

P.S.C. KY NO. 22

CANCELS P.S.C. KY NO. 21

EAST KENTUCKY POWER COOPERATIVE, INC.

OF

WINCHESTER, KENTUCKY

RATES, RULES, AND REGULATIONS FOR FURNISHING

WHOLESALE POWER SERVICE

AT

VARIOUS LOCATIONS TO
RURAL ELECTRIC COOPERATIVE MEMBERS
THROUGHOUT KENTUCKY

FILED WITH THE PUBLIC SERVICE COMMISSION
OF KENTUCKY

ISSUED April 19, 1991

EFFECTIVE May 1, 1991

ISSUED BY EAST KENTUCKY POWER
COOPERATIVE, INC.

BY Donald R. Norris

Donald R. Norris
President and General Manager

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

MAY 1 1991

PURSUANT TO 807 KAR 5:011,
SECTION 9 (1)

BY: [Signature]
PUBLIC SERVICE COMMISSION

C9-92

Farmers RECC

For Area Served
P.S.C. Ky. No.
Original Sheet No.
Cancelling P.S.C. Ky. No.
0 Sheet No.

COGENERATION AND SMALL POWER PRODUCTION
POWER PURCHASE RATE SCHEDULE

AVAILABILITY

Available only to qualified cogeneration or small power production facilities with a design capacity of over 100 kW which have executed a contract for the purchase of electric power by Farmers RECC.

RATES

1. Energy

A base payment per kWh is listed below for the appropriate calendar year.

<u>Year</u>	<u>Rate per kWh</u>
1988	\$0.01235
1989	\$0.01329
1990	\$0.01417
1991	\$0.01541
1992	\$0.01659

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

MAY 6 1988

PURSUANT TO 807 KAR 5:011,
SECTION 9(1)

BY: George L. Lister
PUBLIC SERVICE COMMISSION MANAGER

DATE OF ISSUE June 3, 1988

DATE EFFECTIVE May 6, 1988

ISSUED BY J. B. Hallaway TITLE Manager

Issued by authority of an Order of the Public Service Commission of Kentucky in Case No. 9892 dated May 6, 1988.

c9-92

Farmers RECC

For Area Served
P.S.C. No.
Original Sheet No.
Cancelling P.S.C. No.
0 Sheet No.

TERMS AND CONDITIONS

1. All power from a Qualifying Facility (QF) will be sold only to Farmers RECC.
2. Seller should provide good quality electric power within a reasonable range of voltage, frequency, flicker, harmonic currents and power factor.
3. Qualifying Facility (QF) shall provide reasonable protection for EKPC and the member cooperative's system.
4. Qualifying Facility (QF) shall design, construct, install, own, operate, and maintain the Qualifying Facility in accordance with all applicable codes, laws, regulations, and generally accepted utility practices.
5. Qualifying Facility shall reimburse EKPC and its member cooperatives for all costs incurred as a result of inter-connecting with the QF, including operation, maintenance, administration, and billing.
6. Qualifying Facility shall obtain insurance in the following minimum amounts for each occurrence:
 - a. Public Liability for Bodily Injury - \$1,000,000.00
 - b. Property Damage - \$500,000.00
7. Initial contract term shall be for a minimum of twenty years.
8. Qualifying Facilities proposing to supply as available (non-firm) electric power shall not be entitled to a capacity payment.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
MAY 6 1988
PURSUANT TO 807 KAR 5:011,
SECTION 9 (1)
BY: George Sellen
PUBLIC SERVICE COMMISSION MANAGER

DATE OF ISSUE June 3, 1988 DATE EFFECTIVE May 6, 1988

ISSUED BY J.B. Balloway TITLE Manager

Issued by authority of an Order of the Public Service Commission of Kentucky in Case No. 9892 dated May 6, 1988.

