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August 9, 2005

**VIA HAND DELIVERY**

Elizabeth O'Donnell  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40601

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AUG 09 2005

PUBLIC SERVICE  
COMMISSION

**RE: In the Matter of: Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity, and a Site Compatibility Certificate, for the Expansion of the Trimble County Generating Station**  
**Case No. 2004-00507**

Dear Ms. O'Donnell:

Enclosed please find and accept for filing the original and ten copies of Louisville Gas and Electric Company's and Kentucky Utilities Company's Joint Post-Hearing Brief in the above-referenced matter. Please confirm your receipt of this filing by placing the stamp of your Office with the date received on the enclosed additional copies and return them to me in the enclosed self-addressed stamped envelope.

Should you have any questions or need any additional information, please contact me at your convenience.

Very truly yours,

J. Gregory Cornett

JGC/ec

Enclosures

cc: Parties of Record

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BEFORE THE PUBLIC SERVICE COMMISSION

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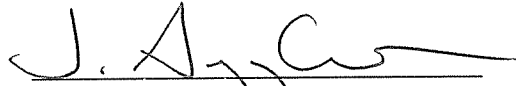
In the Matter of:

PUBLIC SERVICE  
COMMISSION

JOINT APPLICATION OF LOUISVILLE GAS )  
 AND ELECTRIC COMPANY AND KENTUCKY )  
 UTILITIES COMPANY FOR A CERTIFICATE )  
 OF PUBLIC CONVENIENCE AND NECESSITY, ) **CASE NO: 2004-00507**  
 AND A SITE COMPATIBILITY CERTIFICATE, )  
 FOR THE EXPANSION OF THE TRIMBLE )  
 COUNTY GENERATING STATION )

**JOINT POST-HEARING BRIEF OF  
 LOUISVILLE GAS AND ELECTRIC COMPANY  
 AND KENTUCKY UTILITIES COMPANY**

Respectfully submitted,



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## **INTRODUCTION**

This case involves the Joint Application of Louisville Gas and Electric Company (“LG&E”) and Kentucky Utilities Company (“KU”) (collectively, the “Companies”) for a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for the expansion of the Trimble County Generating Station (“Trimble Station”), and for approval of a land sale associated with that expansion (“Joint Application”). The proposed project is a joint one between the Companies, the Illinois Municipal Electric Agency (“IMEA”) and the Indiana Municipal Power Agency (“IMPA”).<sup>1</sup>

The Companies have a need for additional baseload capacity beginning in 2010, and the construction proposed herein is the least-cost method for meeting that need. The proposed expansion of the Trimble Station will allow the Companies to continue providing low-cost, reliable power for their native customers into the future. Accordingly, and for all of the reasons set forth below, the Joint Application should be granted without limitation.

## **PROCEDURAL HISTORY**

The Companies filed their Joint Application, together with supporting testimony and exhibits, on December 17, 2004. The Kentucky Public Service Commission (“Commission”) accepted the Joint Application, and issued a no-deficiency letter relating thereto, on December 28, 2004.<sup>2</sup>

The Commission granted full intervention in this proceeding to the Kentucky Attorney General, by and through his Office of Rate Intervention (“AG”), the International Brotherhood of Electrical Workers, Local 2100, and the Greater Louisville Building and Construction Trades

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<sup>1</sup> The present proceeding involves the Companies’ portion of the project. IMEA and IMPA are seeking approval for their respective portion of the project in Case No. 2005-00152 pending before the State Board on Electric Generation and Transmission Siting.

<sup>2</sup> December 28, 2004 letter from Elizabeth L. O’Donnell.

Council (collectively, the “unions”), the Kentucky Industrial Utility Customers, Inc. (“KIUC”), IMEA, IMPA, and the Louisville/Jefferson County Metro Government (“City of Louisville”). At the Companies’ request, the Commission held an informal conference in this proceeding on January 13, 2005, which was attended by Commission Staff, the Companies, and all intervenors (except the unions and the City of Louisville). The Commission subsequently entered an order establishing a procedural schedule on January 27, 2005.

On April 11, 2005, in response to a request for ruling filed by the Companies, the Commission directed the Companies to amend their Joint Application to seek approval for the transfer of an undivided ownership interest in certain real estate that IMEA and IMPA would acquire as a result of their 25% interest in the proposed project. The Companies complied with the Commission’s directive by filing an amended Joint Application on April 15, 2005.

Pursuant to the Commission’s procedural schedule, the Companies, Commission Staff and intervenors engaged in discovery. On April 22, 2005, the AG and the unions pre-filed their direct testimony. On June 8, 2005, the Companies filed their rebuttal testimony. An evidentiary hearing occurred before the Commission on June 28, 2005. Following that hearing, the Companies filed their responses to post-hearing data requests on July 11, 2005. This brief is filed pursuant to the schedule established at the conclusion of the Commission’s evidentiary hearing.

### **OVERVIEW OF PROPOSED PROJECT**

The Companies have proposed the construction of a new 750 MW nominal net rating (732 MW net summer rating) super-critical pulverized-coal unit (“TC2”) to be located adjacent to the existing operating unit (“TC1”) at the Trimble Station.<sup>3</sup> TC2 will be owned jointly by the Companies, IMEA and IMPA. Specifically, the Companies will own 75% of TC2, and IMEA

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<sup>3</sup> Direct Testimony of John N. Voyles (“Voyles Direct”) at 1-2

and IMPA will own the remaining 25% of TC2.<sup>4</sup> The expected capital cost for construction of TC2 is \$1.1 billion, an amount that includes escalation, contingency, and owner's costs, but excludes costs for transmission facilities.<sup>5</sup> However, as joint owners, IMEA and IMPA will bear 25% of the project costs, and thus the Companies' construction costs are expected to be about \$800 million, excluding transmission facilities.<sup>6</sup>

The Trimble Station is an ideal location for siting a new baseload unit because the Station was originally developed as a multi-unit site and much of the full plant infrastructure was installed at the time of construction of TC1.<sup>7</sup> Specifically, the limestone barge unloader, limestone handling system, limestone grinding and slurry systems, coal barge unloader, coal handling system, site fire protection, site fuel oil storage, administrative offices, maintenance shops, warehousing facilities, site development, barge mooring cells and raw river water supply systems were placed into operation when TC1 was constructed and were built to handle the operation of multiple units with little or no modifications.<sup>8</sup> The Companies can take advantage of these existing systems and infrastructure, thereby significantly reducing the construction costs over that which would be required at a new or "greenfield" site.<sup>9</sup> There is also sufficient real estate available for TC2 at the Trimble Station, and the site is well suited for the required on-site transmission upgrades.<sup>10</sup> In addition, significant staffing benefits will be realized by building at the Trimble Station because of economies of scale. Staffing at TC1 alone consists of

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<sup>4</sup> Direct Testimony of Kent W. Blake ("Blake Direct") at 1, 3. KU will own 81% of the Companies' share of TC2, and LG&E will own the remainder of that share, or 19%. Blake Direct at 2. Applications involving transmission facilities needed to integrate TC2 into the Companies' transmission system are pending in Case Nos. 2005-000142, 2005-00154 and 2005-00155.

<sup>5</sup> Blake Direct at 1.

<sup>6</sup> Voyles Direct at 13.

<sup>7</sup> *Id.* at 2.

