4%	2.3%

<b>Energy and Peak Growth Rates</b>			
	2006-2011	2006-2016	2006-2026
Total Energy Requirements	5.6%	3.9%	3.0%
Residential Sales	4.7%	3.5%	2.9%
Total Commercial and Industrial Sales (Excluding Gallatin Steel)	8.2%	5.2%	3.6%
Firm Winter Peak Demand	6.3%	4.2%	3.2%
Firm Summer Peak Demand	5.8%	3.9%	3.0%

In EKPC's service area, electricity is the primary method for water heating and home heating. Currently, around 85 percent of all homes have electric water heating, and about 54 percent have electric heat. In 2005, 58 percent of EKPC's member retail sales were to the residential class and residential customer use averaged 1,234 kWh per month. While

**Table 7.(4)(a)-1**

Year	Residential Sales (MWh)	Seasonal Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Gallatin Steel (MWh)	Other Sales (MWh)	Total Retail Sales (MWh)
2006	6,702,645	14,445	1,780,456	25,185	2,116,434	981,378	7,945	11,628,489
2007	6,865,831	14,945	1,844,468	25,880	2,257,560	981,718	8,157	11,998,559
2008	7,576,749	15,470	2,143,068	26,578	2,927,518	982,351	12,341	13,684,074
2009	8,036,352	16,009	2,271,045	27,330	3,187,814	981,697	13,773	14,534,020
2010	8,246,901	16,493	2,330,473	28,023	3,301,354	981,659	14,125	14,919,028
2011	8,432,930	16,911	2,387,349	28,674	3,396,327	981,566	14,469	15,258,226
2012	8,650,448	17,466	2,443,562	29,377	3,473,788	981,425	14,817	15,610,882
2013	8,868,278	18,016	2,499,753	30,115	3,550,403	981,156	15,156	15,962,877
2014	9,069,536	18,535	2,555,818	30,813	3,625,976	981,046	15,492	16,297,216
2015	9,270,396	19,050	2,612,249	31,491	3,700,886	981,063	15,824	16,630,959
2016	9,479,347	19,593	2,669,288	32,174	3,792,252	981,254	16,155	16,990,064
2017	9,681,304	20,098	2,727,493	32,868	3,875,814	981,077	16,484	17,335,138
2018	9,900,800	20,637	2,786,650	33,574	3,951,703	980,691	16,815	17,690,869
2019	10,120,469	21,220	2,846,226	34,287	4,052,080	980,619	17,140	18,072,040
2020	10,371,328	21,880	2,905,708	34,941	4,143,897	980,793	17,466	18,476,014

**Assumptions: Gallatin will be interrupted 360 hours per year;  
Warren will become a member April 1, 2008.**

**Estimates of heating and non-heating residential energy use are presented below. As previously mentioned, these are based on results from Statistically Adjusted Modeling used in the load forecast.**

Year	Residential Heating Sales (MWh)	Residential Non-Heating Sales (MWh)	Total Residential Sales (MWh)
2006	1,996,283	4,706,362	6,702,645
2007	2,019,015	4,846,816	6,865,831
2008	2,219,209	5,357,540	7,576,749
2009	2,350,805	5,685,547	8,036,352
2010	2,409,169	5,837,732	8,246,901
2011	2,460,656	5,972,274	8,432,930
2012	2,516,771	6,133,677	8,650,448
2013	2,578,799	6,289,479	8,868,278
2014	2,634,196	6,435,341	9,069,536
2015	2,690,174	6,580,222	9,270,396
2016	2,746,105	6,733,241	9,479,347
2017	2,802,539	6,878,764	9,681,304
2018	2,862,704	7,038,096	9,900,800
2019	2,921,500	7,198,968	10,120,469
2020	2,984,341	7,386,987	10,371,328



# 2006 Load Forecast Report

Prepared by:  
East Kentucky Power Cooperative  
Forecasting and Market Analysis Department

August 2006

Historical and projected total energy requirements, seasonal peak demands, and annual load factor for the EKPC system are presented in Table 1-3 (page 7). Internal demand refers to EKPC's peak demand unadjusted for interruptible loads, and net demand refers to EKPC's peak demand, taking all adjustments into account. Both are based on coincident hourly-integrated demand intervals. Load Factor is calculated using net peak demand and energy requirements.