C9-92

EAST KENTUCKY POWER COOPERATIVE

CASE NO. 9892

EKPC RESPONSE TO PSC ORDER

DATED MAY 6, 1988

EKPC AVOIDED CAPACITY RATE

- A. EKPC capacity purchase rate if cogenerator or small power producer is dispatched by EKPC: \$36.36 per kW per year.

$$\text{Capacity purchase rate} = (\text{avoided cost at generator}) \div (1 - \text{transmission line losses}) = \$35.24 \div (1 - .03093) = \$36.36$$

- B. EKPC capacity purchase rate if cogenerator or small power producer is not dispatched by EKPC ("proportional" capacity payment method).

$$\text{Capacity purchase rate} = [(\text{avoided cost at generator}) \div (1 - \text{transmission line losses})] \div [6,570 \text{ hours}] = [(\$35.24) \div (1 - .03093)] \div 6570 = \$.00553 \text{ per kWh}$$

* Assumes 75% availability for cogeneration and small power production facilities.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

MAY 6 1988

PURSUANT TO OUR ORDER 0:011,
SECTION 9 (1)

BY: George L. Latta
PUBLIC SERVICE COMMISSION MANAGER

09-92

EAST KENTUCKY POWER COOPERATIVE
 DATA ASSUMPTIONS(1) FOR AVOIDED CAPACITY COST ANALYSIS

REVISED DATE: 5/31/88

INTEREST RATE = 10.0%

DISCOUNT (PRESENT WORTH) RATE = 10.0%

CARRYING CHARGE RATES :	GENERATION	TRANSMISSION
INTEREST RATE	10.00%	10.00%
SINKING FUND DEPRECIATION RATE (32 YEARS)	0.50%	0.50%
MARGINS (TIER=1.15)	1.37%	1.37%
TAX RATE	0.26%	0.72%
INSURANCE RATE	0.13%	0.01%
RENEWALS AND REPLACEMENTS RATE	0.20%	0.30%
OPERATION AND MAINTENANCE RATE		3.00%
	-----	-----
CARRYING CHARGE RATE	12.45%	15.89%

1 YEAR'S AVERAGE LOAD GROWTH = 50MW
 EKPC'S MINIMUM RESERVE MARGIN = 20%
 CAPACITY NEEDED TO DEFER EXPANSION PLAN 1 YEAR = 60MW (50MW + 20% RESERVE MARGIN)

CAPITAL COSTS (1987\$) :	COAL-FIRED UNITS	\$1250/kW
	COMBUSTION TURBINES	\$280/kW
	TRANSMISSION (ASSOCIATED WITH C.F.s)	\$30.17/kW

FIXED O&M (1987\$) :	COAL-FIRED UNITS	\$16.45/kW
	COMBUSTION TURBINES	\$0.42/kW

LIFE OF UNITS = 32 YEARS

PUBLIC SERVICE COMMISSION
 OF KENTUCKY
 EFFECTIVE

MAY 6 1988

ESCALATION RATES (%) :	POWER PLANT CAPITAL COST	TRANSMISSION CAPITAL COST	FIXED O&M
YEAR	*****	*****	*****
1988	3.0	2.0	5.0
1989	4.3	4.0	5.0
1990	4.5	4.0	5.1
1991	4.7	5.0	5.7
1992	5.6	6.0	5.7
1993	5.8	6.0	5.7
1994	5.9	6.0	5.7
1995	6.2	6.0	5.7
1996	6.2	6.0	5.7
1997	6.1	6.0	5.6
1998	6.0	6.0	5.5
1999	5.9	6.0	5.4
2000	5.8	6.0	5.3
2001	5.8	6.0	5.3
2002	5.8	6.0	5.3
2003	5.8	6.0	5.3
2004	5.8	6.0	5.3
2005	5.8	6.0	5.3
2006	5.8	6.0	5.3
2007	5.8	6.0	5.3

PURSUANT TO 807 KAR 5.011,
 SECTION 9 (1)
 BY: George Hallee
 PUBLIC SERVICE COMMISSION MANAGER

(1) ALL ASSUMPTIONS FROM EKPC'S 1987 POWER SUPPLY STUDY by STANLEY CONSULTANTS, INC.,
 WITH REVISED CARRYING CHARGE RATES FOR GENERATION AND TRANSMISSION PLANT.

