BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Joint Application of Wisconsin Electric Power Company and Wisconsin Gas LLC, both d/b/a We Energies, to Conduct a Biennial Review of Costs and Rates – Test Year 2015	))))	Docket No. 05-UR-107

SURREBUTTAL TESTIMONY OF JONATHAN WALLACH
ON BEHALF OF THE CITIZENS UTILITY BOARD OF WISCONSIN
September 22, 2014

I. Introduction

Q: Please state your name, occupation, and business address.

A: My name is Jonathan F. Wallach. I am Vice President of Resource Insight, Inc., 5 Water Street, Arlington, Massachusetts.

Q: Are you the same Jonathan Wallach that filed direct and rebuttal testimony in this proceeding?

A: Yes.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of CUB.

Q: What is the purpose of your surrebuttal testimony?

A: This surrebuttal testimony responds to rebuttal testimony by Company witness Eric A. Rogers regarding: (1) the Company's reliance on the minimum distribution system method to classify distribution plant costs; (2) the Company's proposal to increase the residential and small C&I facilities charges;

and (3) the Company's proposal to extend current RTMP contract baselines. This surrebuttal testimony also responds to rebuttal testimony by WIEG witness Richard A. Baudino regarding: (1) the Equivalent Peaker method for classifying production plant costs; (2) the 4CP allocator for allocating demand-related production plant costs; and (3) the minimum distribution system method.

Q: Have you reviewed the supplemental direct testimony by Company witness Mary L. Wolter, which was filed in this proceeding on September 19, 2014?

A: Yes. My understanding of Ms. Wolter's supplemental testimony is that, as a result of a new System Support Resource (SSR) agreement with MISO, the Company expects $41.9 million more in SSR payment revenues than was assumed for the purposes of determining the settlement revenue requirements for the 2015 test year. According to Ms. Wolter, offsetting the additional SSR payment revenues against settlement revenue requirements would eliminate the net revenue deficiency (i.e., including the fuel cost deferral, CSAPR amortization, and biomass tax grant credits) for the 2015 test year.[1]

It would be reasonable and appropriate to apply these additional revenues to the settlement revenue requirements. Consequently, in light of Ms. Wolter's supplemental testimony, I am revising my revenue-allocation proposal for the 2015 and 2016 test years. Specifically, I propose that base (i.e., excluding the fuel cost deferral, CSAPR amortization, and biomass tax grant credits) and net revenues for the 2015 and 2016 test years be allocated to customer classes as shown in Ex.-CUB-Wallach-5r. In summary, I propose that net revenues be increased by 0.1% for all customer classes in the 2015 test year and that there be no base revenue increase for any customer class in the 2016 test year.

[1] Actually, I estimate that offsetting the additional SSR payment revenues against settlement revenue requirements would yield a slight net revenue deficiency of $2.4 million.

In addition, I continue to recommend that the facilities charge for residential and small C&I customers be maintained at current levels for the 2015 and 2016 test years. An increase in facilities charges in this instance would be particularly unfair to small consumers, since these customers would be burdened with bill increases while other consumers benefit from bill reductions. Accordingly, I provide my revised rate designs for the residential and small C&I rate classes in Ex.-CUB-Wallach-6r. These rate designs assume an equal percentage change to each rate class's energy charge in order to yield the $13.0 million base revenue increase allocated to the residential and small C&I customer class, as shown in Ex.-CUB-Wallach-5r.

Q: Absent consideration of Ms. Wolter's supplemental testimony, would you be revising your revenue-allocation or rate-design proposals in light of the Company's and WIEG's rebuttal testimony?

A: No. If not for Ms. Wolter's supplemental testimony, I would continue to believe that it is appropriate to consider the range of results from Commission staff's Scenario 2, 3, and 4 cost of service studies when allocating the base revenue deficiency for the 2015 and 2016 test years. Consequently, if not for the offset to settlement revenue requirements for additional SSR payment revenues, I would not be revising my proposed base revenue allocation to customer classes (as shown in Table 2 of my rebuttal testimony). Nor would I be revising my proposals for allocating the net revenue deficiency to customer classes (as shown in Ex.-CUB-Wallach-3) or to rate classes (as shown in Ex.-CUB-Wallach-4).

