

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In The Matter of the Application of)	
Kansas City Power & Light Company)	
for Approval to Make Certain Changes)	Docket No. ER-2010-0355
in Its Charges for Electric Service to)	
Continue the Implementation of)	
Its Regulatory Plan)	

APPLICATION TO INTERVENE
By ROBERT WAGNER

Pursuant to 4 C.R.S. 240-2.075 of the Missouri Public Service Commission’s Rules of Practice and Procedures, Robert Wagner, in his capacity as an individual person (hereinafter referred to as the Applicant) hereby apply for leave to intervene in the above-referenced proceeding. In Support of this Application, Applicant respectfully states as follows:

A. INTERVENTION

1. Status: Robert Wagner is President of the Board of Directors of the International Dark Sky Association (IDA), a non-profit organization incorporated in the State of Arizona and internationally recognized as a leading authority on outdoor lighting issues. This Application to Intervene is limited to outdoor lighting matters as follows:

Schedule AL - Private Unmetered Protective Lighting - Revised Sheet 33

Schedule 1-ML Municipal Street Lighting - Revised Sheet 35, 35A - C

Schedule 3-ML Municipal Street Lighting - Revised Sheet 36, 36A - B

Schedule OLS Off-Peak Lighting - Revised Sheet 45, 45A

2. IDA’s membership is approximately 6,500 worldwide, with members in Missouri. IDA was founded in 1988 on concern that light pollution was interfering with astronomical observation. Since then, IDA’s mission purpose has expanded to include energy conservation, human health and environmental consequences of light at night. IDA’s website is at www.darksky.org. Robert Wagner would proceed pro se, acting as an individual.

3. IDA has participated as an Intervenor in electric utility rate cases in other states. In 2007 IDA participated in Connecticut Public Utilities Docket 07-07-01, and again in 2009 in Docket 09-12-05 resulting in the adoption of an order for the utility company to establish a Midnight Option for streetlights. (See Exhibit A). IDA is currently an Intervenor in Oregon PUC Docket UE-215 in the rate case of Portland General Electric, for street and area lighting. IDA is also currently an Intervenor in the KCP&L rate case in Kansas.

4. Why a Rate for Part Night Streetlights is in the Public Interest.

KCP&L's Private Unmetered Lighting (Schedule AL), its Municipal Street Lighting (Schedule 1-ML and 3-ML) and its Off-Peak Lighting (Schedule OLS) are each restricted only to all night service. Burn hours for each service are listed for each rate at 4,100 hours annually (dusk-to-dawn). Advances in photocell technology now offer electronic photocells capable of regulating the burn hours of a streetlight with an internal clock, so that streetlights can be turned off at 11PM or midnight, and turned back on at 6AM during the winter. The use of programmable photocells for part night lighting has been tested and proven to be a stable and reliable technology through which municipalities can conserve energy and reduce expenses for street lighting. Utility regulators in Connecticut required in a 2007 rate case that Connecticut Light and Power to add a Midnight Option to their streetlight tariff. In 2009 New Hampshire enacted a law requiring the regulators to include a part night streetlight rate for all streetlight tariffs.

5. Why Including a Rate for 50, and 70 Watt High Pressure Sodium Lamps is in the Public Interest.

In Schedules 1-ML and 3-ML for Municipal Street Lighting, the Company offers 100 watt High Pressure Sodium (HPS) lamps as the lowest HPS lamp available. There is no listing for High Pressure Sodium (HPS) 50 or 70 watt HPS lamps. Rates for 50 and 70 watt HPS lamps are part of the Streetlight tariff for many utilities. The omission of rates for the 50 and 70 watt HPS lamps forces municipalities to purchase higher wattage than may be necessary, thereby wasting energy at higher costs. In the 1970's, prior to the introduction of the HPS, mercury vapor lamps were standard. The 400 watt mercury vapor lamps were commonly used