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at 3.

approximately 80 full-time employees.<sup>11</sup> The addition of TC2, while more than doubling the Station's coal-fired generation capacity, will require only about 30-40 additional full-time employees.<sup>12</sup>

The technology proposed for TC2 will have a number of significant benefits to the Companies and their ratepayers. TC2 will be designed for maximum fuel flexibility to allow the Companies to manage the cost of coal for today's needs and beyond.<sup>13</sup> In addition, the super-critical pulverized coal technology has a higher thermal efficiency as compared to other thermal power cycles, such as sub-critical pulverized coal and circulating fluidized bed units, reducing fuel costs by decreasing the amount of coal burned in relation to the amount of electricity produced.<sup>14</sup> There are also environmental benefits from that efficiency, because the less coal that is combusted to produce the energy, the less pollutants that are emitted as a by-product of that combustion.<sup>15</sup>

TC2 will also employ state of the art air pollution control equipment to ensure environmental compliance.<sup>16</sup> It is anticipated that this equipment will consist of a Selective Catalytic Reduction system, Baghouse, Wet Flue Gas Desulphurization system, and Wet-Electrostatic Precipitator, with provisions for the addition of future environmental controls should air regulations change in the future.<sup>17</sup> Indeed, TC2 will employ the most modern air pollution control equipment available, resulting in lower SO<sub>2</sub> and NO<sub>x</sub> emissions, on a lb/mmBtu basis, than other recently-submitted permit applications for pulverized coal and circulating

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<sup>11</sup> *Id.* at 2-3.

<sup>12</sup> *Id.* at 3.

<sup>13</sup> *Id.* at 9.

<sup>14</sup> *Id.* at 4.

<sup>15</sup> *Id.*

<sup>16</sup> Direct Testimony of Sharon L. Dodson ("Dodson Direct") at 1-2.

<sup>17</sup> *Id.*; Voyles Direct at 2.

fluidized bed units in Kentucky and two coal-fueled IGCC systems in the U.S.<sup>18</sup> TC2 will also be designed and constructed to meet mercury emission limits which are more stringent than those required by the most recent federal legislation.<sup>19</sup>

The result of these planned environmental technologies, when coupled with environmental technology upgrades on TC1, is that TC2 will have only a minimal impact on air quality levels.<sup>20</sup> Indeed, the TC2 Prevention of Significant Deterioration (“PSD”) Construction Permit Application and Title V Operating Permit Application are based on a net increase of less than 40 tons per year in emissions of NO<sub>x</sub> and SO<sub>2</sub> at the Trimble Station.<sup>21</sup>

Construction of TC2 will be performed primarily through a single Engineering, Procurement and Construction (“EPC”) contract that will include the boiler, air pollution control equipment, and turbine generator systems.<sup>22</sup> The utilization of a single EPC contract is very common in today’s marketplace for owners that want to manage schedule, performance and price risk.<sup>23</sup> The EPC contract will include a full performance wrap (i.e., equipment warranties, schedule guarantees, emission rate guarantees, and the like) to ensure the contractor delivers the project on time, within budget and within the required performance criteria, and will have significant penalties associated with these areas of risk to protect the Companies and their ratepayers.<sup>24</sup>

The bidding process for the EPC contract is underway using a functional technical specification with a typical set of turn-key, lump sum fixed price terms and conditions for a

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<sup>18</sup> Dodson Direct at 2, Exhibit SLD-1, Emissions Comparison: Coal-Fired Generating Units in Kentucky, and Exhibit SLD-2, Emissions Comparison: Existing Integrated Gasification Combined Cycle (“IGCC”) Units.

<sup>19</sup> Dodson Direct at 2; Transcript of Evidence from June 28, 2005 hearing (“TE”) at 134.

<sup>20</sup> Voyles Direct at 2; Dodson Direct at 3.

<sup>21</sup> Dodson Direct at 3.

<sup>22</sup> Voyles Direct at 10.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*



project of this scale.<sup>25</sup> Proposals have been solicited from a set of pre-qualified entities, including EPC contractors, major equipment providers, and engineering firms, and detailed negotiations on scope, schedule, price and other commercial terms are expected to proceed through the remainder of 2005.<sup>26</sup>

Once the successful EPC bidder is selected, the Companies expect the actual construction of TC2 to take approximately four years.<sup>27</sup> The expected timeline for construction is as follows: EPC bidding and contract award process to be completed by the end of 2005; construction to begin in the first quarter of 2006 and be mechanically completed in the fourth quarter of 2009; commissioning, startup, and testing phase to commence following mechanical completion and last through the first quarter of 2010; and commercial operation to begin in the second quarter of 2010.<sup>28</sup>

## ARGUMENT

### **I. THE COMPANIES' REQUEST FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR TC2 SHOULD BE GRANTED.**

KRS 278.020(1) states:

No person, partnership, public or private corporation, or any combination thereof shall ... begin the construction of any plant, equipment, property or facility for furnishing to the public any of the services enumerated in KRS 278.010 ... until that person has obtained from the Public Service Commission a certificate that

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<sup>25</sup> *Id.*; TE at 123. Preliminary indications from the bid documents submitted are that the Companies are in line with the budgetary costs submitted in this case. TE at 123.

<sup>26</sup> Voyles Direct at 10-11; TE at 123-25.

<sup>27</sup> The Companies sought approval from the Commission before entering into an EPC contract because they recognized that it would take a number of months for the Commission's resolution of this proceeding and for the necessary pre-construction environmental permits to be obtained, and because they also knew from experience that the large scope of the project would require an extensive bidding, evaluation, and negotiation period. In order to receive proposals with better price certainty and to avoid a large contingency for an uncertain start date, the Companies determined that it was prudent to synchronize their efforts so that the best price could be received for a schedule that supported the needed commercial operating date within the construction commencement requirements of a CCN and air permit. Any EPC contract will be entered contingent upon the grant of a CCN and Site Compatibility Certificate from the Commission. Voyles Direct at 12-13.

<sup>28</sup> *Id.* at 12.

public convenience and necessity require the service or construction.

Kentucky's highest court has construed "public convenience and necessity" to mean that (1) there is a need for the proposed facility or service, and (2) the new facility or service will not create wasteful duplication.<sup>29</sup>

A finding of "need" is supported where there has been a showing of "a substantial inadequacy of existing service" due to a deficiency of service facilities beyond what could be supplied by normal improvements in the ordinary course of business.<sup>30</sup> However, it is important to recognize that "substantial inadequacy of existing service" clearly is not required to be a currently-existing deficiency, but rather may be one expected a number of years into the future "in view of the long range planning necessary in the public utility field."<sup>31</sup> In addition, the prevention of "wasteful duplication" has been interpreted to mean not only a physical multiplicity of facilities, but also an avoidance of "excessive investment in relation to productivity or efficiency."<sup>32</sup> Here, as explained in detail below, the Companies have demonstrated a need for TC2 in order to support native load growth beginning in 2010, and have established that a Certificate of Public Convenience and Necessity ("CCN") is needed now in order to meet a commercial operation date in 2010. Similarly, the proposed construction of TC2 will not constitute a wasteful duplication of facilities.

**A. TC2 is Needed to Allow the Companies' to be Positioned to Meet the Needs of Their Growing Native Loads.**

The Companies forecast that their native load will grow at a rate that will require the addition of baseload generating capacity by 2010. The expected load will require additional

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<sup>29</sup> Kentucky Utilities Co. v. Pub. Serv. Comm'n, 252 S.W.2d 885, 890 (Ky. 1952).

<sup>30</sup> *Id.*

<sup>31</sup> Kentucky Utilities Co. v. Pub. Serv. Comm'n, 390 S.W.2d 168, 171 (Ky. 1965).

<sup>32</sup> Kentucky Utilities Co., 252 S.W.2d at 890.

baseload capacity of between 90 and 235 megawatts in 2010 and between 401 and 552 megawatts of capacity by 2012.<sup>33</sup>

**1. The Companies' load forecasting methodology.**

The Companies offered the testimony of David S. Sinclair, Director, Market Analysis and Valuation for LG&E Energy Services Inc., to describe the Companies' load forecast methodologies and conclusions. In his direct testimony, Mr. Sinclair stated that, in making their load forecasts, the Companies:

1. Build and rigorously test statistically and economically sound mathematical models of the load forecast variable;
2. Use quality forecasts of future macroeconomic events, both nationally and in the service territory, that influence the load forecast variable;
3. Thoroughly review and analyze the model output to ensure that the results make sense based on historical trends and the forecaster's own sense and understanding of long-term trends in electricity usage.<sup>34</sup>

As Mr. Sinclair stated, "experienced professionals employing reasonable methods, models, and data result in the production of a reasonable forecast."<sup>35</sup> Furthermore, the Companies' methodology is widely used in the utility industry and is similar to that utilized in the Companies' 2002 Integrated Resource Plan, which was reviewed and accepted by this Commission.<sup>36</sup> A flow chart further describing the load forecast process is attached to Mr. Sinclair's direct testimony as Exhibit DSS-5.

