## Review of Empire District Electric Company Electric Utility Resource Planning Compliance Filing Case No. EO-2008-0069

Prepared by Missouri Office of the Public Counsel

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## PREFACE OF THE OFFICE OF THE PUBLIC COUNSEL

This report is filed by the Office of the Public Counsel (Public Counsel or OPC) pursuant to 4 CSR 240-22.080(6), which provides that Public Counsel may file a report that identifies deficiencies in a utility's compliance with the provisions of Chapter 22, and any other deficiencies that cause the utility's resource acquisition strategy to fail to meet the fundamental objectives of the planning process as set forth at 4 CSR 240-22.010(2).

4 CSR 240-22.080(8) requires Public Counsel to work with Empire District Electric Company (Empire or the Company) in an attempt to reach an agreement, within forty-five days of the date that this report was filed, on a plan to remedy deficiencies. Should Public Counsel and Empire be unable to reach such an agreement, Public Counsel recommends that the Commission find, pursuant to 4 CSR 240-22.080(13), that Empire's filing does not comply with the requirements of Chapter 22 and that Empire's resource acquisition strategy does not meet the fundamental objectives of the planning process as set forth in 4 CSR 240-22.010(2)(A)-(C).

This report is less comprehensive and much shorter than the reports that Public Counsel submitted in the mid 1990s shortly after the IRP rule went into effect. The abbreviated nature of this report should not be construed to reflect any changes in OPC's view that the formal IRP process is important to consumers. Instead, the abbreviated nature of this report is due the finite resources that OPC has for IRP analysis and other Commission issues and activities that are currently taking place, not the least of which are the large number of rate cases that have been processed recently at the Commission. In order to provide meaningful feedback on Empire's IRP filing, we have focused our attention primarily on those areas where the greatest deficiencies occurred in Empire's filing. Public Counsel has not attempted to address the load forecasting portion of Empire's filing in this report. Therefore, no conclusions should be drawn regarding OPC's views of the degree to which Empire's filing in the forecasting area complies with the provisions in Chapter 22.

## Public Counsel's List of Deficiencies

- 1. 4 CSR 240-22.040(2)(C) Failure to comply with requirements to provide ranking of supply side options in terms of utility costs and utility costs plus probable environmental costs. Empire did not request a waiver from this provision but on page 47 of Volume 3, the Company states that "there is no need" to provide ranking results.
- 2. 4 CSR 240-22.050 (6) Empire failed to comply with the requirement in the rule for it to "develop a set of potential demand-side programs that are designed to deliver an appropriate selection of end-use measures to each market segment." Empire acknowledges on page 49 of Volume IV that "with the exception of the demand response programs, the DSM programs considered in the IRP are the same as those implemented in the five-year plan by Empire and described previously in this report in Section 3.0." While Empire's waiver permits it to rely primarily on programs that are already in its five-year plan, it should have been able to consider more than just 2 new demand response programs in its DSM program screening.
- 3. 4 CSR 240-22.050(8)(F) Failure to comply with this provision requiring that "potential demand-side programs that pass the total resource cost test shall be considered as candidate resource options and must be included in at least one (1) alternative resource plan developed pursuant to 4 CSR 240-22.060(3)." As indicated on page 85 of Volume IV, the AC cycling program passed the total resource cost test, yet Empire failed to comply with the rule by including it in at least one alternative resource plan.
- 4. 4 CSR 240-22.060 (3) and 4 CSR 240-22.010(2)(A) – Empire did not follow this provision which includes the requirement that the utility "shall use appropriate combinations of candidate demand-side and supply-side resources to develop a set of alternative resource plans, each of which is designed to achieve one (1) or more of the planning objectives identified in 4 CSR 240-22.010(2)." One of the planning objectives that has become increasingly important since the IRP rule went into effect in the early 1990s is the mitigation of risks associated with more stringent environmental regulations. While Empire created 2 plans that were expected to perform well under more stringent environmental regulations (Alternative plans 6 and 7), it did not consider these plans to be alternative resource plans or perform a full risk analysis on these plans as required by the rules. At page 19 of Volume V, Empire states that "of the twelve scenarios examined, four (plans 6, 7, 8, and 9) were deemed to be contingency scenarios and thus were not examined further in the risk analysis. Not only were these plans not examined further in the risk analysis, but the outcome measures of these plans were not presented in the integration analysis summary table (Table 15) on page 33 of Volume V.

Another deficiency in this area involves the consideration of a more aggressive set of DSM programs in alternative plans. While Empire screened a more aggressive set of DSM programs in its DSM program screening these more aggressive programs were not utilized extensively, if at all, in the alternative plans created by the Company. This creates a disconnect between Empire's assessment of the likelihood of more stringent

environmental regulations (especially CO<sub>2</sub>) and the alternative resource plans that it created to perform in a future with increasingly stringent environmental regulations.