C9-92

EAST KENTUCKY POWER COOPERATIVE

AVOIDED CAPACITY COSTS - SUMMARY

BASE EXPANSION PLAN \$396,996
1 YEAR DEFERRAL CASE \$378,994

DIFFERENCE (\$1000) : \$18,003

CO-GENERATION (MW) : 60
AVOIDED COSTS (\$/KW) : 300
LEVELIZED SAVINGS (\$/KW-YR) : 35.24

EAST KENTUCKY POWER COOPERATIVE - DEFERRED PLAN PRESENT WORTH ANALYSIS

DISCOUNT RATE: 10.0%

REVISED DATE: 5/31/88

YEAR	FUTURE CFs						TRANSMISSION			FUTURE CTs				FIXED O&M				(3) TOTAL ANNUAL COSTS (\$1000)	1988 P.W. OF ANNUAL COSTS (\$1000)
	ESC. RATE (%)	100 MW \$/KW	200 MW \$/KW	TOTAL P.W. of COST PAYMENTS (\$1000)	(1) (\$1000)		ESC. RATE (%)	TOTAL COST (\$1000)	P.W. of COST PAYMENTS (\$1000)	TOTAL P.W. of COST PAYMENTS (\$1000)	(1) (\$1000)	(2) (\$1000)	ESC. RATE (%)	CFs \$/KW	CTs \$/KW	TOTAL COST (\$1000)			
1988	3.0	1288	876	0	0	2.0	30.78	0	0	288	0	0	5.0	17.28	0.44	0	0	0	
1989	4.3	1343	913	0	0	4.0	32.01	0	0	301	0	0	5.0	18.14	0.46	0	0	0	
1990	4.5	1403	954	0	0	4.0	33.29	0	0	314	0	0	5.1	19.07	0.48	0	0	0	
1991	4.7	1469	999	0	0	5.0	34.95	0	0	329	0	0	5.7	20.15	0.51	0	0	0	
1992	5.6	1552	1055	0	0	6.0	37.05	0	0	348	0	0	5.7	21.30	0.54	0	0	0	
1993	5.8	1642	1116	0	0	6.0	39.27	0	0	368	0	0	5.7	22.51	0.57	0	0	0	
1994	5.9	1738	1182	0	0	6.0	41.63	0	0	389	0	0	5.7	23.80	0.60	0	0	0	
1995	6.2	1846	1255	0	0	6.0	44.12	0	0	414	0	0	5.7	25.15	0.64	0	0	0	
1996	6.2	1961	1333	0	0	6.0	46.77	0	0	439	60	26350	5.7	26.59	0.67	40	31303	14603	
1997	6.1	2080	1415	0	0	6.0	49.58	0	0	466	60	27958	5.6	28.08	0.71	86	33255	14103	
1998	6.0	2205	1499	0	0	6.0	52.55	0	0	494	60	29635	5.5	29.62	0.75	135	35295	13608	
1999	5.9	2335	1588	0	0	6.0	55.71	0	0	523	60	31384	5.4	31.22	0.79	190	37424	13117	
2000	5.8	2471	1680	0	0	6.0	59.05	0	0	553	60	33204	5.3	32.88	0.83	250	39643	12632	
2001	5.8	2614	1777	0	0	6.0	62.59	12518	18952	585	60	35130	5.3	34.62	0.88	316	60946	17634	
2002	5.8	2765	1880	200	376099	6.0	66.35	0	0	619	0	0	5.3	36.45	0.93	7624	453826	119507	
2003	5.8	2926	1990	0	0	6.0	70.33	0	0	655	0	0	5.3	38.38	0.97	8028	8028	1922	
2004	5.8	3096	2105	0	0	6.0	74.55	7455	11286	693	0	0	5.3	40.42	1.03	8453	19739	4296	
2005	5.8	3275	2227	100	327507	6.0	79.02	0	0	734	0	0	5.3	42.56	1.08	13157	401710	79476	
2006	5.8	3465	2356	0	0	6.0	83.76	0	0	776	0	0	5.3	44.82	1.14	13855	13855	2492	
2007	5.8	3666	2493	0	0	6.0	88.79	8879	13442	821	60	49271	5.3	47.19	1.20	14661	86557	14153	
2008	5.8	3879	2637	0	460158	6.0	94.11	0	0	869	0	0	5.3	49.69	1.26	20407	480565	71433	
TOTAL :																378994			

(1) PRESENT WORTH OF 32 YEARS OF ANNUAL CARRYING CHARGES (12.45%) BASED ON INVESTMENT COST EXPRESSED IN ACTUAL YEAR DOLLARS.

(2) PRESENT WORTH OF 32 YEARS OF ANNUAL CARRYING CHARGES (15.89%) BASED ON INVESTMENT COST EXPRESSED IN ACTUAL YEAR DOLLARS.

(3) SUM OF PRESENT WORTH OF INVESTMENT CHARGES + ANNUAL FIXED O&M.

