

1 **Market Power and Competition**

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3 **Q. Do you have any comments concerning Dr. Harris' analysis of the competitive**
4 **implications of the proposed merger of CP&L Energy and FPC?**

5 A. Yes. I would first note that Dr. Harris' analysis is a competent and consistent application of the
6 approach prescribed by the FERC in its guidelines. However, I do not believe these guidelines
7 are sufficient to encompass all of the relevant concerns in this proceeding. The Commission
8 need not and should not be bound by the FERC's narrow perspective on market power. The
9 FERC is primarily concerned with wholesale markets, while this Commission also is concerned
10 with retail markets.

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12 The retail markets in which CP&L operates involve more participants, more transactions, more
13 energy, and more total dollars than the short-term wholesale markets, which are the primary
14 focus of the Company's filings. Moreover, as I mentioned earlier, the Commission has broad
15 responsibilities to review the proposed merger from the perspective of whether it is justified by
16 the "public convenience and necessity." The FERC guidelines do not comprehensively explore
17 all of the relevant aspects of market power which potentially need to be considered by the
18 Commission in a proceeding of this type.

19
20 I also am concerned that CP&L examines retail market power purely in the current regulatory
21 context, and many of its conclusions rely upon the fact that the retail market for electricity in
22 North Carolina is fully regulated. While this is certainly true, it ignores the fact that there is an
23 emerging trend towards increased competition in the industry—a trend that is one of the primary
24 motivating factors behind CP&L's proposed acquisition of FPC. Consequently, it is
25 appropriate to also consider how the merger might affect future competitive conditions, when
26 the structure of the industry may have changed, and regulation may not be as pervasive. Also,
27 the Commission should consider how the proposed merger might relate to potential legislative
28 decisions to introduce retail competition in North Carolina, consistent with recent legislative
29 trends in other states.

1 **Q. Please explain these concerns in greater detail. First, would you expand your**
2 **comments about the first item you noted – that the Commission needs to look at**
3 **market power and competition more broadly than the FERC’s prescribed approach?**

4 A. Yes. According to Dr. Harris, the FERC methodology contains “rigorous and comprehensive
5 guidelines for the analysis of the effects of merger of horizontal market power in the wholesale
6 electric markets.” [Harris, Direct Testimony, p. 11]. In my view, the FERC approach, which
7 confines the evaluation of market power to the “Delivered Price Test”(DPT), is simply too
8 limited to produce definitive results. I agree with the following broader prescription advocated
9 by the Tellus Institute in a study published by the National Regulatory Research Institute:

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11 In short, the potential ability of firms to exercise market power should
12 be evaluated in light of known or likely changes in corporate structures
13 (e.g., utility merger, utility divestiture of generation assets) and market
14 structures (e.g., retail competition, bilateral contract markets, poolco-
15 type spot markets), as well as in light of the factors which the Federal
16 Energy Regulatory Commission (FERC) has identified as its new
17 merger guidelines. [Heidi Kroll and Richard Rosen, Ph.D., Tellus
18 Institute, “Market Power, Mergers, and Deregulation: A Critique of the
19 FERC’s New Merger Guidelines” NRRI Quarterly Bulletin, Vol. 18,
20 No. 2, p. 193.]
21

22 Furthermore, the foundation of the FERC’s method, the Herfindahl-Hirschman Index (HHI), is
23 rather simplistic. To compute the HHI, the market share of each firm is squared and then
24 totaled. If a single firm has 100% of the market, the HHI is 10,000. If ten firms each have a
25 market share of 10%, the HHI is 1,000. Under the FERC guidelines, post-merger HHIs of
26 less than 1,000 are considered “unconcentrated”; those between 1,000 and 1,800 are
27 “moderately concentrated.” If a pre-merger level of +1,000 is paired with a post-merger level
28 above 1,800, then and only then does the FERC assume that the merger is “likely to create or
29 enhance market power, or facilitate its exercise.” [FERC Docket No. RM96-6-000,
30 Competitive Screen Analysis, Appendix A, p. 58.] This cookie-cutter approach fails to
31 consider the many complexities of the electric power market.