used in central business districts, and 100 watt mercury vapor were common on residential roads. The 100 watt mercury vapor lamp had an initial lumen output of 4,000 lumen. When the HPS lamps were introduced, they were much more energy efficient. A 50 watt HPS lamp produced the same 4 000 initial lumen output as the existing 100 watt mercury vapor lamp. A number of utility companies used street lighting as a revenue recovery tool for energy generated during off-peak and were concerned with revenue loss in switching from a 100 watt mercury vapor to a 50 watt high pressure sodium streetlight. Instead of including the 50 watt HPS in their new rate offering when HPS became available, these utility companies switched their lowest wattage offering from 100 watt mercury vapor (4,000 lumen) to 70 watt high pressure sodium (6,300 lumen), resulting in 63.5% increase in light and a 71% increase in energy use when compared to the 50 watt high pressure sodium. KCP&L's own tariffs in include the 70 watt HPS lamps in the existing Schedule AL. Municipalities should not be required to purchase higher illumination levels (higher wattages) than necessary.

6. Limitation and Scope

This Petition to Intervene is limited to addressing the public interest in requiring KCP&L to develop a new rate for Part Night street and area lighting under Sheets 33, 35, 35A-C, 36, 36A-B, 45 and 45A and to incorporate, within these schedules, rates for lower wattage High Pressure Sodium lamps used in typical street lighting applications in other parts of the country.

7. Proceeding Pro Se

Robert Wagner will act pro se in these proceedings:

Robert Wagner
9005 N Chatham Ave
Kansas City, MO 64154
rwagner@eruces.com
913-244-7608

7. The Commission's regulations allow intervention when a person has an interest in the proceeding which may be directly affected and which is not adequately represented by existing parties, and as to which the person may be bound by the action of the Commission in the proceeding. Intervention is also permitted where participation may be in the public interest.

8. As President of the Board of a nonprofit association specializing in outdoor lighting and energy conservation issues related thereto, Robert Wagner satisfies the standard because Robert Wagner possesses a significant knowledge and interest which may be directly affected and which is not adequately represented by existing participants.

9. This intervention is in the public interest. Energy wasted by street lighting left on during hours when streetlight may not be needed represents a substantial and unnecessary increase in CO2 emission and unnecessarily higher costs for municipal budgets. Accordingly, Robert Wagner's participation in this proceeding is clearly in the public interest.

10. If granted this Application to Intervene, Robert Wagner will limit his intervention to written interrogatories pre-filed testimony and written briefs related to the outdoor lighting issues referenced above. Robert Wagner will conform to all rules of practice and Missouri Public Service Commission's Rules of Practice and Procedures as part of his intervention.

B. CONCLUSION

WHEREFORE, Rober Wagner respectfully requests that the Commission grant this Application to Intervene in this Docket.

Respectfully submitted, June 29, 2010, by:

A handwritten signature in black ink, appearing to read "Robert A. Wagner", is written over a horizontal line.

Robert Wagner
9005 N Chatham Ave
Kansas City, MO 64154
rwagner@eruces.com
913-244-7608

CERTIFICATE OF SERVICE

Docket No. ER-2010-0355

I do hereby certify that a true and correct copy of the foregoing document has been sent by electronic mail this 29th day of June, 2010, to:

Nathan Williams
Missouri Public Service Commission
Governor's Office Building
200 Madison Street
P.O. Box 360
Jefferson City, Missouri 65102
nathan.williams@psc.mo.gov

Lewis Mills
Governor's Office Building
200 Madison Street
P.O. Box 7800
Jefferson City, Missouri 65102
lewis.mills@ded.mo.gov

Stuart Conrad
Finnegan, Conrad & Peterson, LC
3100 Broadway, Suite 1209
Kansas City, MO 64111
stucon@fcplaw.com

Sarah Mangelsdorf
Shelley A. Woods
Assistant Attorney General
P.O. Box 899
Jefferson City, Missouri 65102
sarah.mangelsdorf@ago.mo.gov
shelley.woods@ago.mo.gov