In addition, I would continue to recommend that the Commission reject the Company's proposal to increase residential and small C&I facilities charges and instead maintain rates for such charges at current levels.

II. Response to WEPCO Rebuttal Testimony

Q: How does Mr. Rogers respond to the discussion in your direct testimony regarding the flaws in the minimum distribution system method?

A: Mr. Rogers focuses on the examples I used in my direct testimony to illustrate the flaws in the minimum distribution system method. For those examples, I assumed a hypothetical distribution system with a single feeder. I then showed how the minimum distribution system method would misclassify the cost of that hypothetical single-feeder system.

In his rebuttal testimony, Mr. Rogers finds that my examples correctly calculate how the costs of the hypothetical single-feeder system would be allocated to customer classes under the minimum distribution system method. However, he then goes on to conclude that:

> I agree that if the Company billed customers based on the cost of the specific feeder by which they were served, some customers would understandably be upset that they were being treated unfairly. This is not how we bill customers, however. We have roughly 2,000 distribution feeders in our service territory and each feeder has a unique mix of residential, commercial, industrial and lighting customers. The classification of the distribution costs is based on the overall average of all these feeders.[2]

If I understand Mr. Rogers correctly, he is not disputing my findings regarding the ways that the minimum distribution system method misclassifies distribution plant costs, but instead is suggesting that these misclassifications somehow average out over a system with 2,000 feeders so that no particular customer class is harmed.

Mr. Rogers offers no evidence to support his contention that residential and small C&I customers are not over-allocated distribution plant costs as a result of

[2] Rebuttal-WEPCO/WG-Rogers-33, ll. 17-22.

the misclassification of such costs under the minimum distribution system method. Nor is there any reason to believe that the misclassifications identified in my illustrative example of a single-feeder system would not apply to the Company's 2,000-feeder system in total. To the contrary, as I discussed in my direct testimony, the Company explicitly recognizes that the flaw in the minimum-size approach applies to the costs of its 2,000 feeders in total and applies an ad hoc adjustment to the minimum-size classification to correct for this flaw.

Q: Please summarize Mr. Rogers's response to your direct testimony regarding the Company's proposal to increase the facilities charge for residential and small C&I customers.

A: Mr. Rogers disagrees with my assertion that the Company's proposal to shift allegedly "fixed" costs from the energy charge would destabilize price signals to consumers for reducing energy usage. Instead, Mr. Rogers contends that recovering these "fixed" costs through the energy charge creates an unstable price signal, since revenue shortfalls from reduced usage would result in increases to the energy charge in rate cases. From Mr. Rogers's perspective, these increases to the energy charge destabilize price signals because "customers … will not save as much money as they expected from their conservation measures."[3]

Q: How do you respond to Mr. Rogers's assertion that the current rate design creates unstable price signals?

A: Mr. Rogers has it backwards. Repeated shifts of load-related costs from the energy charge over time will destabilize the price signal by moving the energy

[3] Rebuttal-WEPCO/WG-Rogers-35, ll. 2-3.

charge further and further from long-run marginal cost. The prospect of a continued steep decline in the energy charge will discourage economically efficient new investment in energy efficiency measures and sharply curtail the bill savings from past investments.

Q: How does Mr. Rogers respond to your recommendation that the Commission deny the Company's request to use original RTMP contract baselines if the terms of existing contracts are extended?

A: Mr. Rogers does not understand why CUB is offering an opinion on this issue, since "the shifting of revenue within the large customer class does not affect the revenue requirement or rate design of any customer within the small customer class."[4]

Q: Why is CUB concerned about the Company's proposal to use original contract baselines if existing RTMP contracts are extended?

A: CUB is concerned that the large customer class will not bear full responsibility for its cost of service if contract baselines are not updated in accordance with the provisions of the RTMP rider for setting baselines for new contracts. Other customer classes will bear a disproportionate share of the Company's revenue requirements if the allocation of revenue requirements to the large customer class is not commensurate with its responsibility for such costs.