The Companies' joint load forecast includes historical data on sales and customers, historical and projected macroeconomic and demographic indicators on the national, state and

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<sup>33</sup> Joint Application, ¶ 3.

<sup>34</sup> Direct Testimony of David S. Sinclair ("Sinclair Direct") at 10.

<sup>35</sup> *Id.*

<sup>36</sup> Sinclair Direct at 10; *In the Matter of: The Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*, Case No. 2002-00367.

local levels, and historical weather data.<sup>37</sup> A general list of the variables used to prepare the load forecast is set forth on Exhibit DSS-6. One of the first steps in the forecast is obtaining an outlook of national macroeconomic trends (provided by Global Insight, a major national economic forecasting service). This information includes forecasts of U.S. GDP growth, inflation, real interest rates and population growth rates.<sup>38</sup> The national trends are then translated into service territory projections of economic activity. The Companies engaged the University of Kentucky's Gatton Center for Business and Economic Research to develop a Service Territory Economic Model ("STEM"), which provides detailed economic and demographic projections specific to the Companies' service territories.<sup>39</sup> This information is applied in developing the load forecast.<sup>40</sup>

Together with other indicators, the projections from STEM are used as inputs to the econometric models that are developed for each customer class (e.g., residential, commercial, industrial) within each Company. The econometric model captures, in statistical terms, the causal relationship between the "dependent" variable being forecasted (here, energy sales) and the underlying economic or technical "drivers" shaping the forecast. The "drivers" include key "independent" variables such as economic output, population and weather (as appropriate for each class of sales).<sup>41</sup> In the case of the residential sales forecast, the econometric approach complements an analysis of specific end-use applications for electricity (heating, cooling and other functions) in households in the service territories.<sup>42</sup> Each of the sector models is rigorously

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<sup>37</sup> *Id.* at 6.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Id.* at 6-7.

<sup>41</sup> *Id.* at 7.

<sup>42</sup> *Id.*

tested to ensure that appropriate, statistically-significant results are obtained for the independent variables utilized.<sup>43</sup>

For most classes of sales, the forecast is the product of two forecasts: the number of customers and the use per customer. For the residential class, for example, the number of customers in each Company's service territory is a function of the forecasted number of households, which is information generated by STEM from national and state-level demographic indicators.<sup>44</sup> The use-per-customer forecast utilizes STEM forecasts of persons per household, employment and income levels, along with forecasted (normal) weather and electricity cost.<sup>45</sup>

The forecasts are then evaluated by comparison to historical monthly patterns and growth rates.<sup>46</sup> In addition, year to year growth rates of the forecasts are evaluated to ensure reasonableness.<sup>47</sup> If a forecasted year appears to be unreasonable, the models are reevaluated and, if necessary, re-specified.<sup>48</sup> The use-per-customer forecast is then multiplied by the forecasted number of customers to arrive at the energy forecast for the particular class.<sup>49</sup>

In addition to the use of the econometric models, 25 large LG&E customers and 9 large KU customers, representing 11 percent of total energy sales, are individually forecasted.<sup>50</sup> These forecasts are developed using recent sales history (applying historical growth rates) and information obtained in discussions with each customer about its views of future energy requirements.<sup>51</sup>

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<sup>43</sup> *Id.*

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> *Id.*

<sup>47</sup> *Id.* at 7-8.

<sup>48</sup> *Id.* at 8.

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

The Companies' monthly energy forecast is converted into a chronological projection of hourly system loads, which determines the Companies' annual peak demand.<sup>52</sup> This process is illustrated on Exhibit DSS-7 attached to Mr. Sinclair's direct testimony. The forecasted monthly energy requirement (taking into account transmission and distribution system losses) is converted into an hourly load duration curve using a representative curve reflecting the typical 10-year historical pattern of hourly demand load pattern for that month.<sup>53</sup> The resulting monthly load duration curves are converted to chronological load curves by application of an appropriate historical hourly load curve that captures the calendar attributes of the forecast month in question.<sup>54</sup> The chronological load curves of each Company are then combined to create the total coincident load for the total system.<sup>55</sup>

## **2. The results of the 2004 Joint Load Forecast.**

Using the above-described methodology, the Companies developed the 2004-2033 energy and peak demand forecasts set forth at Exhibits DSS-1 and DSS-2.<sup>56</sup> After the filing of the Joint Application in this case, the Companies completed their 2005-2035 energy requirements and peak demand forecasts. They are set forth in Rebuttal Exhibits DSS-1 and DSS-2. A comparison of the 2005 load forecasts to the 2004 load forecasts is set forth in Rebuttal Exhibits DSS-3 and DSS-4. Mr. Sinclair concluded that, from a statistical and practical perspective, the 2005 load forecasts are not materially different from the 2004 load forecasts during the 2010-2012 time period.<sup>57</sup> Thus, the use of the 2004 load forecasts to determine the need for TC2 is appropriate.

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<sup>52</sup> *Id.*

<sup>53</sup> *Id.*

<sup>54</sup> *Id.* at 8-9.

<sup>55</sup> *Id.* at 9.

<sup>56</sup> Minor errors in these exhibits were corrected and introduced in the record as Joint Applicants' Hearing Exhibits 3 and 4, respectively.

<sup>57</sup> Rebuttal Testimony of David S. Sinclair ("Sinclair Rebuttal") at 12.

The Companies forecast that the joint Companies' energy requirement in 2010 will be 38,121 GWh, summer peak demand will be 7,383 MW and winter peak demand will be 6,223 MW.<sup>58</sup> The 2010 forecast for LG&E is 13,722 GWh of energy requirements, 2,850 MW of summer peak demand and 1,957 MW of winter peak demand.<sup>59</sup> The 2010 forecast for KU is 24,399 GWh of energy requirements, 4,549 MW of summer peak demand and 4,297 MW of winter peak demand.<sup>60</sup> As indicated above, the Companies will need between 90 and 235 MW of additional baseload capacity by 2010 to meet the forecasted energy requirements and peak demand.

**3. The AG's criticisms of the Companies' Forecast are not reasonable.**

The AG offered the testimony of David H. Brown-Kinloch ("Mr. Kinloch") to evaluate the Companies' load forecast and to address the Companies' schedule to add new capacity. Mr. Kinloch agrees that the Companies will need to add new baseload generating capacity, but recommends that it should not be added until 2012 at the earliest.<sup>61</sup> This recommendation is based on Mr. Kinloch's erroneous conclusion that the Companies are in a period of stagnant growth<sup>62</sup> and on a flawed computation of capacity needs.<sup>63</sup>

Mr. Kinloch's determination that the Companies are in a period of stagnant growth is based on the observation of two data points: 1999 peak demand and 2004 peak demand.<sup>64</sup> Although peak demand in 2004 is 44 MW higher than it was in 1999, such an "analysis" should not be utilized to forecast peak load in 2010 or to determine the need for TC2, because it is overly simplistic and misinterprets or ignores important information. As Mr. Sinclair pointed out

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<sup>58</sup> Joint Applicants' Hearing Exhibit 3.

<sup>59</sup> Joint Applicants' Hearing Exhibit 4.

<sup>60</sup> *Id.*

<sup>61</sup> Direct Testimony of David H. Brown Kinloch ("Kinloch Direct") at 22.

<sup>62</sup> *Id.* at 5.

<sup>63</sup> David H. Brown-Kinloch Direct Exhibit ("Exhibit DHBK") 2.