Douglas L. Healy
HEALY & HEALY,
ATTORNEYS AT LAW, LLC
939 N. Boonville, Suite A
Springfield, Missouri 65802
doug@healylawoffices.com

Diana M. Vuylsteke
Bryan Cave
211 N. Broadway, Suite 3600
St. Louis MO 63102
dmvuylsteke@bryancave.com
efdowney@bryancave.com

Thomas M. Byrne
Ameren Services Company
1901 Chouteau Ave.
P.O. Box 66149 (MC 1310)
St. Louis, MO 63166-6149
tbyrne@ameren.com

Mark Comley
Newman, Comley & Ruth P.C.
P.O. Box 537
Jefferson City, MO 65102
comleym@ncrpc.com

Karl Zobrist
Sonnenschein Nath & Rosenthal LLP
4520 Main Street, Suite 1100
Kansas City, MO 64111
kzobrist@sonnenschein.com

James M. Fischer
Fischer & Dority, P.C.
101 Madison Street, Suite 400
Jefferson City, MO 65101
jfischerpc@aol.com

James B. Lowery
111 South Ninth Street, Suite 200
P.O. Box 918
Columbia, MO 65205-0918
lowery@smithlewis.com

Diana Carter
P.O. Box 456
Jefferson City, MO 65102
dcarter@brydonlaw.com



Robert Wagner

Exhibit A - Page 1 from Connecticut Docket 09-12-05 showing Midnight Option streetlight rates

EXHIBIT CRG-11
Comparison Dusk-to-Dawn vs Midnight Option

RATE 117

Dated: January 8, 2010
Page 2 of 2

The Connecticut Light & Power Company
Docket No. 09-12-05
Witness Responsible: C. R. Goodwin
Rate 117 - Partial Service Streetlighting