EKPC's load forecast indicates that total energy requirements are projected to increase by 3.0 percent per year over the 2006 through 2026 period. Net winter peak demand will increase by approximately 2,400 MW, and net summer peak demand will increase by approximately 1,700 MW. Annual load factor projections are remaining steady at approximately 53 percent.

Energy projections for the residential, small commercial, and large commercial classifications indicate that during the 2006 through 2026 period, sales to the residential class will increase by 2.9 percent per year, and total commercial sales will increase by 3.6 percent per year. Class sales are presented in Tables 1-4. Please note the energy use projection for Gallatin Steel in Table 1-4. EKPC and Owen Electric (Gallatin Steel's electric provider) expect Gallatin Steel to use 1,000,000 MWh per year, adjusted by 360 hours of interruption each year.

<b>Energy and Peak Growth Rates</b>			
	<b>2006-2011</b>	<b>2006-2016</b>	<b>2006-2026</b>
Total Energy Requirements	5.6%	3.9%	3.0%
Residential Sales	4.7%	3.5%	2.9%
Total Commercial and Industrial Sales (Excluding Gallatin Steel)	8.2%	5.2%	3.6%
Firm Winter Peak Demand	6.3%	4.2%	3.2%
Firm Summer Peak Demand	5.8%	3.9%	3.0%

Factors considered in preparing the forecast include national, regional, and local economic performance, appliance saturations and efficiencies, population and housing trends, service area industrial development, electric price, household income, and weather.

**Table 1-4  
Total Member System Retail Energy Sales**

Year	Residential Sales (MWh)	Seasonal Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Gallatin Steel (MWh)	Other Sales (MWh)	Total Retail Sales (MWh)
1990	3,495,899	9,094	813,371	10,770	653,502	0	3,737	4,986,373
1991	3,769,089	9,423	868,031	11,744	725,419	0	4,029	5,387,735
1992	3,811,817	9,756	913,599	13,345	776,268	0	4,304	5,529,089
1993	4,228,581	10,144	980,301	15,684	968,345	0	5,081	6,208,135
1994	4,283,267	10,280	1,014,549	16,073	1,026,927	0	4,156	6,355,251
1995	4,591,084	11,066	1,097,729	17,715	1,119,361	279,070	5,042	7,121,068
1996	4,873,716	12,342	1,138,469	18,732	1,188,760	640,756	5,555	7,878,329
1997	4,899,179	11,888	1,163,683	18,151	1,256,829	755,279	5,663	8,110,671
1998	5,107,125	11,476	1,230,450	19,191	1,345,859	696,051	5,601	8,415,754
1999	5,318,860	11,496	1,336,957	19,763	1,415,128	901,686	5,756	9,009,647
2000	5,624,384	12,479	1,446,958	20,397	1,503,523	917,983	6,160	9,531,884
2001	5,795,728	12,769	1,505,480	21,032	1,666,141	992,711	6,545	10,000,406
2002	6,164,400	14,076	1,577,590	22,776	1,798,352	1,005,493	7,107	10,589,794
2003	6,203,143	13,445	1,550,248	23,975	1,874,044	1,007,676	7,447	10,679,978
2004	6,335,445	13,846	1,598,111	25,266	1,989,780	1,047,466	7,498	11,017,413
2005	6,743,486	14,501	1,733,280	25,065	2,020,930	992,824	7,711	11,537,797
2006	6,702,645	14,445	1,780,456	25,185	2,116,434	981,378	7,945	11,628,489
2007	6,865,831	14,945	1,844,468	25,880	2,257,560	981,718	8,157	11,998,559
2008	7,576,749	15,470	2,143,068	26,578	2,927,518	982,351	12,341	13,684,074
2009	8,036,352	16,009	2,271,045	27,330	3,187,814	981,697	13,773	14,534,020
2010	8,246,901	16,493	2,330,473	28,023	3,301,354	981,659	14,125	14,919,028
2011	8,432,930	16,911	2,387,349	28,674	3,396,327	981,566	14,469	15,258,226
2012	8,650,448	17,466	2,443,562	29,377	3,473,788	981,425	14,817	15,610,882
2013	8,868,278	18,016	2,499,753	30,115	3,550,403	981,156	15,156	15,962,877
2014	9,069,536	18,535	2,555,818	30,813	3,625,976	981,046	15,492	16,297,216
2015	9,270,396	19,050	2,612,249	31,491	3,700,886	981,063	15,824	16,630,959
2016	9,479,347	19,593	2,669,288	32,174	3,792,252	981,254	16,155	16,990,064
2017	9,681,304	20,098	2,727,493	32,868	3,875,814	981,077	16,484	17,335,138
2018	9,900,800	20,637	2,786,650	33,574	3,951,703	980,691	16,815	17,690,869
2019	10,120,469	21,220	2,846,226	34,287	4,052,080	980,619	17,140	18,072,040
2020	10,371,328	21,880	2,905,708	34,941	4,143,897	980,793	17,466	18,476,014
2021	10,624,237	22,524	2,965,803	35,626	4,227,112	980,680	17,788	18,873,770
2022	10,867,695	23,173	3,025,759	36,294	4,317,896	980,577	18,110	19,269,504
2023	11,112,981	23,824	3,085,307	36,890	4,399,917	980,480	18,429	19,657,828
2024	11,371,259	24,512	3,144,693	37,483	4,473,032	980,513	18,745	20,050,237
2025	11,605,707	25,103	3,203,587	38,068	4,553,769	980,287	19,057	20,425,578
2026	11,840,688	25,765	3,262,188	38,649	4,617,527	980,266	19,365	20,784,448