<sup>64</sup> Kinloch Direct at 5.

in his rebuttal testimony, the use of two other sets of peak demand data points could result in an observed growth of 3% or a decline of 1.4%.<sup>65</sup> In other words, the use of only two data points to conclude that little growth has occurred is both random and erroneous.<sup>66</sup> In addition, such an approach is not an appropriate way to determine whether or not the Companies' load is growing, because peak demand is far more volatile year to year than is annual energy requirements.<sup>67</sup> That volatility persists even after attempting to weather-normalize the peak, because the total load in any one hour reflects the coincident behavior of millions of people and businesses whose behavior is influenced by countless events that will not precisely coincide from year to year.<sup>68</sup>

Mr. Sinclair set forth actual combined Company system peak demand in both his direct and rebuttal testimony.<sup>69</sup> That information demonstrates that the highest actual peak demand was 6,513 MW in 2002 and that the highest weather normalized peak demand was 6,448 MW in 2003.<sup>70</sup> In addition, the Companies added 19,778 new customers from 2002 to 2004 and 11,157 new customers between 2003 and 2004. Weather normalized energy requirements grew by 1.7 MWh from 2002 to 2004 and by over 0.9 million MWh from 2003 to 2004. This information demonstrates that the combination of new customers and changes in consumption by existing customers is causing an increase in electricity consumption.<sup>71</sup> And, as Mr. Sinclair pointed out in response to cross examination by counsel for the AG, with the right weather conditions, time of week and the like, the hourly load on the system can be quite high and has proven to be in line with the Companies' forecast.<sup>72</sup>

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<sup>65</sup> Sinclair Rebuttal at 3.

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> Exhibit DSS-3; Sinclair Rebuttal at 4, Table 2.

<sup>70</sup> *Id.* at 4.

<sup>71</sup> *Id.*

<sup>72</sup> TE at 56-57.



Mr. Kinloch's conclusion that additional capacity is not needed until 2012 is equally flawed. First, Mr. Kinloch did not perform a load growth analysis of any kind.<sup>73</sup> Instead, he utilized one data point, the Companies' last actual peak demand value, and grew it by the same percentage of growth that resulted from the Companies' load forecasts.<sup>74</sup> This approach has the obvious problem of being vulnerable to widely skewed results if the starting point is inappropriate. An examination of Mr. Sinclair's Table 2 demonstrates that the Companies' combined system actual peak in 2004 was only 2 MW higher than the lowest peak from 1999 through 2004.<sup>75</sup> The weather normalized combined system peak was far lower than the peaks for 2002 and 2003.<sup>76</sup> Thus, if one desires the ending point of a forecast to be low then one should use a methodology that begins with a low starting point. Conversely, the ending point of a load forecast can be higher using Mr. Kinloch's methodology by beginning with a high starting point, such as the Companies' recent all-time record peak.<sup>77</sup>

The "methodology" utilized by Mr. Kinloch is conceptually different from the Companies' load forecast methodology. While the Companies analyze large amounts of data to develop projected energy requirements and peak demand for each year in the forecast, Mr. Kinloch picks a "starting point" and then grows it by some percentage. The two operative variables in Mr. Kinloch's approach are the "starting point" and the percentage by which that value will be increased, or the growth rate. The Companies, on the other hand, do not use a "starting point." Their forecasts "are developed by analysis of the longer-term statistical

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<sup>73</sup> AG's Response to Companies' Request for Information No. 3; TE at 165.

<sup>74</sup> Kinloch Direct at 7.

<sup>75</sup> Sinclair Rebuttal at 4.

<sup>76</sup> *Id.*

<sup>77</sup> That recent all-time peak demand was reported in both the *Lexington Herald Leader* and the *Louisville Courier-Journal* on July 27, 2005. The Commission can take administrative notice of information which is generally available or known. See *In the Matter of: Area Code Exhaustion Relief for 606 Area Code Region*, Administrative Case No. 377 (PSC Order of September 8, 1999); *In the Matter of: Joint Application for Transfer of Louisville Gas and Electric Company and Kentucky Utilities Company in Accordance With E.ON AG's Planned Acquisition of Powergen PLC*, Case No 2001-104 (PSC Order of August 6, 2001).

relationships between electricity demand and various underlying explanatory variables; they are not anchored to any particular year.”<sup>78</sup> The growth rates in the Companies’ load forecasts are the result of comparisons of loads in the years encompassed by the studies.<sup>79</sup> Therefore, the Companies’ load forecasts are not skewed by a single unrepresentative year or by an unrepresentative growth rate between time periods. As a result, the Companies’ load forecasts are more reliable than Mr. Kinloch’s calculation.

**4. The Commission should accept the Companies’ 2004 Forecast.**

The Companies have presented a detailed load forecast which projects the need for additional baseload capacity beginning in 2010. That forecast was made using a sophisticated, critically-analyzed methodology that is used throughout the industry. The AG, through Mr. Kinloch, has reached a contrary conclusion without any forecast and using only a basic extrapolation from random data points which has no merit. For those reasons, the Commission should reject Mr. Kinloch’s testimony and accept the Companies’ conclusion that new baseload capacity is needed in 2010.

**B. The Construction of TC2 Will Not Create a Wasteful Duplication of Facilities.**

In addition to considering the need for TC2, the Commission must also evaluate whether construction of TC2 would result in a duplication of facilities through an unnecessary multiplicity of facilities or an “excessive investment in relation to productivity or efficiency.”<sup>80</sup> In this case, none of the intervenors have claimed that a duplication of facilities would occur if

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<sup>78</sup> Companies’ Response to AG’s Request for Information No. 7.

<sup>79</sup> *Id.* See also TE at 53-55 for further discussion of the differences in methodology.

<sup>80</sup> Kentucky Utilities Co., 252 S.W.2d at 890.

TC2 were constructed, and no such claim could reasonably be made based on the evidence of record.<sup>81</sup>

As set forth above, the Companies have established a need for additional baseload capacity beginning in 2010. The Companies' existing baseload fleet, which has an average age of 34 years of service with approximately 650 MW at 40 years or older, is not capable of meeting those future capacity needs.<sup>82</sup> And, as explained in depth below, the construction of TC2 will allow the Companies to meet their growing demand at the lowest cost, providing significant productivity and efficiency in relation to the investment required. For all of those reasons, construction of TC2 on the schedule proposed by the Companies will not result in a wasteful duplication of facilities.

**C. TC2 is the Least-Cost Resource for Meeting the Companies' Baseload Capacity Needs.**

Although cost is not an express component of the determination of whether a proposed project will meet the public convenience and necessity under KRS 278.020, it is well settled in Kentucky that regulated utilities have the obligation to pursue a "least-cost strategy" for meeting future capacity needs.<sup>83</sup> The Companies take seriously their obligation to provide reliable, low-cost service to their customers, and once the determination was made that additional baseload capacity would be needed to meet growing native loads, the Companies conducted a Resource Assessment to evaluate the options for meeting that need.<sup>84</sup> That Resource Assessment

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<sup>81</sup> Indeed, although the AG takes issue with the timing for TC2, his consultant, Mr. Kinloch, agrees that the next capacity addition should be a baseload unit. Kinloch Direct at 11.

<sup>82</sup> Voyles Direct at 3-4; Direct Testimony of John P. Malloy ("Malloy Direct") at 7-9. The Companies also included planned enhancements to the Ohio Falls Hydroelectric facility in the Resource Assessment, and analyzed expansion of that facility. Malloy Direct at 7-9.

<sup>83</sup> See 807 KAR 5:058, Section 8; *Re: Small Power Producers*, 60 PUR4th 574 (PSC Order of June 28, 1984).

<sup>84</sup> Malloy Direct at 3-4.

evaluated self-build options (construction of TC2), shared unit ownership, and market-based Purchased Power Alternatives (“PPA”).<sup>85</sup>

### **1. The Companies’ Resource Assessment process**

The Companies began their Resource Assessment by issuing a formal Request for Proposals (“RFP”).<sup>86</sup> The RFP was sent to over ninety potential energy suppliers, nine of whom responded. The Companies then contacted those nine respondents to collect further information in order to better evaluate or screen the varying proposals.<sup>87</sup> Three suppliers were eliminated during that screening process, due to their considerably higher costs.<sup>88</sup> A preliminary detailed analysis was then performed based on data used in the screening analysis, and as a result of that analysis one other supplier was eliminated, also because of high costs.<sup>89</sup> Following that process, five potential suppliers remained. Those suppliers provided additional information for further analysis, and met with representatives of the Companies in October and November 2003.<sup>90</sup> In those meetings, the analysis process and progress were discussed, and agreements were reached on additional information, including that relating to pricing and delivery, to be provided to the Companies.<sup>91</sup> The Companies then gathered additional information from the five remaining suppliers and analyzed all of the data to determine the least-cost method for meeting their forecasted baseload capacity needs.<sup>92</sup>

### **2. The results of the Resource Assessment.**

A summary of the results of the Resource Assessment is set forth in the table below.<sup>93</sup>

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<sup>85</sup> *Id.*

<sup>86</sup> TE at 75.

