#### BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of Empire District Electric	)	
Company's 2010 Utility Resource Filing	)	File No. EO-2011-0066
Pursuant to 4 CSR 240-22.	)	

### REVISED COMMENTS OF DOGWOOD ENERGY, LLC

COMES NOW Dogwood Energy, LLC ("Dogwood") and respectfully submits its Revised Comments in this proceeding pursuant to 4 CSR 240-22.080(6) regarding Empire District Electric Company's (Empire's) Integrated Resource Plan (IRP) compliance submission. In accordance with Rule 22.080(6), Dogwood has identified deficiencies and concerns with Empire's submittal to be further addressed by Empire, the other parties, and the Commission, as stated herein:

## I. Introduction and Summary

- 1. Empire submitted its IRP materials in September, 2010. As the Commission has stated in prior IRP orders, "The purpose of the Commission's integrated resource planning rule is to require Missouri's electric utilities to undertake an adequate planning process to ensure that the public interest in a reasonably priced, reliable, and efficient energy supply is protected." See ORDER APPROVING STIPULATION AND AGREEMENT AND ACCEPTING 2006 INTEGRATED RESOURCE PLAN, Case No. EO-2007-0008, p. 1-2 (4/22/07). Sound planning for a reliable supply of energy protects and serves the public interest.
- 2. Although Empire's IRP submittal appears quite comprehensive in its coverage of topics that will affect Empire's long-term resource acquisition strategy, a few items are not adequately addressed in the IRP. In particular:

- The IRP does not adequately examine competitively bid supply-side resources as means of meeting Empire's future resource needs.
- The IRP does not appear to fully examine possible interactions between identified risks.
- The IRP does not appear to take into account the additional costs that will be incurred to assure reliable integration of intermittent or uncontrollable supply sources.
- The IRP is not sufficiently accessible and transparent to the public, in that too much of the IRP has been classified as highly confidential including the components of Empire's preferred plan.

The remainder of Dogwood's comments elaborates on these issues.

## II. Lack of Consideration of Competitively Bid Resources

3. Empire appears to have relied extensively on generic cost information, in the form of pricing quotes from equipment manufacturers, in evaluating supply side solutions to its future capacity needs. For example, Empire appears to consider the generic costs of building a new combined cycle generating plant and an apparently more detailed study of the potential repowering of one of its own turbines. However, Empire did not obtain and does not consider or evaluate information readily available from third-party power suppliers with excess capacity in the region regarding costs for obtaining generation from facilities which are already constructed and in operation. The Dogwood Energy facility is an example of one such generating facility in close proximity to Empire's service area that has excess capacity available on a long-term basis and from which Empire has purchased power from time to time. Further, despite a prior commitment to consider all purchase power agreement (PPA) alternatives, Empire apparently only considered coal and nuclear PPAs. (IRP Vol. III, p. 7-8). Other sources of generation

supply would also be available to Empire from third-party suppliers in the form of either a PPA or a partial facility ownership option.

4. The generic information used by Empire for new construction projects, as provided by manufacturers, appears to be unrealistically low, which is not surprising since manufacturers often take a narrow view of costs for initial estimates of power plant construction costs. Reliance on this one source of information unfortunately distorts the analysis. Indicative competitive bids from various sources regarding the full range of alternatives would provide far more accurate information regarding the potential range of actual costs for building or acquiring generating resources. To prepare a truly "least-cost" resource plan, Empire should issue an indicative competitive solicitation for generating resources and incorporate the results into its planning efforts, as well as perform its own, more detailed studies of costs to self-build generating facilities, as needed.

## III. Risk Analysis

5. The risk analysis performed by Empire is insufficient to adequately evaluate the complexity and interrelationships of the various risks it currently faces in constructing or acquiring new generation resources today. In particular, Empire does not appear to fully consider covariant risks. Analyzing each risk factor individually to determine whether it affected the choice of resource plan will tend to underestimate the impacts of any individual risk. While Empire does in some cases link various reasonably related risks together in its analysis, its efforts are not robust. Empire should commit to participating in the anticipated industry meetings regarding best practices of covariant risk analysis for IRPs in Missouri.