**Assumptions: Gallatin will be interrupted 360 hours per year;  
Warren will become a member April 1, 2008.**



### 3.5 Major Differences Between EKPC's 2006 and 2004 Load Forecasts


There are three major changes in the 2006 Load Forecast: 1.) Gallatin Steel will be interrupted 360 hours each year as a result of contract negotiations. The 2004 forecast assumed 500 hours. 2.) Based on the most recent End-Use Survey, the assumption for electric furnace saturation is higher than in the 2004 Load Forecast. 3.) Household formation has slowed relative to the 2004 forecast. Table 3-6 shows the differences between the forecasts. Figures 3-7 and 3-8 compare the peak demand projections for the past several forecasts.

**Table 3-6**

<b>Forecast Comparison 2006 Versus 2004</b>				
		<b>2006</b>	<b>2004</b>	<b>Difference</b>
<b>Residential Sales, MWh</b>				
	2007	6,865,831	7,183,613	-317,783
	2012	8,650,448	9,277,560	-627,113
	2017	9,681,304	10,734,638	-1,053,334
<b>Total Commercial and Industrial Sales, MWh</b>				
	2007	4,102,027	4,202,123	-100,095
	2012	5,917,350	6,157,558	-240,208
	2017	6,603,307	6,938,307	-335,000
<b>Gallatin Steel, MWh</b>	2007-2017	982,000	960,000	22,000
<b>Residential Customers</b>				
	2007	477,298	486,697	-9,399
	2012	580,588	600,127	-19,539
	2017	635,513	666,258	-30,745
<b>Firm Winter Peak, MW</b>				
	2007	2,773	2,838	-65
	2012	3,595	3,753	-158
	2017	4,031	4,305	-274
<b>Firm Summer Peak, MW</b>				
	2007	2,213	2,300	-87
	2012	2,907	3,089	-182
	2017	3,225	3,519	-294
<i>Note: Warren becomes member in April 2008.</i>				



EAST KENTUCKY POWER COOPERATIVE

A Touchstone Energy Cooperative 

# Integrated Resource Plan

Case No. 2009-00106

CONFIDENTIAL  
INTERVENOR  
VERSION

April 21, 2009

**5.(3) Summary of forecasts of energy and peak demand, and key economic and demographic assumptions or projections underlying these forecasts.**

EKPC's most recent load forecast (*EKPC 2008 Load Forecast Report, August 2008*) projects that total energy requirements are expected to increase by 2.0 percent per year over the 2008 through 2028 period. Net winter peak demand will increase by approximately 1,300 MW, and net summer peak demand will increase by approximately 1,100 MW. Annual load factor projections are remaining steady at approximately 52 percent. See response to 5.2 for specific assumptions related to the load forecast.