<sup>87</sup> Malloy Direct at 4.

<sup>88</sup> *Id.*

<sup>89</sup> *Id.* at 4-5

<sup>90</sup> *Id.* at 5.

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> Sinclair Direct at 3-4.

<b>Case</b>	<b>NPVRR (\$000)</b>	<b>Rank</b>	<b>Delta from Min (\$000)</b>
TC2 2010 and Marketer F's PPA in 2013	16,370,555	1	0
Marketer F's PPA in 2010 and TC2 2011	16,377,517	2	6,962
TC2 and Marketer F's PPA in 2010	16,399,793	3	29,238
TC2 in 2010	16,443,935	4	73,380
TC2 in 2011	16,450,735	5	80,180
Marketer E's Joint Ownership and Marketer F's PPA in 2010	16,462,347	6	91,792
Marketer E's Joint Ownership in 2010	16,508,339	7	137,784
Marketer E's Joint Ownership in 2011	16,512,364	8	141,809
No Baseload Addition	16,850,301	9	479,746

As can be seen from this table, TC2 is a component of each of the five top least-cost options identified in the Resource Assessment. Furthermore, three of the five top options involve a PPA from WV Hydro Inc. ("WV Hydro") (Marketer F in the table above) in addition to construction of TC2. The Companies are seeking a CCN for the construction of TC2 in 2010, while also pursuing a PPA with WV Hydro.<sup>94</sup>

WV Hydro's original offer consisted of two 80 MW hydroelectric projects to be built at two dams on the Ohio River using a relatively new design technology. The projected average output during the peak summer month was approximately 114 MW.<sup>95</sup> Prior to completion of the Companies' final analysis, however, WV Hydro revised its offer, which revision was incorporated in the Resource Assessment, to consist of three 80 MW hydroelectric projects using conventional hydro technology. The average summer output during peak month increased to 181 MW as a result of the updated response.<sup>96</sup> The Resource Assessment concluded that pursuing the WV Hydro PPA to commence in 2013, after construction of TC2 in 2010, results in the

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<sup>94</sup> TE at 76-78.

<sup>95</sup> Malloy Direct at 5-6.

<sup>96</sup> *Id.* at 6.

lowest net present value revenue requirement as shown in the Resource Assessment.<sup>97</sup> Since that time, though, WV Hydro has yet again revised its proposal to offer only one 77 MW facility to the Companies.<sup>98</sup> Firm pricing for that latest revised offer from WV Hydro was not available at the time of the hearing, although indications from the supplier were that pricing would not be more favorable, and could be significantly less favorable, than that provided to the Companies previously and included in the Resource Assessment.<sup>99</sup> Although the Companies are continuing discussions with WV Hydro, the outcomes of those discussions will not change the need for TC2 because, from an overall expansion plan perspective, the construction of TC2 in 2010 remains the least-cost alternative available to the Companies.<sup>100</sup>

**3. The AG's criticisms of the Resource Assessment are not reasonable.**

Despite the fact that the Companies fully analyzed the previous WV Hydro proposal in their Resource Assessment, and despite the fact that subsequent revisions to the proposal have been less favorable, the AG's witness, Mr. Kinloch, has suggested that the purchase of power from WV Hydro prior to, or in place of, TC2 may be a better course of action to pursue.<sup>101</sup> He has also proposed delaying construction of TC2 for at least two years.<sup>102</sup> The Companies studied Mr. Kinloch's proposal (before he made it) as Case 4 in the Resource Assessment, which has WV Hydro's PPA commencing in 2010, followed by TC2 in 2011.<sup>103</sup> That study revealed that Case 4 (WV Hydro 2010 / TC2 2011) did not provide the lowest net present value revenue requirement ("NPVRR") over the thirty-year study period.<sup>104</sup> The fact that the addition of WV

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<sup>97</sup> *Id.* at 6.

<sup>98</sup> TE at 118.

<sup>99</sup> Rebuttal Testimony of John P. Malloy ("Malloy Rebuttal") at 2.

<sup>100</sup> Malloy Direct at 5-6; Malloy Rebuttal at 2. As of the time of the hearing in this matter, the Companies had executed a letter of intent with WV Hydro. TE at 72-73, 118-19; Joint Applicants' Hearing Exhibit 6.

<sup>101</sup> Kinloch Direct at 16-22.

<sup>102</sup> *Id.* at 7-8.

<sup>103</sup> Malloy Direct at 6; Malloy Rebuttal at 1.

<sup>104</sup> Malloy Rebuttal at 1.

Hydro's PPA reduces NPVRR in cases including TC2 does not mean that pursuing that PPA before TC2 is a least-cost option, but instead only establishes that the incremental cost of WV Hydro's PPA is less than the incremental cost of building combustion turbines.<sup>105</sup>

Mr. Kinloch argues that attributing value to WV Hydro's Green Tags would alter the results of the Companies' Resource Assessment.<sup>106</sup> That claim, however, is simply invalid. As Mr. Kinloch has conceded, Kentucky does not have renewable energy portfolio requirements and, even assuming Green Tags could be traded elsewhere in the ECAR region, it is not possible to say with any certainty what the value, if any, of WV Hydro's Green Tags would be when the project comes on line.<sup>107</sup> Furthermore, the \$6.6 million (\$3/MWh) Green Tag value estimated by Mr. Kinloch does not represent the low end of the spectrum of Green Tag pricing. In fact, Green Tags can actually be bought for as little as \$1/MWh, which reduces the \$6.6 million estimated by Mr. Kinloch to \$2.2 million, and the inclusion of Green Tag values in that range would not have a significant impact on the conclusions reached in the Resource Assessment.<sup>108</sup>

Mr. Kinloch also attempts to bolster his recommendation with a faulty carbon tax analysis.<sup>109</sup> Assuming carbon taxes of \$10 and \$40 starting in 2010, as analyzed in the Companies' 2005 Integrated Resource Plan,<sup>110</sup> there is a difference of \$4.9 million and \$19.8 million, respectively, between Case 4 (WV Hydro 2010 / TC2 2011) and Case 5 (TC2 2010 /

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<sup>105</sup> *Id.* at 2; TE at 80.

<sup>106</sup> Kinloch Direct at 16-17.

<sup>107</sup> *Id.* at 17.

<sup>108</sup> Malloy Rebuttal at 2-3.

<sup>109</sup> Mr. Kinloch places much importance on reducing the emission of carbon dioxide -- even though there are no restrictions currently against its production -- while ignoring the fact that TC2 will have significant benefits with regard to currently regulated emissions (e.g. SO<sub>2</sub> and NO<sub>x</sub>). Of course, with regard to SO<sub>2</sub> and NO<sub>x</sub>, and even mercury, Mr. Kinloch's preferred proposal, Case 4 (WV Hydro 2010 / TC2 2011), produces higher amounts of those pollutants when compared to Case 5 (TC2 2010 / WV Hydro 2013). This is due to the greater displacement of energy from less efficient and older coal units resulting from the earlier installation of TC2. Malloy Rebuttal at 4-5.

<sup>110</sup> *In the Matter of: The 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*, Case No. 2005-00162.

