

**IN RE: KANSAS CITY POWER & LIGHT COMPANY'S  
2008 UTILITY RESOURCE FILING PURSUANT TO 4 CSR 240, CHAPTER 22**

**WAIVER REQUESTS RELATED TO:  
DEMAND-SIDE RESOURCE ANALYSIS  
4 CSR 240-22.050**

**(1) 4 CSR 240-22.050 (2.C.1)**

**Current Requirement:** For each year of the planning horizon and for each avoided cost period, the utility shall calculate the avoided direct running cost per kWh.

**Proposed Alternative:** Rather than utilizing the avoided direct running cost for valuing total avoided costs associated with DSM, KCPL proposes to utilize the forecasted market price of energy.

**Rationale:** Customer end-use energy savings will either be available for sale into the wholesale market or will reduce the need to purchase energy from the wholesale market. KCPL believes utilization of energy market pricing is a more accurate value for the avoided energy costs associated with DSM programs.

**WAIVER REQUESTS RELATED TO  
SUPPLY SIDE RESOURCE ANALYSIS  
4 CSR 240-22.040**

**(2) 4 CSR 240-22.040 (2)**

**Current Requirement:** For technology pre-screening, the IRP rule indicates:

1. "The purpose of this step (pre-screening) is to provide an initial ranking of these options based on their relative annualized utility cost"
2. "All costs shall be expressed in nominal dollars"

**Proposed Alternative:** For pre-screening, KCPL will rank technologies based on projected busbar costs which will be expressed in constant year dollars.

**Rationale:** Busbar costs are a solid indication of the all-inclusive cost of ownership and production for each alternative technology. This cost provides a clear comparison and direct ranking between technologies. Using the busbar cost for comparison eliminates the need to consider nominal dollar value as all costs can be expressed in annual costs. Therefore applying constant year dollars is appropriate for the busbar cost comparison.

**(3)     4 CSR 240-22.040 (3) (6) & (7)**

**Current Requirement:** The analysis of supply side resources shall include a thorough analysis of existing and planned interconnected generation resources. The purpose is to ensure that the transmission network is capable of reliably supporting the supply resource options under consideration.

**Proposed Alternative:** KCPL will include projected transmission upgrade costs on a \$/kW basis for each technology that would interconnect to the transmission system. For prescreening, the applied cost will be the average transmission-related costs associated with Iatan-2 and the West Gardener CT's. In addition, KCPL will develop factors to apply to various technology types. For example, KCPL may apply a factor of 1.5 times the average cost for wind while applying 1.2 times the average cost for CT's and 1.0 for larger base load units. Application of these factors allows for consideration of technology-specific issues such as economies of scale and the known transmission infrastructure issues associated with many wind sites.

For integrated analysis, KCPL will apply a range of potential transmission costs to each technology. Note that some smaller scale technologies might not interconnect to the transmission system, but rather might connect on the customer side of the meter or only connect to the distribution system. Also, for larger scale base load additions, the range of capital and operating costs applied may cover the potential range in costs associated with transmission.

**Rationale:** The Southwest Power Pool process for providing transmission interconnection costs does not allow a utility to identify costs for a wide range of potential new generating resources. The process requires all utilities to file planned generation additions which are incorporated into an integrated transmission analysis. SPP then provides the expected transmission cost for each project assuming all projects will be installed. At this point utilities may opt-out, effectively changing the projected costs. The process is then repeated, and again utilities may opt-out changing the projected costs yet again. A final evaluation is ultimately performed, but a utility must commit to installing the generating unit at this point in the process.

The overall process simply is not compatible with a 20-year resource planning process as any cost values provided today would be expected to change by the time resources are actually installed over the course of the planning horizon. Additionally, utilities are charged for each evaluation performed during this iterative process. Given the associated high cost and potential inaccuracy of the results, KCPL has chosen the proposed alternative.

(4) **4 CSR 240-22.040 (2) (B) 2 & 4, Probable Environmental Cost**

**Current Requirement:** The utility shall specify at least two (2) levels of mitigation that are more stringent than existing (environmental) requirements.

**Proposed Alternative:** KCPL will provide a detailed review of current and potential environmental regulations. Based on that review, the cost of complying with more restrictive future regulations will be calculated. Current evaluations indicate that many of the potential restrictions result in an “either-or” condition and do not lend themselves to the required “2-levels of mitigation”. Therefore, KCPL may only show 1-level of mitigation in many instances.

Based on current findings, the cost impacts of several potential regulations can be combined. For example, regulations relating to Ozone, PM and CAIR primarily focus on SO<sub>2</sub> and NO<sub>x</sub> (as precursors to Ozone & PM or as the primary issues for acid rain). Increased controls required for all three regulations are therefore anticipated to include the addition of scrubbers for SO<sub>2</sub>, SCR’s for NO<sub>x</sub> control and baghouses for PM control. These installations are assumed to equal Best Available Control Technology (BACT) over the planning horizon. KCPL assumes in the base case that BACT controls will be required for all existing coal fired units. Therefore, the probable environmental “capital” costs associated with tighter restrictions for all three of these regulations is essentially captured in the base case. The probable environmental “operating” costs are projected to be related to increased usage of limestone, ammonia and other catalysts. It is assumed that these cost increases are captured through the application of a range of allowance prices over the planning horizon.

It should be noted that the capital and operating cost projections for new generating resources includes the cost of BACT emission controls. Therefore, the probable environmental cost for new resources is similarly captured through the application of a range of allowance price forecasts for these three regulations.

Based on the above discussions, a portion of future probable environmental costs will be captured in the base case assumptions and therefore will not be shown as a separate cost evaluation. For potential regulations not captured in base case assumptions, KCPL will document probable environmental costs separately; however, “either-or” applications will not necessarily show “2-levels” of future mitigation.

**Rationale:** KCPL believes the proposed evaluations accurately capture the probable environmental costs required in the IRP rules and takes into consideration all of the specific approaches contained in those rules. This waiver is being requested to indicate that many of the probable environmental costs will be captured in our base case assumptions and also to indicate that documenting 2-levels of mitigation may not be applicable to all potential regulations.