<b>Energy Sales and Peak Demands</b>								
<b>Growth Rates</b>								
	<b>2008-2013</b>		<b>2008-2018</b>		<b>2008-2028</b>			
Total Energy Requirements	2.3%		2.1%		2.0%			
Residential Sales	2.0%		2.0%		2.0%			
Total Commercial and Industrial Sales (Excluding Gallatin Steel)	3.3%		2.8%		2.3%			
Firm Winter Peak Demand	1.1%		1.5%		1.7%			
Firm Summer Peak Demand	1.9%		1.9%		1.9%			
<b>Year</b>	<b>Residential Sales (MWh)</b>	<b>Seasonal Sales (MWh)</b>	<b>Small Comm. Sales (MWh)</b>	<b>Public Buildings (MWh)</b>	<b>Large Comm. Sales (MWh)</b>	<b>Gallatin Steel (MWh)</b>	<b>Other Sales (MWh)</b>	<b>Total Retail Sales (MWh)</b>
2009	7,240,039	15,203	2,005,467	28,093	2,345,827	969,012	10,580	12,614,222
2010	7,374,611	15,683	2,059,958	28,667	2,443,048	969,150	10,821	12,901,939
2011	7,493,203	16,065	2,114,817	29,256	2,506,190	968,960	11,061	13,139,552
2012	7,646,800	16,585	2,169,237	29,837	2,569,877	967,411	11,298	13,411,045
2013	7,773,389	16,975	2,223,152	30,404	2,632,834	967,031	11,533	13,655,317
2014	7,903,386	17,368	2,277,104	30,963	2,698,010	968,462	11,769	13,907,062
2015	8,059,377	17,855	2,331,968	31,516	2,748,980	968,404	12,004	14,170,103
2016	8,233,250	18,401	2,387,430	32,073	2,814,845	968,850	12,239	14,467,087
2017	8,387,245	18,846	2,442,770	32,622	2,857,240	966,792	12,474	14,717,988
2018	8,540,177	19,298	2,498,092	33,159	2,916,374	966,524	12,707	14,986,331
2019	8,713,969	19,857	2,553,229	33,693	2,967,431	966,412	12,940	15,267,531
2020	8,899,636	20,436	2,608,961	34,232	3,025,391	968,439	13,173	15,570,267
2021	9,059,814	20,908	2,665,418	34,773	3,086,839	968,256	13,405	15,849,412
2022	9,230,462	21,444	2,722,020	35,323	3,154,493	968,089	13,637	16,145,470
2023	9,401,535	21,959	2,778,618	35,874	3,207,786	966,278	13,870	16,425,919

## 6. Significant Changes

All integrated resource plans, shall have a summary of significant changes since the plan most recently filed. This summary shall describe, in narrative and tabular form, changes in load forecasts, resource plans, assumptions, or methodologies from the previous plan. Where appropriate, the utility may also use graphic displays to illustrate changes.

### Major Differences Between EKPC's 2008 and 2006 Load Forecasts

The major changes in the 2008 Load Forecast are:

1.) The 2006 formal report and load forecast included the addition of Warren RECC as an EKPC member beginning in April 2008. However, Warren RECC is not going to become an EKPC member.

2.) EKPC and its member systems have implemented a direct load control program. The implementation plan indicates installing 10,000 control devices on water heaters and/or air conditioners each year for the next 5 years. This will result in 15 MW being clipped off the winter peak and 60 MW off the summer peak. These reductions are reflected in the load forecast.

3.) In late 2007 and all of 2008, the nation has experienced an economic downturn. Gas and coal prices have increased dramatically. The housing market has fallen. The economy is in a recession. While the 2008 forecast was prepared prior to the full effect being seen, the 2006 and 2007 data indicated a slowing down of growth for the member systems was beginning. Therefore, the 2008 forecast does reflect a more pessimistic outlook than prior forecasts. The table below shows the differences between the forecasts. The graphs on page 6-2 compare the peak demand projections for the past several official EKPC load forecasts.