	Type/Size	Wattage	Distribution Monthly Rate	Annual kWh		Annual Bill \$		Difference	Percent Change
				Dusk-to-Dawn	Midnight Option	Dusk-to-Dawn	Midnight Option		
11	<u>Incandescent</u>								
12		59	\$2.21	245	130	\$57.55	\$43.06	-\$14.49	-25.2%
13		104	\$2.96	432	230	\$90.13	\$64.60	-\$25.54	-28.3%
14		203	\$1.93	842	449	\$129.75	\$79.90	-\$49.85	-38.4%
15		328	\$1.71	1,361	725	\$192.78	\$112.23	-\$80.55	-41.8%
16		449	\$2.45	1,863	992	\$265.22	\$154.96	-\$110.26	-41.6%
17		691	\$4.35	2,868	1,527	\$415.18	\$245.49	-\$169.69	-40.9%
18	<u>Mercury Vapor</u>								
19		118	\$1.09	490	261	\$75.01	\$46.04	-\$28.98	-38.6%
20		206	\$1.67	855	455	\$128.29	\$77.70	-\$50.59	-39.4%
21		287	\$2.46	1,191	634	\$180.27	\$109.79	-\$70.48	-39.1%
22		455	\$3.52	1,888	1,006	\$281.23	\$169.50	-\$111.73	-39.7%
23		1103	\$9.00	4,577	2,438	\$687.44	\$416.58	-\$270.86	-39.4%
24	<u>High Pressure Sodium</u>								
25		59	\$0.36	245	130	\$35.35	\$20.86	-\$14.49	-41.0%
26		84	\$0.50	349	186	\$50.12	\$29.49	-\$20.63	-41.2%
27		118	\$0.84	490	261	\$72.01	\$43.04	-\$28.98	-40.2%
28		172	\$1.42	714	380	\$107.36	\$65.12	-\$42.24	-39.3%
29		190	\$1.44	789	420	\$117.11	\$70.46	-\$46.66	-39.8%
30		311	\$2.65	1,291	687	\$185.19	\$118.82	-\$66.37	-39.1%
31		472	\$3.46	1,959	1,043	\$289.46	\$173.55	-\$115.91	-40.0%
32		1103	\$9.00	4,577	2,438	\$687.44	\$416.58	-\$270.86	-39.4%
33	<u>Metal Halide</u>								
34		72	\$0.48	299	159	\$43.54	\$25.86	-\$17.68	-40.6%
35		89	\$0.60	369	197	\$53.96	\$32.11	-\$21.86	-40.5%
36		119	\$0.81	494	263	\$72.18	\$42.96	-\$29.22	-40.5%
37		207	\$1.39	859	457	\$125.46	\$74.63	-\$50.83	-40.5%
38		289	\$1.95	1,199	639	\$175.24	\$104.28	-\$70.97	-40.5%
39		451	\$3.05	1,872	997	\$273.52	\$162.77	-\$110.75	-40.5%
40		1080	\$7.30	4,482	2,387	\$654.93	\$389.71	-\$265.21	-40.5%
41	<u>Other Wattage</u>								
42		14	\$0.10	58	31	\$8.52	\$5.08	-\$3.44	-40.4%
43		16	\$0.10	66	35	\$9.62	\$5.69	-\$3.93	-40.9%
44		18	\$0.12	75	40	\$10.95	\$6.53	-\$4.42	-40.4%
45		23	\$0.16	95	51	\$14.04	\$8.39	-\$5.65	-40.2%
46		28	\$0.19	116	62	\$17.04	\$10.16	-\$6.88	-40.4%
47		40	\$0.27	166	88	\$24.22	\$14.40	-\$9.82	-40.6%
48		42	\$0.29	174	93	\$25.56	\$15.25	-\$10.31	-40.4%
49		48	\$0.32	199	106	\$29.09	\$17.30	-\$11.79	-40.5%
50		54	\$0.36	224	119	\$32.70	\$19.44	-\$13.26	-40.5%
51		71	\$0.49	295	157	\$43.13	\$25.69	-\$17.44	-40.4%
52		90	\$0.60	374	199	\$54.49	\$32.39	-\$22.10	-40.6%
53		144	\$0.98	598	318	\$97.36	\$52.00	-\$45.36	-40.5%
54		175	\$1.18	726	387	\$106.14	\$63.17	-\$42.97	-40.5%
55		180	\$1.22	747	398	\$109.23	\$65.03	-\$44.20	-40.5%
56		204	\$1.38	847	451	\$123.71	\$73.62	-\$50.10	-40.5%
57		238	\$1.62	988	526	\$144.41	\$85.96	-\$58.44	-40.5%
58		250	\$1.70	1,038	553	\$151.67	\$90.28	-\$61.39	-40.5%
59		289	\$1.95	1,199	639	\$175.24	\$104.28	-\$70.97	-40.5%
60		300	\$2.03	1,245	663	\$181.98	\$108.31	-\$73.67	-40.5%
61		451	\$3.05	1,872	997	\$273.52	\$162.77	-\$110.75	-40.5%
62		480	\$3.24	1,992	1,061	\$291.09	\$173.22	-\$117.87	-40.5%
63		1,520	\$10.28	6,308	3,359	\$921.83	\$548.57	-\$373.26	-40.5%

ELECTRICITY CRG-11
Comparison Dusk-to-Dawn vs Midnight Option

The Connecticut Light & Power Company
Docket No. 09-12-05
Witness Responsible: C. R. Goodwin