WV Hydro 2013).<sup>111</sup> A carbon tax of \$10 per ton equates to a carbon dioxide tax of \$2.73 per ton (because the molecular weight of carbon is 27.3% of carbon dioxide).<sup>112</sup> The only differences between Cases 4 and 5 occur in years 2010 to 2012. Mr. Kinloch has assigned a value to the difference in carbon dioxide emissions in the aforementioned years when it is unlikely any regulations will be in place by that time. Mr. Kinloch acknowledges that the timing of any potential regulations on carbon dioxide is unknown and, therefore, any consideration of costs between the two cases regarding carbon dioxide emissions is not valid.<sup>113</sup> Moreover, as noted above, a sensitivity analysis on carbon emissions taxing was performed as part of the Supply-Side Screening Analysis contained in the Companies' 2005 IRP.<sup>114</sup> The technologies suggested by the screening analysis including the carbon tax did not differ much from the screening analysis without a carbon tax and, regardless of the carbon tax rate evaluated in the screening, TC2 remained the least-cost technology alternative.<sup>115</sup>

Mr. Kinloch's analysis relating to WV Hydro also ignores the remaining uncertainty regarding the availability and pricing of that project, does not consider the fact that the WV Hydro PPA is not sufficient in size to eliminate the need for TC2, and does not recognize the energy benefits associated with TC2. The Companies' 2004 Joint Load Forecast projects that they will need an additional 169 MW to meet a 14% reserve margin in 2010.<sup>116</sup> The 77 MW output from the WV Hydro run-of-river plant, as presently offered, would not even meet the

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<sup>111</sup> Malloy Rebuttal at 4. And, current indications are that the low end of taxes evaluated in the IRP is higher than what may actually materialize. *Id.*

<sup>112</sup> *Id.*

<sup>113</sup> *Id.* at 4; AG's Response to Question No. 14(b) of the Companies' First Requests for Information.

<sup>114</sup> Malloy Rebuttal at 3.

<sup>115</sup> Malloy Rebuttal at 3.

<sup>116</sup> During the hearing, the AG suggested, through cross-examination, that the Companies should utilize a lower reserve margin in order to delay the need for TC2. However, as explained by Mr. Malloy in response to those questions, the 14% reserve margin is the margin target to which the Companies have planned for a number of years, and that target is set for risk reasons associated with the Companies' aging fleet, the EEI pre-merger power purchase agreement, the litigation surrounding the OMU purchased-power contract, and related items. TE at 83. Moreover, the AG's own witness, Mr. Kinloch, admitted during the hearing that the Companies' reserve margin range is "fairly reasonable." TE at 179.



Companies' 2010 reserve margin needs, much less place the Companies in a position to meet the projected 401 to 552 MW deficit in 2012.<sup>117</sup> It would not be prudent for the Companies to delay construction of TC2 in favor of a PPA with a supplier that has a history of fluctuations in technology, availability and pricing, and considering that the outcome of such PPA remains fundamentally uncertain at the present time. As previously discussed, the pursuit of the WV Hydro PPA in 2013, following construction of TC2 in 2010, produces the lowest NPVRR. The Companies remain in discussions with WV Hydro, and if that supplier is ultimately able to offer a firm, cost-effective and reliable proposal, then the Companies will pursue that proposal at that time, working towards a 2013 in-service date. In the meantime, however, the Companies must plan to be in a position to meet their ratepayers' baseload needs, and TC2 is clearly the best option to meet those needs. In addition, because TC2 will be a highly-efficient unit, it will at times be able to displace certain of the Companies' older, less efficient and higher-cost operation units.<sup>118</sup> As a result, the construction of TC2 in 2010 will produce approximately \$40 million in variable cost benefits (fuel, NO<sub>x</sub>, SO<sub>2</sub>) when compared to the use of the WV Hydro PPA in 2010.<sup>119</sup>

**4. The Commission should accept the Companies' recommendation.**

The installation of TC2 at the Trimble Station provides the best, least-cost choice available. The selection of a 750 MW nominal net super-critical unit will provide the Companies' customers with a proven technology, adding the most reliable, lowest cost generating asset to the existing fleet of generating assets to meet the growing load requirements. The unit design provides the least cost supply alternative, inclusive of state-of-the-art environmental controls, while preserving fuel flexibility to manage the cost of coal for today's

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<sup>117</sup> Malloy Direct at 2-3; TE at 117-119.

<sup>118</sup> TE at 86-87

<sup>119</sup> Malloy Rebuttal at 6; TE at 86-87.

needs and beyond. The arguments of Mr. Kinloch, on behalf of the AG, in favor of pursuing WV Hydro before TC2 are without merit, and should be rejected.

**D. The Commission May Not Condition a CCN for TC2 on the Use of a Specific Workforce, as Urged by the Unions.**

The unions intervened in this proceeding based upon an argument that they were advocating for the utilization of Kentucky workers on the construction of TC2.<sup>120</sup> On that exact point, there is no disagreement, as the Companies fully support the utilization of available, qualified Kentucky workers.<sup>121</sup> The TC2 project will require a large number of heavy industrial construction-skilled crafts that must be filled with drug free, qualified workers. Consistent with that need, the Companies' RFP to the EPC contractors specifically provides that the Companies wish, "wherever practical and appropriate, to promote the use of local services and employment of local labor during the construction works."<sup>122</sup> Should the TC2 project receive all necessary approvals, the Companies will, in cooperation with the successful EPC bidder, go forward with a construction job recruitment process that insures all qualified local workers will be fairly considered for available construction jobs.<sup>123</sup> The process will include several outreach programs that will actively seek qualified local workers, including advertising in the local media and the utilization of on-site recruitment and training offices, Kentucky Department of Employment Services, and local vocational and community college training services.<sup>124</sup>

Although the unions purported to have an interest only in the use of local workers, a review of the unions' testimony reveals that the real interest of the unions is to advocate for the use of a project labor agreement ("PLA") for TC2, which would require the hiring of only union

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<sup>120</sup> Unions' Motion to Intervene at 2.

<sup>121</sup> Rebuttal Testimony of John N. Voyles ("Voyles Rebuttal") at 2.

<sup>122</sup> *Id.* at 2.

<sup>123</sup> *Id.*

<sup>124</sup> *Id.* at 2-3.

workers.<sup>125</sup> On that issue, the Companies do have disagreement with the unions. Importantly, while the arguments raised by the unions here are familiar ones, the Commission has not previously required the use of PLA on a utility plant construction project, or otherwise conditioned a CCN on the use of any specific workforce population.<sup>126</sup> That is so because there is nothing in the express grant of authority in KRS 278.020(1) which, by necessity or fair implication, allows such a ruling in this context.<sup>127</sup>

Moreover, the lack of authority aside, the Companies have explained why it is not advisable to require the use of a PLA in this situation. To begin with, union workers account for, at best, only about 40% of the local construction workforce.<sup>128</sup> Accordingly, utilization of a PLA would not in and of itself help to fully utilize Kentucky workers and, in fact, would necessarily exclude a majority of local workers from consideration for the TC2 project.<sup>129</sup> In addition, a PLA would include work rules that would increase the labor costs and, consequently, the construction costs of the TC2 project.<sup>130</sup> Finally, use of a PLA at this stage would hamper the Companies' efforts to minimize the risks associated with construction timing delays and cost overruns. Specifically, as outlined in the Companies' RFP, the final contract with the successful EPC bidder will contain penalty provisions for the failure to perform as required on the TC2 project. If the Companies were to be signatories to or require a PLA to be executed by the successful EPC bidder, the protections of the penalty provisions would be significantly weakened and the successful EPC bidder would be able to pass cost and schedule risks back to

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<sup>125</sup> Direct Testimony of Larry L. Roberts, pp. 3-4, 7.

<sup>126</sup> Counsel for the Companies has searched previous Commission orders and found no instance in which a PLA was required or in which a CCN was conditioned on use of a specific workforce population.

<sup>127</sup> Boone Co. Water and Sewer Dist. v. Pub. Serv. Comm'n, 949 S.W.2d 588 (Ky. 1997) (recognizing the limitation on the Commission's authority).

<sup>128</sup> Voyles Rebuttal at 3.

<sup>129</sup> The unions' witness admitted under cross-examination that he had no studies or analysis to support the claim that use of a PLA would benefit the Companies, their ratepayers, or Kentucky workers. TE at 160-161.