		Forecast Comparison 2008 Versus 2006		Without Warren	
		2008	2006	Difference	
Residential Sales, MWh	2008	7,032,311	7,099,687	-67,376	
	2013	7,773,389	8,092,806	-319,417	
	2018	8,540,177	9,078,713	-538,536	
Total Commercial and Industrial Sales, MWh	2008	4,126,020	4,265,695	-139,675	
	2013	4,855,986	4,876,900	-20,914	
	2018	5,414,466	5,440,454	-25,988	
Gallatin Steel, MWh per Year	2008-2018	968,960	968,960		
Residential Customers	2008	480,233	487,370	-7,137	
	2013	518,075	538,602	-20,527	
	2018	559,160	590,201	-31,041	
Net Winter Peak MW	2008	2,962	2,848	114	
	2013	3,215	3,251	-36	
	2018	3,547	3,638	-91	
Net Summer Peak MW	2008	2,302	2,273	29	
	2013	2,529	2,569	-40	
	2018	2,790	2,848	-58	

7.(2)(b) Recorded and weather-normalized annual energy sales and generation for the system, and sales disaggregated by class as defined in subsection (1) of this section.

Response: Table 1 below shows recorded sales by class and total requirements. EKPC does not weather normalize by class, however, Table 2 below shows actual and weather normalized for retail sales and total requirements.

**Table 1:**

<b>EKPC Recorded Annual Energy Sales (MWh) and Energy Requirements (MWh), 2004-2008</b>					
<b>Year</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Residential Heating	4,513,321	4,839,330	4,599,396	4,967,050	4,843,681
Residential Non-Heating	1,861,236	1,949,247	1,984,843	2,072,611	2,260,201
<b>Total Residential*</b>	<b>6,374,557</b>	<b>6,788,577</b>	<b>6,584,239</b>	<b>7,039,660</b>	<b>7,103,882</b>
Commercial	1,598,111	1,733,390	1,777,897	1,861,952	1,872,811
Industrial**	1,989,780	2,020,875	2,078,245	2,137,525	2,256,099
Gallatin Steel	1,047,466	992,824	978,939	986,518	827,490
Utility Use and Other***	7,498	7,713	8,236	8,457	9,477
<b>Total Sales</b>	<b>11,017,413</b>	<b>11,543,379</b>	<b>11,427,556</b>	<b>12,034,113</b>	<b>12,069,760</b>
Office Use	8,289	8,617	8,924	10,291	9,925
% Loss	4.4	4.2	3.8	4.3	3.9
EKPC Sales to Members	11,537,505	12,060,460	11,892,304	12,582,260	12,569,735
EKPC Office Use	9,106	8,902	7,568	7,491	7,912
Transmission Loss (%)	2.8	3.8	3.6	3.9	2.9
<b>Total Requirements</b>	<b>11,865,797</b>	<b>12,527,829</b>	<b>12,331,272</b>	<b>13,080,367</b>	<b>12,948,091</b>

Notes: \* Residential Class consists of Residential, Seasonal and Public Buildings.  
 \*\* Industrial is labeled "Large Commercial" in EKPC's Load Forecast Report.  
 \*\*\* Utility Use and Other includes lighting.

**Table 2:**

<b>EKPC Weather Normalized Annual Energy Sales (MWh) and Energy Requirements (MWh), 2004-2008</b>					
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Total Retail Sales by Member Cooperatives</b>					
Recorded	11,017,413	11,543,379	11,427,556	12,034,113	12,069,760
Weather Normalized	11,124,391	11,383,421	11,626,079	11,725,885	11,665,038
<b>EKPC</b>					
Recorded	11,865,797	12,527,829	12,331,272	13,080,367	12,948,091
Weather Normalized	11,981,013	12,354,230	12,545,495	12,745,342	12,513,917

7.(4) The following information shall be filed for each forecast:

7.(4)(a) Annual energy sales and generation for the system and sales disaggregated by class as defined in subsection (1) of this section.