- 5. 4 CSR 240-22.060(6)(B) Failure to comply with filing requirements to provide "a summary tabulation that shows the performance of each alternative resource plan as measured by each of the measures specified in section (2) of this rule." Table 1 on page 4 of Volume V references the summary table (Table 15) on page 33 of Volume V. However, Table 15 only gives information on PVRR on a deterministic basis and on a "probabilities" basis. Required information on other performance measures such as "rate increases" and all identified critical uncertain factors are not provided.
- 6. 4 CSR 240-22.070(1) Empire did not comply with this requirement which states that "the utility shall use the methods of formal decision analysis to assess the impacts of critical uncertain factors on the expected performance of each of the alternative resource plans developed pursuant to 4 CSR 240-22.060(3)..." As noted in item 5 above, "while Empire created 2 plans that were expected to perform well under more stringent environmental regulations (Alternative plans 6 and 7), it did not consider these plans to be alternative resource plans or perform a full risk analysis on these plans as required by the rules." This same deficiency occurs with respect to Alternative Resource plan 8. The Alternative plans that were considered by Empire in its risk analysis all tended to have very similar risk profiles as shown by the graph on page 28 and the bar graph on page 33 of Volume 5. If alternative plans 6, 7, and 8 had been analyzed by Empire in its risk analysis, the results may have provided some useful information when viewed on graphs such as these.
- 7. 4 CSR 240-22.070(1) and (5) Failure to explicitly state and document the subjective probabilities that utility decision makers assign to each of the uncertain factors as required by 4 CSR 240-22.070(1) and (5). On pages 26 28 of Volume V, Empire discusses several uncertain factors. Specific utility decision-makers or specific groups of such decision makers such as a Board of Directors were not identified in Empire's filing and based on the information provided in the filing, they do not appear to have identified which uncertain factors are "critical" or made determinations about which subjective probabilities should be assigned to any such factors.
- 8. 4 CSR 240-22.070(2) and 4 CSR 240-22.070(11)(A)2. Failure to perform analysis required by this section of the rule for each of the uncertain factors listed in (A) (L) of 4 CSR 240-22.070(2) and document it as required by 4 CSR 240-22.070(11). Empire's reference to the reporting requirements for 4 CSR 240-22.070(11)(A) on page 8 merely indicates that information responsive to this reporting requirement can be found in the decision tree diagram on page 26 of Volume V. There is no reference to where the information required by subsection 4 CSR 240-22.070(11)(A)2. can be found. Specifically, neither (1) the process used to determine the critical uncertain factors pursuant to 4 CSR 240-22.070(2) nor (2) the results of that process are documented in the filing.

- **9. 4** CSR 240-22.070(9)(B)  **Failure to create an adequate implementation plan for DSM programs.** 4 CSR 240-22.070(9)(B) requires "a schedule and description of ongoing and planned demand-side programs, program evaluations and research activities. In an attempt to satisfy this requirement, Empire states on page 51 of Volume 5 that it will "bring the DSM programs selected by the optimization modeling in this IRP to the CPC for review and approval." This statement does not come close to satisfying this requirement.
- 10. 4 CSR 240-22.070(10)(C) Failure to specify the ranges or combinations of outcomes for the critical uncertain factors and explain how limits were determined. Since the company did not explicitly identify critical uncertain factors as required by the rule it could not satisfy this requirement. The resource acquisition strategy discussion on pages 50 52 of Volume V does not explicitly address the requirement in 4 CSR 240-22.070(10)(C) for it to specify "the ranges or combinations of outcomes for the critical uncertain factors that define the limits within which the preferred resource plan is judged to be appropriate, and an explanation of how these limits were determined."
- 11. 4 CSR 240-22.070(10)(D) Failure to specify a set of contingency options for the critical uncertain factors as part of an officially adopted resources acquisition strategy. There is no discussion of contingency options in the "Resource Acquisition Strategy" section on page 52 of Volume V. One of the possible contingency options in this area, moving towards implementation of a more aggressive portfolio of DSM programs, is not included because Empire did not include such a portfolio in any of its alternative resource plans. While Empire does identify new carbon regulations as a critical uncertain factor, the Company failed to analyze which demand-side contingency options, if any, should be implemented if emissions costs varied greatly from its base assumption. Similarly, the Company failed to specify analyze which supply-side contingency options should be implemented if emissions costs or natural gas costs varied greatly form its base assumption.
- 12. 4 CSR 240-22.070(10)(E) Failure to create and provide full documentation of a credible process for monitoring the critical uncertain factors and reporting to managers/officers. While Empire makes some broad statements about this subject on pages 50 52 of Volume V, no specific process for satisfying this requirement is documented in its filing. Furthermore, as mentioned earlier in this report, Empire has neither complied with the required process in the IRP rule for identifying critical uncertain factors nor specified which uncertain factors it considers to be critical.