1 Not only is the FERC relying upon a single, narrow measure of market conditions, but some
2 even question the relevance of this measure. A recent California Energy Commission report
3 states as follows:

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5 The Herfindahl-Hirschman Index (HHI) numbers are suspect. They are
6 neither derived from economic theory nor statistical evidence. Studies
7 of concentrations's influence on price exists for only a few industries
8 and often there is not association. Empirical relationships to electricity
9 remain uncertain.... Relevance is questionable since guidelines are
10 difficult to apply to emerging markets. [Joseph Diamond and Jon D.
11 Edwards, *Mergers, Acquisitions and Market Power in the Electric*
12 *Power Industry*. California Energy Commission, April 4, 1997, p. 28.]
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14 Similarly, the Telus Institute concludes that

15
16 HHI is far too simplistic an index to measure market power in an
17 industry as complex as the electric industry. While the HHI may or
18 may not be a useful tool to assess the potential for market power in
19 other industries, we do not believe that it is an appropriate measure for
20 analyzing market power in the electric industry. This is true from both
21 an empirical and theoretical perspective." [Kroll and Rosen, op. cit., p.
22 201.]
23

24 By quoting these criticisms, I do not mean to suggest that the HHI Index is an irrelevant or
25 inappropriate measure of market power. If one were forced to boil an analysis of market
26 power down to a single statistic, the HHI Index is probably the best available choice. The HHI
27 statistic alone, however, does not dispose of all market power issues.

28
29 Another weakness in the FERC's methodology is its 5% pricing rule, which defines the market
30 for which the HHI is calculated. Potential electric suppliers are considered part of the relevant
31 market only if they can deliver electricity to a customer at a cost no greater than 5% above the
32 competitive price. This is a somewhat arbitrary criterion for determining the geographic
33 parameters of energy markets. The complexity of modern electricity markets, with numerous

1 different contract conditions, durations, and delivery time periods, means that a 5% price
2 differential may be insignificant in one case and a substantial barrier to sales in another case. In
3 most markets, once one considers slight variations in the characteristics of the product offered
4 by a supplier and the relevant substitutes offered by other suppliers, one observes a range of
5 prices which is significantly greater than 5%. Even where all of the products being considered
6 are perfect substitutes, a 5% differential may or may not be a valid basis for delineating the
7 scope of a market. For some customers, a price differential well below 5% would be sufficient
8 to motivate them to change suppliers. For other customers—particularly some retail end
9 users—the price spread would need to be much larger than 5% before they would be motivated
10 to make a change. My primary reason for mentioning this is to make clear that the formulaic
11 approach adopted by the FERC and relied upon by CP&L may not be adequate in evaluating
12 future merger proposals or future competitive conditions.

13
14 **Q. Please explain your second concern regarding the Company's market power analysis.
15 What is the problem with limiting the analysis of retail market power to the current
16 regulatory context?**

17 A. The electric utility industry is changing. While the pace of change varies in different states, it is
18 becoming less and less appropriate to evaluate market power in the context of a static analysis
19 of regulatory and market conditions. It is becoming increasingly important for the Commission
20 to examine merger proposals from a forward-looking perspective, taking into consideration the
21 possibility that the trend in other states toward increased retail competition and reduced or
22 modified regulatory control over the market will also emerge in North Carolina—particularly with
23 regard to electric generation.

24
25 In fact, as the following extract from the Commission's Order of May 17, 2000, indicates, the
26 trend towards increased competition clearly underlies the Company's request to the

1 Commission to form a holding company. It is equally clear that it is one of the primary
2 motivations behind the proposed merger with FPC.

3
4 Witnesses Gillen and Smith also explained that in addition to CP&L's
5 diversification activities and the consolidation of electric and gas
6 companies in the industry, the events occurring in the electric industry
7 with regard to deregulation require CP&L to examine its corporate
8 structure. According to CP&L, the existing problems involved with a
9 holding company also functioning as a utility, the fact that these
10 problems are exacerbated by further diversification, the need for CP&L
11 to further grow and diversify to survive and prepare for possible
12 deregulation all dictate that CP&L find a way to more clearly separate
13 its utility operations from its holding company operations and CP&L's
14 affiliates. [Order Approving Application, Docket Nos., E-2, Sub 753,
15 P-708, Sub 5, and G-21, Sub 387, May 17, 2000.]
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17

18 The Company is transforming itself to better deal with the changing electric power markets.
19 However, for purposes of this filing, it seems to be putting blinders on with respect to market
20 power and relying upon the assumption that both CP&L and Florida Power will continue to be
21 fully regulated, and that retail customers will continue to be served under nearly pure monopoly
22 conditions.
23

24 **Q. Does this assumption of a regulated retail monopoly impact the conclusions drawn by**
25 **the Company from its use of the FERC's approach?**