RATE 116

Dated: January 8, 2010

Page 1 of 2

Rate 116 - Full Service Streetlighting

	Type/Size	Wattage	Distribution Monthly Rate	Annual kWh		Annual Bill \$						
				Dusk-to-Dawn	Midnight Option	Dusk-to-Dawn	Midnight Option	Difference	Percent Change			
10	<u>Incandescent</u>											
11	600 lumen	59	\$5.58	242	129	\$97.67	\$83.33	-\$14.34	\$83.33	-\$14.34	-14.7%	
12	1,000	104	\$4.65	427	228	\$109.85	\$84.57	-\$25.28	\$84.57	-\$25.28	-23.0%	
13	2,500	203	\$2.52	834	444	\$135.81	\$86.46	-\$49.35	\$86.46	-\$49.35	-36.3%	
14	4,000	328	\$1.98	1348	718	\$194.33	\$114.59	-\$79.74	\$114.59	-\$79.74	-41.0%	
15	6,000	449	\$2.67	1845	982	\$265.59	\$156.43	-\$109.16	\$156.43	-\$109.16	-41.1%	
16	10,000	691	\$4.18	2839	1512	\$409.50	\$241.52	-\$167.99	\$241.52	-\$167.99	-41.0%	
17	<u>Mercury Vapor</u>											
18	4,000 lumen	118	\$4.77	485	258	\$118.66	\$89.98	-\$28.69	\$89.98	-\$28.69	-24.2%	
19	8,000	206	\$5.16	846	451	\$168.99	\$118.91	-\$50.08	\$118.91	-\$50.08	-29.6%	
20	12,500	287	\$6.34	1179	628	\$225.37	\$155.60	-\$69.77	\$155.60	-\$69.77	-31.0%	
21	22,500	455	\$7.51	1869	995	\$326.70	\$216.08	-\$110.61	\$216.08	-\$110.61	-33.9%	
22	60,000	1,103	\$13.58	4532	2413	\$736.63	\$468.48	-\$268.15	\$468.48	-\$268.15	-36.4%	
23	<u>High Pressure Sodium</u>											
24	4,000 lumen	59	\$5.59	242	129	\$97.79	\$83.45	-\$14.34	\$83.45	-\$14.34	-14.7%	
25	6,300	84	\$5.55	345	184	\$110.30	\$89.88	-\$20.42	\$89.88	-\$20.42	-18.5%	
26	9,500	118	\$5.89	485	258	\$132.10	\$103.42	-\$28.69	\$103.42	-\$28.69	-21.7%	
27	13,000	190	\$6.28	781	416	\$174.15	\$127.96	-\$46.19	\$127.96	-\$46.19	-26.5%	
28	16,000	172	\$6.29	707	376	\$164.95	\$123.14	-\$41.81	\$123.14	-\$41.81	-25.3%	
29	27,500	311	\$8.00	1278	680	\$257.69	\$182.09	-\$75.61	\$182.09	-\$75.61	-29.3%	
30	50,000	472	\$9.00	1939	1033	\$353.42	\$238.68	-\$114.75	\$238.68	-\$114.75	-32.5%	
31	140,000	1103	\$17.33	4532	2413	\$781.63	\$513.48	-\$268.15	\$513.48	-\$268.15	-34.3%	
32	<u>Metal Halide</u>											
33	3,450 Lumen	72	\$8.08	296	158	\$134.45	\$116.94	-\$17.50	\$116.94	-\$17.50	-13.0%	
34	5,200	89	\$7.13	366	195	\$131.80	\$110.17	-\$21.64	\$110.17	-\$21.64	-16.4%	
35	8,500	119	\$7.12	489	260	\$147.31	\$118.38	-\$28.93	\$118.38	-\$28.93	-19.6%	
36	14,400	207	\$8.07	850	453	\$204.48	\$154.16	-\$50.32	\$154.16	-\$50.32	-24.6%	
37	22,000	289	\$9.23	1187	632	\$261.09	\$190.83	-\$70.26	\$190.83	-\$70.26	-26.9%	
38	36,000	451	\$10.41	1853	987	\$359.43	\$249.78	-\$109.64	\$249.78	-\$109.64	-30.5%	
39	110,000	1080	\$18.84	4437	2363	\$787.79	\$525.23	-\$262.56	\$525.23	-\$262.56	-33.3%	