PURSUANT TO 807 KAR 5:011,
 SECTION 9 (1),
 MAY 6 1988
 PUBLIC SERVICE COMMISSION
 OF KENTUCKY
 EFFECTIVE
 EY: *[Signature]*
 PUBLIC SERVICE COMMISSION MANAGER

2-2-88

DISCOUNT RATE: 10.02

YEAR	CAP. COST ESC. RATE (1)	FUTURE CFs				TRANSMISSION				FUTURE CTs				FIXED O&M				(2) TOTAL ANNUAL COSTS (\$1000)	1988 P.W. OF ANNUAL COSTS (\$1000)
		100 MW \$/KW	200 MW \$/KW	TOTAL P.M. of COST PAYMENTS (\$1000)	(1) P.M. of COST PAYMENTS (\$1000)	ESCAL RATE (2)	TOTAL COST (\$1000)	P.M. of COST PAYMENTS (\$1000)	(2) P.M. of COST PAYMENTS (\$1000)	TOTAL P.W. of COST PAYMENTS (\$1000)	ESCAL RATE (2)	CFs (\$/KW)	CTs (\$/KW)	TOTAL COST (\$1000)					
1988	3.0	1288	876	0	0	2.0	30.78	0	0	288	0	0	5.0	17.28	0.44	0	0	0	
1989	4.3	1343	913	0	0	4.0	32.01	0	0	301	0	0	5.0	18.14	0.46	0	0	0	
1990	4.5	1403	954	0	0	4.0	33.29	0	0	314	0	0	5.1	19.07	0.48	0	0	0	
1991	4.7	1469	999	0	0	5.0	34.95	0	0	329	0	0	5.7	20.15	0.51	0	0	0	
1992	5.6	1552	1035	0	0	6.0	37.05	0	0	348	0	0	5.7	21.30	0.54	0	0	0	
1993	5.8	1642	1116	0	0	6.0	39.27	0	0	368	0	0	5.7	22.51	0.57	0	0	0	
1994	5.9	1738	1182	0	0	6.0	41.63	0	0	389	0	0	5.7	23.80	0.60	0	0	0	
1995	6.2	1846	1235	0	0	6.0	44.12	0	0	414	60	24812	5.7	25.15	0.64	38	29475	15125	
1996	6.2	1961	1333	0	0	6.0	46.77	0	0	439	60	26350	5.7	26.59	0.67	81	31343	14622	
1997	6.1	2080	1415	0	0	6.0	49.58	0	0	466	60	27958	5.6	28.08	0.71	128	33297	14121	
1998	6.0	2205	1499	0	0	6.0	52.55	0	0	494	60	29635	5.5	29.62	0.75	180	35340	13625	
1999	5.9	2335	1588	0	0	6.0	55.71	0	0	523	60	31384	5.4	31.22	0.79	238	37471	13133	
2000	5.8	2471	1680	0	0	6.0	59.05	11810	17879	553	60	33204	5.3	32.88	0.83	300	57372	18344	
2001	5.8	2614	1777	200	355481	6.0	62.59	0	0	585	0	0	5.3	34.62	0.88	7240	428981	124261	
2002	5.8	2765	1880	0	0	6.0	66.35	0	0	619	0	0	5.3	36.45	0.93	7624	7624	2008	
2003	5.8	2926	1990	0	0	6.0	70.33	7033	10647	655	0	0	5.3	38.38	0.97	8028	18675	4471	
2004	5.8	3096	2105	100	309553	6.0	74.55	0	0	693	0	0	5.3	40.42	1.03	12495	379747	82644	
2005	5.8	3275	2227	0	0	6.0	79.02	0	0	734	0	0	5.3	42.56	1.08	13157	13157	2603	
2006	5.8	3465	2356	0	0	6.0	83.76	8376	12681	776	60	46570	5.3	44.82	1.14	13923	81854	14722	
2007	5.8	3666	2493	100	366599	6.0	88.79	0	0	821	0	0	5.3	47.19	1.20	19380	454312	74284	
2008	5.8	3879	2637	0	0	6.0	94.11	0	0	869	0	0	5.3	49.69	1.26	20407	20407	3033	

TOTAL : 396996

PUBLIC SERVICE COMMISSION
 OF KENTUCKY
 EFFECTIVE
 MAY 6 1988
 PURSUANT TO 807 KAR 5:011,
 SECTION 9 (1)
 BY: *Shirley Kelle*
 PUBLIC SERVICE COMMISSION MANAGER

C-9-92