III. Response to WIEG Rebuttal Testimony

Q: What is Mr. Baudino's position on the appropriateness of the Equivalent Peaker method for classifying production plant costs?

[4] Rebuttal-WEPCO/WG-Rogers-35, ll. 10-12.

A: Mr. Baudino objects to Commission staff's use of the Equivalent Peaker method in the Scenario 3 and 4 cost of service studies for two reasons. First, Mr. Baudino faults Commission staff for not undertaking an economic analysis to support its Equivalent Peaker analysis. Mr. Baudino then posits a hypothetical analysis to show that the decision to invest in a baseload unit may have been driven solely by energy savings in on-peak hours.

Second, Mr. Baudino faults Commission staff for not considering the Company's analyses of economic trade-offs that led to the decisions to add capacity to the WEPCO system. According to Mr. Baudino, without these historical analyses, "it is impossible to identify the 'cost causation' underlying each unit and, in particular, the expected fuel savings that a base load coal or nuclear unit was likely to achieve."[5] Mr. Baudino goes on to claim that:

> The additional cost of a base load unit may not have been justified by fuel savings expectations alone. Rather, the decision may also have considered other factors (such as the longer life of a base load unit) which, when combined with fuel savings, justified the higher cost base load unit.[6]

I address each of Mr. Baudino's criticisms in turn.

Q: Do the results of Mr. Baudino's hypothetical economic analysis indicate that it is not appropriate to use the Equivalent Peaker method to classify production plant costs?

A: No. To the contrary, Mr. Baudino's hypothetical analysis shows that the coal plant capital and fixed O&M costs in excess of peaking plant costs were justified on the basis of energy savings. That the bulk of such energy savings may have occurred in the on-peak hours is irrelevant to the issue of whether

[5] Rebuttal-WIEG-Baudino-6, ll. 14-16.

[6] Rebuttal-WIEG-Baudino-6, ll. 19-23.

such excess costs were incurred for the purposes of energy savings.[7] Thus, per the Equivalent Peaker approach, these excess costs should be classified as energy-related.

Q: Do you agree with Mr. Baudino's contention that historical analyses of fuel savings are relevant to the determination of cost causation for production plant costs?

A: No. What is relevant is that the decision to invest in baseload or cycling capacity, rather than less-expensive peaking units, was based on the fundamental economic logic underlying least-cost capacity expansion planning. In other words, what is relevant is not the amount of "the expected fuel savings that a base load coal or nuclear unit was likely to achieve," but that under typical capacity expansion planning practice the Company's additional capital investment for baseload or cycling units would have been justified on the basis of fuel savings. As described in the NARUC manual on cost allocation:

> The utility can choose to construct one of a variety of plant-types: combustion turbines (CT), which are the least costly per KW of installed capacity, combined cycle (CC) units costing two to three times as much per KW as the CT, and baseloaded units with a cost of four or more times as much as the CT per KW of installed capacity. The choice of unit depends on the energy load to be served.[8]

Thus, from a cost-allocation perspective, the fixed costs incurred for baseload or intermediate capacity over and above that incurred for peaking

[7] However, it might be relevant to the determination of the appropriate energy allocator for allocating both these energy-related excess fixed costs and the fuel savings attributable to such excess fixed costs.

[8] *Electric Utility Cost Allocation Manual*, National Association of Regulatory Utility Commissioners, January 1992, p. 53.

capacity are appropriately classified as energy-related, since these additional fixed costs are incurred to meet energy requirements at lowest total cost.

Q: Could other factors, such as expected plant life, play a role in determining the type of investment, as Mr. Baudino contends?

A: Expected life, along with a number of other assumptions regarding plant and transmission-system characteristics, are typically factors that are accounted for in economic evaluations of capacity-expansion plans, and these factors, either individually or collectively, may affect the economic trade-offs between different types of plant investments. However, it is unlikely that such factors would prove to be material in the determination of the least-cost capacity additions.