Year	Residential Sales (MWh)	Seasonal Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Gallatin Steel (MWh)	Other Sales (MWh)	Total Retail Sales (MWh)
2009	7,240,039	15,203	2,005,467	28,093	2,345,827	969,012	10,580	12,614,222
2010	7,374,611	15,683	2,059,958	28,667	2,443,048	969,150	10,821	12,901,939
2011	7,493,203	16,065	2,114,817	29,256	2,506,190	968,960	11,061	13,139,552
2012	7,646,800	16,585	2,169,237	29,837	2,569,877	967,411	11,298	13,411,045
2013	7,773,389	16,975	2,223,152	30,404	2,632,834	967,031	11,533	13,655,317
2014	7,903,386	17,368	2,277,104	30,963	2,698,010	968,462	11,769	13,907,062
2015	8,059,377	17,855	2,331,968	31,516	2,748,980	968,404	12,004	14,170,103
2016	8,233,250	18,401	2,387,430	32,073	2,814,845	968,850	12,239	14,467,087
2017	8,387,245	18,846	2,442,770	32,622	2,857,240	966,792	12,474	14,717,988
2018	8,540,177	19,298	2,498,092	33,159	2,916,374	966,524	12,707	14,986,331
2019	8,713,969	19,857	2,553,229	33,693	2,967,431	966,412	12,940	15,267,531
2020	8,899,636	20,436	2,608,961	34,232	3,025,391	968,439	13,173	15,570,267
2021	9,059,814	20,908	2,665,418	34,773	3,086,839	968,256	13,405	15,849,412
2022	9,230,462	21,444	2,722,020	35,323	3,154,493	968,089	13,637	16,145,470
2023	9,401,535	21,959	2,778,618	35,874	3,207,786	966,278	13,870	16,425,919

Year	Total Retail Sales (MWh)	Office Use (MWh)	% Loss	EKPC Sales to Members (MWh)	EKPC Office Use (MWh)	Transmission Loss (%)	Total Requirements (MWh)
2009	12,614,222	9,984	4.3	13,188,540	8,165	3.3	13,647,057
2010	12,901,939	9,984	4.3	13,490,439	8,205	3.3	13,959,302
2011	13,139,552	9,984	4.3	13,739,781	8,250	3.3	14,217,198
2012	13,411,045	9,984	4.3	14,024,740	8,295	3.3	14,511,928
2013	13,655,317	9,984	4.3	14,281,078	8,339	3.3	14,777,060
2014	13,907,062	9,984	4.3	14,545,167	8,384	3.3	15,050,207
2015	14,170,103	9,984	4.3	14,821,184	8,429	3.3	15,335,690
2016	14,467,087	9,984	4.3	15,132,793	8,473	3.3	15,657,979
2017	14,717,988	9,984	4.3	15,396,169	8,518	3.3	15,930,390
2018	14,986,331	9,984	4.3	15,677,759	8,562	3.3	16,221,635
2019	15,267,531	9,984	4.4	15,972,833	8,607	3.3	16,526,826
2020	15,570,267	9,984	4.4	16,290,399	8,652	3.3	16,855,275
2021	15,849,412	9,984	4.4	16,583,321	8,696	3.3	17,158,239
2022	16,145,470	9,984	4.4	16,893,987	8,741	3.3	17,479,553
2023	16,425,919	9,984	4.4	17,188,356	8,786	3.3	17,784,014

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**AN INVESTIGATION OF EAST KENTUCKY ) PSC CASE NO.**  
**POWER COOPERATIVE, INC.'S NEED FOR ) 2010-00238**  
**THE SMITH 1 GENERATING FACILITY )**

**TESTIMONY OF**  
**JULIA J. TUCKER**  
**DIRECTOR OF POWER SUPPLY PLANNING**  
**EAST KENTUCKY POWER COOPERATIVE, INC.**

**Filed: November 18, 2010**

Energy projections for the residential, small commercial, and large commercial classifications indicate that during the 2010 through 2030 period, sales to the residential class will increase by 1.4 percent per year, and total commercial and industrial sales will increase by 2.3 percent per year. Class sales are presented in Table 1-5. One member system serves a thin-slab steel mill. This large load is on an interruptible rate and the forecast assumes 360 hours of interruption each year.

<b>Energy Sales and Peak Demands Growth Rates</b>			
	<b>2010-2015</b>	<b>2010-2020</b>	<b>2010-2030</b>
Total Net Energy Requirements	1.1%	1.4%	1.6%
Residential Sales	0.7%	1.2%	1.4%
Total Commercial and Industrial Sales (Excluding steel mill)	2.7%	2.5%	2.3%
Net Winter Peak Demand	1.9%	1.8%	1.8%
Net Summer Peak Demand	1.0%	1.3%	1.6%

Factors considered in preparing the forecast include national, regional, and local economic performance, population and housing trends, service area industrial development, electric price, household income, appliance saturations and efficiencies, demand-side management programs, and weather. A demand-side impacted load forecast is presented in Table 1-1. Details of the demand-side management plan are provided in Section 8 of this report.