26 A. Yes. The FERC requires two types of screen tests: the "Economic Capacity" (EC) test, and
27 the "Available Economic Capacity" (AEC) test. The EC measure is of primary interest where
28 native load obligations no longer exist and individual retail customers can shop among
29 competing suppliers. The AEC measure is of more general interest, focusing on the more
30 typical situation where a utility only sells power in wholesale markets once it has already
31 assured coverage of its native load. Dr. Harris argues against giving much consideration to the
32 EC analysis because retail competition does not currently exist in the Carolinas or in Florida:

1 The FERC requires that the delivered price test be conducted using
2 both AEC and EC because it is designed generically to be used in all
3 parts of the U.S., including areas where retail deregulation has already
4 occurred. Arguably, [t]he EC measure is relevant where native load
5 obligations no longer exist and individual retail customers can shop
6 among competing suppliers. However, retail electricity competition has
7 not been adopted in North Carolina, South Carolina or Florida, nor is
8 such competition imminent in those jurisdictions. [Harris, Direct
9 Testimony, p. 19]
10

11 **Q. Do you accept this reasoning?**

12 A. No. While I certainly agree that retail competition will most likely not be introduced in these
13 states in the very near future, the possibility is strong that such competition will be introduced in
14 the more distant future. There is no inherent reason why the industry must continue to be
15 structured and regulated in the same way it evolved historically. Not only is momentum
16 towards increased competition building as experience is gained in other markets, but the natural
17 monopoly characteristics of electric distribution and transmission simply do not apply to the
18 generation of electricity. If the ownership of electric plants were more widespread, if the
19 regulatory climate were different, and if more transmission capacity were available, one can
20 easily visualize a situation in which generating plants in each state would compete with dozens
21 or hundreds of other plants in the same and other states.
22

23 There has been a strong trend towards increased reliance upon competition and reduced
24 reliance upon classic rate of return regulation, in multiple different industries, including natural
25 gas, telecommunications, air transport, and electricity. While the results of this trend have been
26 mixed, there is no indication that the trend will soon end or be reversed.
27

28 Even if the Carolinas and Florida continue to take a cautious wait-and-see approach, it is likely
29 that their state legislatures will eventually find merit in at least some aspects of retail competition.
30 Furthermore, there has been increased lobbying activity before Congress to fundamentally

1 change the regulatory structure of the industry. If these efforts are successful, they would likely
2 reduce the ability of individual states to resist the trend towards increased competition.

3
4 The Commission should not simply assume that market power considerations are irrelevant to
5 its evaluation of the merger, merely because retail competition is not imminent, and the
6 Company is still subject to pervasive rate of return regulation.

7
8 **Q. The merging companies in this case -- CP&L and FPC -- are physically separated by**
9 **the state of Georgia. Is this an important factor to consider in evaluating the**
10 **competitive implications of the proposed merger?**

11 A. Yes. In my view, the remoteness of the merging firms is an extremely important, and ultimately
12 decisive, factor to consider in this context. Yet, CP&L's analysis only indirectly considers this
13 issue of geographic separation.

14
15 If CP&L were proposing a merger with Duke Power or Virginia Electric & Power Company
16 (Virginia Power), rather than Florida Power, it would obviously be important to consider the
17 potential implications of the merger for future retail competition. Yet, under the Company's
18 approach, it could potentially argue that such a merger would not have any adverse effects on
19 end user markets because retail competition is not currently authorized or imminent, and
20 because both of the merging firms are regulated. Needless to say, any such reasoning would
21 appropriately be rejected out of hand if it were applied to CP&L and Duke. A merger that
22 would combine the state's two largest utilities under a single corporate umbrella would have a
23 serious impact on any future attempt by policy makers to encourage retail competition, and this
24 impact would need to be fully evaluated.

25
26 In my view, there is an enormous difference between a proposal to combine two electric utilities
27 in widely separated markets and a proposal to combine two utilities in adjacent markets. Much

1 of the analysis developed by the Company fails to make this important distinction, just as it fails
2 to give adequate consideration to retail markets generally.

3
4 As it happens, the “screen tests” required by the FERC do take into consideration the relative
5 proximity of the combining firms’ generating plants. Because CP&L’s and Florida Power’s
6 generating plants are as widely separated as their retail markets, the market screen analysis
7 performed by the Company indicates very little overlap in their potential wholesale markets,
8 and thus it indicates that the proposed combination will not significantly increase concentration
9 in wholesale markets.