#### IV. Intermittent Resources

- 6. Empire does not appear to address integration and reliability issues associated with the use of intermittent wind and solar generation and the potential costs thereof for its future resource additions. In order to reliably integrate such resources into its system, Empire must have available, or have access to, adequate regulation service to accommodate wind and solar generation output forecast errors. Likewise, Empire must have access to adequate resource/reserve capacity (spinning and non-spinning) and flexible, rapid-start and shut-down capacity (from 0-4 hours starting and stopping from minimum load, respectively) to accommodate normal daily fluctuations in wind and solar generation output. Generally, such requirements are met by uncommitted peaking and intermediate capacity resources to guard against blackouts, brownouts and penalties for violating NERC reliability standards. While Empire certainly has experience with these issues given the significant component of wind resources in its supply portfolio (above 15%), Empire does not address these potential costs in relation to future costs of adding new wind resources. It should be expected that these reliability-related requirements will only become more significant and costly as wind resources potentially comprise higher percentages of Empire's total resource mix in the future.
- 7. In order to more fully evaluate the costs of future additions of intermittent resources, Empire should explicitly consider in its IRP the additional costs of reliably integrating intermittent resources into its system and discuss its current experiences with reliably integrating wind resources into its supply portfolio, particularly with regards to the operation of its other generating facilities, additional costs incurred, and impact on Empire's ability to meet NERC reliability standards.

## V. Restricted Access

8. Compared to IRPs filed by other investor-owned utilities, it seems that an unusual amount of the Empire IRP has been classified as highly confidential, and thus public access has been unduly limited. For example, even the components and costs of Empire's preferred and alternative plans are classified, such that the public has no access to the actual proposed plan or the alternatives against which it was compared. To achieve greater transparency, Empire should review its classification and make as much information as possible public and/or only proprietary rather than highly confidential.

# VI. Concluding Remarks

9. Dogwood appreciates the efforts Empire has made in preparing its IRP. Empire and the other parties should work together in accordance with Rule 22.080 to develop a joint agreement to remedy all deficiencies and concerns identified by the parties, in order to achieve a satisfactory resolution to this proceeding.

CURTIS, HEINZ, GARRETT & O'KEEFE, P.C.

/s/ Carl J. Lumley

Carl J. Lumley, #32869 130 S. Bemiston, Suite 200 Clayton, Missouri 63105 (314) 725-8788 (314) 725-8789 (Fax) clumley@lawfirmemail.com

Attorneys for Dogwood Energy, LLC

# **CERTIFICATE OF SERVICE**

A true and correct copy of the foregoing was emailed, faxed or mailed by U.S. Mail, postage paid, this 3rd day of January, 2011, to the persons shown on the attached list.

/s/ Carl J. Lumley

General Counsel Office Missouri Public Service Commission 200 Madison Street, Suite 800 P.O. Box 360 Jefferson City, MO 65102 gencounsel@psc.mo.gov

Office of Public Counsel 200 Madison Street, Suite 650 P.O. Box 2230 Jefferson City, MO 65102 opcservice@ded.mo.gov

Sarah Kliethermes Missouri Public Service Commission 200 Madison Street, Suite 800 P.O. Box 360 Jefferson City, Mo 65102 sarah.kliethermes@psc.mo.gov

Dean Cooper 312 East Capitol P.O. Box 456 Jefferson City, MO 65102 dcooper@brydonlaw.com

Sarah Mangelsdorf Missouri Department of Natural Resources 207 West High Street P.O. Box 899 Jefferson City, MO 65102 sarah.mangelsdorf@ago.mo.gov

Douglas Healy 939 Boonville, Suite A Springfield, MO 65802 doug@healylawoffices.com

David Woodsmall 428 E. Capitol Ave., Suite 300 Jefferson City, Mo 65101 dwoodsmall@fcplaw.com Stuart Conrad 3100 Broadway, Suite 1209 Kansas City, MO 64111 stucon@fcplaw.com