**Table 1-5**  
**Class sales shown are before the impacts of DSM**

Year	Residential Sales (MWh)	Seasonal Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Public Street And Highway Lighting Sales (MWh)	Total Retail Sales (MWh)
1990	3,497,574	9,094	813,371	9,096	653,502	3,737	4,986,373
1991	3,770,962	9,423	868,031	9,871	725,419	4,029	5,387,735
1992	3,813,577	9,756	913,599	11,586	776,268	4,304	5,529,089
1993	4,230,486	10,144	980,301	13,779	968,345	5,081	6,208,135
1994	4,285,099	10,280	1,014,549	14,240	1,026,927	4,156	6,355,251
1995	4,592,909	11,066	1,097,729	15,889	1,414,196	5,042	7,136,833
1996	4,875,662	12,342	1,138,469	16,785	1,829,516	5,555	7,878,329
1997	4,901,058	11,888	1,163,683	16,272	2,012,108	5,663	8,110,671
1998	5,109,002	11,476	1,230,450	17,315	2,041,910	5,601	8,415,754
1999	5,320,858	11,496	1,336,957	17,765	2,316,814	5,756	9,009,646
2000	5,626,500	12,479	1,446,958	18,280	2,409,695	6,160	9,520,072
2001	5,797,895	12,769	1,505,480	18,865	2,658,579	6,545	10,000,133
2002	6,166,723	14,076	1,577,590	20,453	2,803,844	7,107	10,589,793
2003	6,205,364	13,445	1,550,248	21,754	2,881,780	7,447	10,680,038
2004	6,337,737	13,846	1,598,111	22,974	3,037,246	7,498	11,017,413
2005	6,751,547	14,501	1,733,390	22,530	3,013,699	7,713	11,543,379
2006	6,548,160	13,882	1,777,897	22,196	3,057,184	8,236	11,427,556
2007	6,998,554	14,679	1,861,952	26,427	3,124,043	8,457	12,034,113
2008	7,055,277	14,531	1,872,811	34,074	3,083,589	9,477	12,069,760
2009	6,789,142	13,080	1,787,112	35,507	2,831,935	9,065	11,465,842
2010	6,916,947	13,434	1,820,349	35,741	3,035,175	9,217	11,830,863
2011	6,919,599	13,419	1,846,959	36,195	3,092,314	9,505	11,917,991
2012	6,944,934	13,455	1,877,310	36,596	3,210,477	9,711	12,092,483
2013	6,957,738	13,333	1,917,456	37,314	3,272,546	9,937	12,208,323
2014	7,055,893	13,570	1,959,197	38,037	3,335,403	10,160	12,412,259
2015	7,159,616	13,790	2,001,631	38,752	3,395,326	10,382	12,619,498
2016	7,281,181	14,097	2,044,932	39,450	3,459,446	10,601	12,849,707
2017	7,391,828	14,359	2,089,551	40,127	3,508,475	10,820	13,055,162
2018	7,523,977	14,682	2,134,733	40,784	3,581,071	11,039	13,306,286
2019	7,661,291	15,007	2,180,098	41,444	3,651,747	11,256	13,560,843
2020	7,788,470	15,389	2,225,634	42,105	3,709,435	11,475	13,792,507
2021	7,923,044	15,831	2,271,700	42,768	3,780,129	11,693	14,045,165
2022	8,056,599	16,290	2,317,291	43,396	3,836,002	11,908	14,281,486
2023	8,203,953	16,774	2,362,531	44,026	3,904,812	12,124	14,544,221
2024	8,351,660	17,235	2,407,717	44,669	3,970,782	12,339	14,804,401
2025	8,482,142	17,589	2,453,143	45,327	4,035,146	12,556	15,045,903
2026	8,625,165	18,070	2,499,227	45,986	4,103,086	12,774	15,304,309
2027	8,764,282	18,593	2,545,021	46,621	4,174,930	12,989	15,562,437
2028	8,893,234	18,928	2,590,457	47,232	4,234,283	13,203	15,797,336
2029	9,010,609	19,163	2,635,782	47,870	4,308,104	13,418	16,034,945
2030	9,163,386	19,694	2,681,368	48,548	4,367,000	13,631	16,293,627

Impacts of interruptible contracts have been subtracted.