<sup>130</sup> Voyles Rebuttal at 3.

the Companies and, ultimately, their ratepayers.<sup>131</sup> All of these factors, which went unrebutted by the unions, clearly dictate against the execution of a PLA.<sup>132</sup>

The Companies have proposed a construction plan which seeks to maximize the use of all available, qualified local labor to the extent practical, without limiting the exercise of prudent management to control risks and costs. There is no basis for the Commission to require any different action in this proceeding. Accordingly, the Commission should approve the Companies' plan for construction and reject the efforts to limit the Companies, or the successful EPC bidder, to the use of any specific class of workers.

**E. The Commission Should Reject the Efforts by the AG and the KIUC to Engage in Impermissible Ratemaking.**

The Companies are not proposing any change in base rates as part of this proceeding. In his pre-filed testimony on behalf of the Companies, Kent W. Blake, Director of State Regulation and Rates for LG&E Energy Services, Inc., made this fact clear when he stated:

The Companies are not presently seeking cost recovery associated with the planned construction of their share of TC2, as cost recovery is not within the scope of KRS 278.020. However, the Companies do expect to seek cost recovery in the future, consistent with the Commission's long-standing policy of including construction work in progress in base rates or pursuant to other applicable law.<sup>133</sup>

Nonetheless, and despite the fact that no contemporaneous ratemaking information, such as that required by 807 KAR 5:001, Section 10, has been included in the record of this proceeding, the issue of rate treatment of both costs related to TC2 and revenues associated with

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<sup>131</sup> *Id.* at 3.

<sup>132</sup> All of this said, however, the Companies do not object to the use of a PLA for the labor on TC2, should that choice be made by the successful EPC bidder and not increase the costs and risks to the Companies and their ratepayers. *Id.* at 3. To that end, the Companies have facilitated contact between the unions and the EPC bidders. TE at 161.

<sup>133</sup> Blake Direct at 5; TE at 144.

off-system sales was pursued by certain intervenors during the hearing.<sup>134</sup> Specifically, counsel for KIUC and the AG suggested in cross-examination that some provision should be made for off-system sales revenues in any order approving the construction of TC2.<sup>135</sup> Counsel for KIUC attempted to speculate on the proper treatment of possible future off-system sales in the following exchange:

Q. Okay. So the Commission would have to make some sort of adjustment, because, if the ratepayers are going to pay for this unit and it's going to produce a lot of electricity there's a potential for higher off-system sales, that would be some sort of adjustment the Commission would have to make if there was a use of an historic test year; isn't that right? Otherwise, ratepayers would be paying for the cow, so to speak, and not getting any of the milk.

A. I'm not prepared to suggest what the Commission would have to do at that time. I think there are any number of facts that will be in play. If in the event that hypothetical of a rate case at the end of the construction of Trimble County 2 occurs, that can be discussed at that time and probably with better information than we can today.<sup>136</sup>

KIUC's counsel then further suggested that an off-system sales tracker, like one utilized by Kentucky Power (American Electric Power), should be considered.<sup>137</sup> In response to all of those questions, Mr. Blake consistently stated the Companies' position that ratemaking issues should be considered in future rate cases, and not in this proceeding.<sup>138</sup> That position is correct, and should be recognized as such by the Commission in this proceeding, for a number of reasons.

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<sup>134</sup> TE at 147-53, 156-57.

<sup>135</sup> *Id.*

<sup>136</sup> TE at 151-52. The position of KIUC also assumes something -- additional off-system sales as a result of the addition of TC2 -- which may not materialize. As Mr. Malloy explained in depth, TC2 would go to serve native load, because it would be least-cost, and would displace older, higher-cost units. Thus, it would be the capacity of those older units, not TC2, which *might* be *available* for off-system sales. However, in order for any sales to in fact occur, those displaced units would have to clear the market for such sales, which clearance probably would not occur because of the higher costs associated with those older units. TE at 111-12.

<sup>137</sup> *Id.* at 177.

<sup>138</sup> *Id.*

To begin with, the Commission lacks the authority to address ratemaking issues in the context of a CCN proceeding. KRS 278.020(1) provides the statutory authority to consider and rule upon an application for a CCN, and does not give the Commission the authority to place conditions on CCNs, like it is authorized to do with respect to changes of control in KRS 278.020(6). Of course, the Commission is a creature of statute and has only such powers as have been granted to it by the General Assembly.<sup>139</sup> Moreover, it is well-settled that, where there are two separate statutory mechanisms, such as those here for regulating utility rates, as set forth in KRS 278.190, and for ruling upon an application for a CCN, as set forth in KRS 278.020, the Commission must follow those respective mechanisms and the two may not be commingled.<sup>140</sup>

Further, while the Companies have presented sufficient evidence regarding the estimated reasonable construction costs to justify the requested CCN, that evidence is not the type of known and measurable data required and utilized in a base rate case. Moreover, no one knows with certainty the level of off-system sales revenues, if any, that the Companies may obtain at any given time period in the future. Accordingly, as Mr. Blake testified, this proceeding is not the appropriate place to attempt to provide for rate treatment of future unknown events.<sup>141</sup>

The KIUC and AG are asking this Commission to prejudge a future rate issue now, based upon limited, very speculative information. That request must be declined. Numerous variables go into the determination of rates, and those variables are presented in a detailed manner as set forth in the Commission's regulations.<sup>142</sup> That detailed procedure is not followed in CCN cases and has not been followed here. Accordingly, any decision by the Commission imposing some

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<sup>139</sup> Boone County Water and Sewer Dist., 949 S.W.2d 588.

<sup>140</sup> South Central Bell Tel. Co. v. Utility Reg. Comm'n, 637 S.W.2d 649 (Ky. 1982) (recognizing the distinct nature and statutory division between matters involving rates and those involving service, and holding that the Commission was not authorized to consider service issues in a rate proceeding).

<sup>141</sup> TE at 151-52.

<sup>142</sup> 807 KAR 5:001, Section 10.

sort of rate treatment for costs and revenues to be incurred in future years, as suggested by the AG and KIUC, would not be based upon the required level of evidentiary support and would be arbitrary.<sup>143</sup>

Finally, the imposition of a condition in the final order in this proceeding requiring an off-system sales tracking mechanism -- or indeed any mechanism addressing future rate treatment -- is beset not only with the problems described above, but also with the fact that this Commission has acknowledged that its authority to approve such tracking mechanisms is limited. The Commission recently denied the Companies' request to approve a tracking mechanism relating to revenues and costs arising out of their participation in the Midwest Independent Transmission System Operator, Inc. ("MISO").<sup>144</sup> In the order in the MISO tracker cases, the Commission affirmed the prohibition against single-issue ratemaking and observed that, absent specific statutory authorization, the Commission's ability to approve tracking mechanisms is limited to "the context of a general rate case."<sup>145</sup> Similarly, the off-system sales tracker, entitled System Sales Clause, of American Electric Power Company, mentioned by counsel for KIUC at the hearing, was initially approved in a general rate case that was *settled*, and was not part of a CCN proceeding.<sup>146</sup>

For all of these reasons, the Commission should refuse the intervenors' invitation for speculative single issue ratemaking in this proceeding. There is no authority for the Commission

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<sup>143</sup> See American Beauty Homes Corp. v. Louisville and Jefferson Co. Planning and Zoning Comm'n, 379 S.W.2d 450, 457-58 (Ky. 1964) (holding that decisions not supported by substantial evidence of record are arbitrary).

<sup>144</sup> *In the Matter of: The Application of Louisville Gas and Electric Company for Approval of New Rate Tariffs Containing a Mechanism for the Pass-Through of MISO-Related Revenues and Costs Not Already Included in Existing Base Rates*, Case No. 2004-00459, *In the Matter of: The Application of Kentucky Utilities Company for Approval of New Rate Tariffs Containing a Mechanism for the Pass-Through of MISO-Related Revenues and Costs Not Already Included in Existing Base Rates*, Case No. 2004-00460 (PSC Order of April 15, 2005).