10
11 **Q. Using the FERC’s method were there any market screen failures found in North
12 Carolina by the Company?**

13 A. Yes. Using the AEC measure, where each utility’s selling potential is reduced by its native load
14 requirements, no market screen failures were found. However, there were a few market screen
15 failures found in the North Carolina market when using the EC measure, which arguably will be
16 more relevant if retail competition is pursued in the future. These failures are what led to the
17 proposed mitigation measure of auctioning off 85 MW of CP&L’s generating resources and 50
18 MW of Florida Power’s generating resources for six years.

19
20 **Q. Why would the EC screen test prove more difficult to pass?**

21 A. There are many subtle factors involved in these tests which influence the outcomes. At the risk
22 of oversimplifying the Economic Capacity test envisions a hypothetical situation in which utilities
23 are using all of their generating resources to compete in wholesale markets, rather than
24 reserving the bulk of their generating capacity to serve their own load. This provides many more
25 opportunities for utilities to compete with each other, and thus more potential overlap in the two
26 firm’s activities. Because CP&L and Florida Power are so widely separated, their generating
27 plants do not provide viable alternatives to each other under most circumstances today.

1 Because the EC test encompasses a hypothetical situation in which virtually every utility
2 potentially competes with every other utility, it is not surprising that some situations are detected
3 where CP&L could potentially compete with FPC, and thus the EC test indicates a potential
4 increase in market concentration if the merger is approved.

5
6 **Q. What are your conclusions regarding the competitive implications of the proposed**
7 **merger?**

8 A. While I disagree with the narrow scope of the Company's market power analysis, I agree with
9 its conclusion that the proposed merger will not adversely affect competitive conditions now.
10 This is a proposed merger of two utilities that are serving widely separated and economically
11 distinct markets. They are not likely to become strong rivals, even if retail competition were to
12 be authorized in the future.

13
14 The proposed merger could have positive impacts. It will allow CP&L to diversify outside the
15 state, which should reduce its exposure to the risks associated with increased competition. By
16 reorganizing and expanding, CP&L is placing itself in a better position to survive and prosper in
17 the increasingly competitive climate it sees over the horizon. Rather than striving to block or
18 delay the trend towards increased competition, CP&L is placing itself in a position to grow and
19 benefit from this trend.

20
21 Provided reasonable conditions are imposed by the Commission and future developments are
22 monitored carefully, the proposed merger could ultimately serve to benefit consumers by
23 placing one of the major utilities in the state in a stronger position to compete with Duke Power,
24 the Southern Company, and other major utilities. One of the proposed conditions of merger
25 approval should be CP&L's acknowledgment that the Commission retains authority to
26 thoroughly review CP&L's corporate structure as competition in electric utility markets
27 develops.

1 Alternate 1: CP&L recognizes that the NCUC retains the right to order
2 **reas onable** modifications to the structure and/or operations of CP&L
3 and/or its Affiliates, in accordance with the provisions of Regulatory
4 Condition 43 to the NCUC’s approval of the holding company
5 fomation in Docket Nos. E-2, Sub 753, G-21, Sub 387, and P-708,
6 Sub 5 (Order dated June 17, 2000), to **be consistent with the**
7 **development of competition for electric service, to the extent**
8 **such competition is permitte d under North Carolina law.**

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10 Alternate 2: CP&L recognizes that the NCUC retains the right to order
11 modifications to the structure and/or operations of CP&L and/or its
12 Affiliates, in accordance with the provisions of Regulatory Condition 43
13 to the NCUC’s approval of the holding company fomation in Docket
14 Nos. E-2, Sub 753, G-21, Sub 387, and P-708, Sub 5 (Order dated
15 June 17, 2000), as reasonably necessary to *encourage the*
16 *development of competition in the electric industry, consistent*
17 *with the Commission’s responsibilities under North Carolina*
18 *law.”*

19
20 In addition, CP&L’s North Carolina retail ratepayers should be held harmless from the effects
21 of CP&L auctioning off 85 MW of its capacity and energy for six years, as committed to by
22 CP&L in its FERC merger application and from the effects of CP&L’s contract for the 50 MW
23 transmission path also made necessary by the FERC application. I recommend, therefore, that
24 the following condition be imposed upon the merger:

25
26 CP&L agrees to hold North Carolina retail customers harmless for any and all
27 losses associated with or attributable to the six-year divestiture by CP&L of 85
28 MW of capacity and energy, as committed to in the merger application filed
29 with the FERC by CP&L Energy and Florida Progress, and for any and all
30 losses associated with or attributable to the 50 MW transmission path made
31 necessary by that same application.
32