

Jackson Purchase Energy

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March 28, 2008

Director of Engineering
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

RECEIVED
APR - 1 2008
**PUBLIC SERVICE
COMMISSION**

Re: Jackson Purchase Energy Corporation
2007 Reliability Report

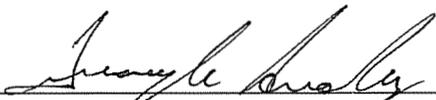
Mr. Welch:

Enclosed is a copy on CD of Jackson Purchase Energy Corporation's (JPEC) submittal of the 2007 Reliability Report required by the Public Service Commission's order in Administrative Case No. 2006-00494.

If you need any additional information, please let us know.

Sincerely,

JACKSON PURCHASE ENERGY CORPORATION

By 
Tracy A. Bensley, P.E.
Vice President of Engineering & Operations

Cc: Mr. Kelly Nuckols, JPEC President/CEO



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**Jackson Purchase Energy Corporation
Annual Reliability Report - 2007**

System Statistics:

<u>Calendar Year</u>	<u>SAIFI</u>	<u>SAIDI (minutes)</u>	<u>CAIDI (minutes)</u>
2002*	1.735	151.592	87.365
2003*	2.128	224.204	105.345
2004*	2.416	199.254	82.473
2005*	1.593	109.646	68.845
2006*	2.596	390.298	150.321
2007** (all inclusive)	1.986	177.592	89.439
2007** (w/o major events)	1.814	155.638	85.821

* Note: IEEE Standard 1366 could not be used in the calculations for years 2002-2006 as data is not available for daily SAIDI values until the calendar year 2006. Daily SAIDI values for 2006 were used to calculate major event days for 2007, per this standard.

** Note: The indices reported for 2007 are calculated including and excluding major event day data. The only major event day per IEEE Standard 1366 was June 23.

Vegetation Management Plan (VMP) Implementation:

JPEC is satisfied that its current VMP is being implemented properly and is providing adequate results as indicated by the drop in outages attributed to right-of-way from 251 in the calendar year 2006 to 142 in the calendar year 2007. No changes will be implemented to the plan in the coming year.

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Contributing Causes:

<u>Cause Code</u>	<u>SAIFI</u>
Supplier	0.331
Storms	0.319
ROW	0.238
Line Equipment	0.165
Human Error	0.149
Cut Out - Line or XFMR	0.133
Substation	0.100
Animal	0.092
Public	0.072
OCR / Breaker	0.063

<u>Cause Code</u>	<u>SAIDI</u>
Storms	49.607
ROW	24.708
Line Equipment	11.349
Cut Out - Line or XFMR	11.252
Public	9.899
Supplier	8.605
Substation	8.548
Wire Primary	7.534
Animal	6.016
OCR / Breaker	5.558

<u>Cause Code</u>	<u>CAIDI</u>
Wire Primary	156.256
Storms	155.494
Public	136.803
Weather	118.515
Wire Secondary	108.224
ROW	103.797
Lightning	101.596
OCR / Breaker	88.716
Substation	85.592
Cut Out - Line or XFMR	84.745

**Jackson Purchase Energy Corporation
Annual Reliability Report - 2007**

Feeder Statistics:

<u>Feeder - SAIFI</u>	<u>Index Value</u>	<u>Major Outage Category</u>
3202	5.795	Storms
1502	4.000	Animal
6104	3.913	Public
1404	3.884	Right-of-way
3201	3.458	Line Equipment
4902	3.458	Right-of-way
4702	3.439	Storms
4705	3.397	Right-of-way
4003	3.136	OCR/Breaker
2802	3.058	Weather

<u>Feeder - SAIDI</u>	<u>Index Value</u>	<u>Major Outage Category</u>
6102	722.458	Public
1404	697.550	Storms
3202	631.196	Storms
4503	513.000	Line Equipment
4705	449.035	Storms
501	441.865	Storms
7702	404.551	Wire, Primary
6104	358.695	Public
1502	358.375	Animal
4702	338.408	Storms

<u>Feeder - CAIDI</u>	<u>Index Value</u>	<u>Major Outage Category</u>
6102	410.619	Public
501	368.221	Storms
505	362.368	Storms
4503	256.500	Line Equipment
7601	234.415	Right-of-way
4203	233.385	Storms
5003	225.875	Animal
1902	190.143	Cutout - Line or Transformer
1404	179.592	Storms
7401	179.307	Cutout - Line or Transformer