<sup>145</sup> *Id.* at 7.

<sup>146</sup> *In the Matter of: Application for Adjustment of Electric Rates of Kentucky Power Company*, Case No. 91-066, Order dated October 28, 1991. Of course, there has been no settlement, or agreement, to address rates in this proceeding.

to institute an inquiry into ratemaking issues in this case, and the record should not and does not contain sufficient information for meaningful consideration of such issues. Ratemaking issues should be considered in future base rate cases, not in this CCN proceeding.

**II. THE COMPANIES' APPLICATION FOR A SITE COMPATIBILITY CERTIFICATE SHOULD BE GRANTED.**

In addition to the CCN discussed above, the Companies are also seeking a Site Compatibility Certificate from the Commission pursuant to KRS 278.216. As discussed in detail above, TC2 is proposed to be constructed at the Trimble Station, which was designed to accommodate additional generating units. The Companies have submitted a Site Assessment Report as part of their Joint Application in this proceeding, and that report demonstrates that the addition of a second coal-fired generating unit at the Trimble Station will not cause a negative impact to local property values, unduly increase traffic or noise, or materially change the visual impacts of the facility from current conditions. Neither the AG nor any of the other intervenors has in any way questioned or challenged the findings of the Site Assessment Report. Moreover, those findings were reviewed and confirmed by BBC Research & Consulting, on behalf of Commission Staff, in the written report filed of record in this proceeding.<sup>147</sup> For all of those reasons, the Companies' request for a Site Compatibility Certificate for TC2 should be granted.

**III. THE COMPANIES' REQUEST FOR APPROVAL OF THE LAND SALE TO IMEA AND IMPA SHOULD BE GRANTED.**

The final component of this proceeding is the Companies' Request, raised in the Amendment to their Joint Application, for approval to sell an undivided interest in the land which will underlie TC2 to IMEA and IMPA. That request is made pursuant to the June 11, 2002 Order of the Commission in Case No. 2002-00029, which provided, among other things,

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<sup>147</sup> Review and Evaluation of Trimble County Unit 2 Site Assessment Report, BBC Research and Consulting (April 11, 2005).



that “LG&E and KU shall seek Commission approval prior to entering into a sale or lease of any land located on any existing generation sites.”

As previously discussed, TC2 is proposed as a joint project between the Companies and IMEA and IMPA. As part of that joint project, the Companies propose to sell to IMEA and IMPA a 25% undivided interest in the land on which the TC2 unit will be located.<sup>148</sup> That anticipated sale involves land which has previously been removed from rate base (and thus base rates) pursuant to the Commission's disallowance of 25% of TC1 in Case No. 9934.<sup>149</sup>

The total acreage associated with the TC2 unit footprint is approximately 6.5 acres.<sup>150</sup> The original cost of that land was \$10,636, or \$1,636 per acre.<sup>151</sup> A March 2001 independent appraisal assessed the fair market value of the land at the Trimble Station, including that which will underlie TC2, to be \$8,600 per acre, which results in a total appraised value of \$55,900 for the approximately 6.5 acres that will constitute the TC2 unit footprint.<sup>152</sup> Pursuant to the terms of their agreement with the Companies, IMEA and IMPA will together pay a total of \$25,000 for their collective 25% undivided ownership interest in the land underlying TC2, which reflects a price per acre of \$15,385.<sup>153</sup> Accordingly, the price to be paid by IMEA and IMPA for their proposed interest in the land underlying TC2 exceeds both the original cost and the most recent appraised value of the land at issue.<sup>154</sup>

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<sup>148</sup> Amended Joint Application, ¶¶ 6, 8. That sale would be made pursuant to Article 6.2.2 of the February 9, 2004 Participation Agreement between the Companies and IMEA and IMPA. *Id.*

<sup>149</sup> On July 1, 1988, the Commission entered an Order in Case No. 9934, requiring a “disallowance of 25 percent” of TC1 at the Trimble Station. In response to that 25% disallowance, LG&E removed 25% of the total property costs associated with the Trimble Station from its books, which removal was accounted for in the calculation of rate base in Case Nos. 90-158, 98-426 and, most recently, 2003-00433. Amended Joint Application, ¶¶ 2-3.

<sup>150</sup> Amended Joint Application, ¶ 9.

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

<sup>153</sup> *Id.*; Attachment to February 25, 2005 Response of Companies to Commission Data Request No. 11(d).

<sup>154</sup> Amended Joint Application, ¶¶ 9-10.

None of the intervenors have taken issue with the proposed land sale to IMEA and IMPA, and the facts relating to that sale establish that it is fair, just and reasonable. The approval of the land sale, together with the other necessary regulatory approvals required for TC2 as described above, will allow the Companies to move forward with the joint development of TC2 with IMEA and IMPA to meet the requirements of the public convenience and necessity and for the benefit of the Companies' ratepayers.

### **CONCLUSION**

There is no dispute that the Companies will need additional baseload capacity in the near term. Likewise, there is no dispute that the super-critical pulverized coal technology chosen by the Companies to meet that capacity need will provide significant, tangible environmental, energy and cost benefits to the Companies and their ratepayers. There is a dispute, however, with regard to the exact timing of the implementation of the Companies' plan to meet growing demand.

The Companies have presented the Commission with a thorough, reasoned approach, based upon a detailed Joint Load Forecast and a Resource Assessment, which support construction of TC2 for an in-service date in 2010. The AG, on the other hand, has presented the Commission with a number of flawed conclusions, based on an incomplete, rudimentary analysis. The difference between those two approaches and, more importantly, the risk to ratepayers from those differing approaches, could not be more stark. On one hand, the Companies propose construction of a least-cost resource, TC2, in 2010 so that they will be fully situated to meet their customers' needs at that time. On the other hand, the AG would have the Companies delay construction of that resource to a later time when construction will be more expensive, and in the meantime gamble that they will be able to find sufficient resources in the marketplace, at some unknown and perhaps astronomical price, to meet their load requirements.

There is simply no legitimate reason for the Companies, or this Commission, to accept the AG's proposal here.

The Companies have established that construction of TC2 in 2010 is required by the public convenience and necessity, as set forth in KRS 278.020(1) and case law, and the requested CCN should be granted for that reason. The CCN should not be conditioned upon use of any specific workforce, as argued by the unions, or upon any ratemaking issues as raised by the KIUC and AG. In addition, for all of the reasons set forth above, the Companies' requests for a Site Compatibility Certificate and for approval of the land sale to IMEA and IMPA, both of which are unopposed by the intervenors, should also be granted.


Accordingly, the Companies respectfully request that the Commission enter an order providing the following relief:

1. Accepting the Companies' 2004 Joint Load Forecast and finding that a need exists for additional baseload capacity beginning in 2010;
2. Finding that construction of a 750 MW nominal net rating (732 MW net summer rating) super-critical pulverized-coal unit ("TC2") at the Trimble County Generating Station, for an in-service date in 2010, is the most reasonable, least-cost resource for meeting the Companies' capacity needs as set forth in the Companies' Resource Assessment;
3. Finding that construction of TC2 as proposed by the Companies in this proceeding will serve the public convenience and necessity;
4. Granting KU and LG&E each a CCN for their respective ownership interests (81% and 19%, respectively) in the Companies' collective 75% share of TC2 as proposed in this proceeding;

5. Granting KU and LG&E each a Site Compatibility Certificate for their respective ownership interests (81% and 19%, respectively) in the Companies' collective 75% share of TC2 as proposed in this proceeding; and
6. Approving the sale to IMEA and IMPA of a collective 25% undivided ownership interest in the approximately 6.5 acres on which the TC2 facilities will be located.

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Respectfully submitted,



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The undersigned hereby certifies that a true and correct copy of the foregoing Brief was served on the following persons on the 9th day of August 2005, U.S. mail, postage prepaid:

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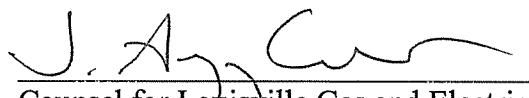
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