Q: What is Mr. Baudino's position on the appropriateness of the Equivalent Peaker method for classifying fixed O&M costs?

A: As with production plant costs, Mr. Baudino objects to Commission staff's use of the Equivalent Peaker method to classify fixed O&M costs in the Scenario 3 and 4 cost of service studies. However, in this case, Mr. Baudino offers no support for his objection, and instead simply asserts that Commission staff has no basis for applying the Equivalent Peaker method to fixed O&M costs.

Mr. Baudino's assertion is incorrect. It is appropriate to classify as energy-related both capital and fixed O&M costs in excess of peaking plant fixed costs because utilities would not invest in baseload or intermediate plant unless energy savings exceeded the sum of excess capital and excess fixed O&M costs. In other words, the rationale for applying the Equivalent Peaker method to fixed O&M costs is the same as that for production plant costs.

Q: Please summarize Mr. Baudino's rebuttal testimony regarding the appropriate allocator for allocating demand-related production plant costs.

A: Mr. Baudino argues against the 12CP allocator and in favor of the 4CP allocator as follows:

> I would agree that it is important to have reliable capacity throughout the year to meet customer loads, but it is the summer peak that drives capacity requirements and availability. System reliability is most important during the peak summer months when demands are at their highest.[9]

Q: How do you respond to Mr. Baudino's arguments?

A: Mr. Baudino is mistaken in his belief that the summer peak "drives capacity requirements" for the Company. To the contrary, MISO determines the amount of capacity required for planning reserve based on the results of a Loss of Load Probability (LOLP) analysis that considers the daily contribution of the Company's demand to annual LOLP. In other words, the Company's capacity requirements are determined based on the Company's demand throughout the year, not just by summer peak as Mr. Baudino contends. Consequently, it is not appropriate to allocate demand-related production plant costs using the 4CP allocator, since it allocates costs as if capacity requirements and costs incurred to meet those requirements are driven solely by summer peaks.

On the other hand, I agree with Mr. Baudino's claim that "system reliability is most important during the peak summer months when demands are at their highest." In that regard, the 12CP allocator appropriately reflects the importance of summer peaks, since the average of the twelve monthly peaks gives greater weight to the higher summer peaks than to the lower non-summer peaks. Thus, with the 12CP allocator, the allocation of production plant costs to a customer class is driven more heavily by that class's contribution to system summer peaks than to system non-summer peaks.

[9] Rebuttal-WIEG-Baudino-3, ll. 11-14.

Q: How does Mr. Baudino respond to your criticisms of the minimum distribution system method?

A: Mr. Baudino disagrees with my critique of the minimum distribution system method, and instead believes that the Company's reliance on this approach is "reasonable and appropriate to use for purposes of classifying and allocating distribution costs."[10] In particular, Mr. Baudino argues that:

> … to the extent that the utility incurs a distribution cost simply to connect a customer to its system, regardless of that customer's size, it is appropriate to assign the cost of these minimal facilities to rate schedules on the basis of the number of customers, rather than on the kW demand of the class.[11]

The fallacy in Mr. Baudino's argument is that even if there is a minimum cost to connect customers, the cost of that minimum system does not necessarily vary with the number of customers. For example, if service were extended to a new area using minimum-height poles, the total cost of those poles would likely be the same whether service was being extended to a single industrial customer or to one apartment building with 100 residential customers. If the cost of the minimum system does not vary with the number of customers, it would not be appropriate to allocate such minimum costs to rate classes in proportion to the number of customers in each class.

This fallacy is highlighted by Mr. Baudino's discussion of the examples in Figures 1a and 1b of my direct testimony. In these figures, I show how the minimum distribution system method inappropriately allocates minimum costs for a hypothetical single-feeder system to the residential class in proportion to the number of customers even though such costs do not vary with the number of residential customers. Mr. Baudino alleges that my example shows that the

[10] Rebuttal-WIEG-Baudino-10, ll. 5-6.

[11] Rebuttal-WIEG-Baudino-8, line 21 to Rebuttal-WIEG-Baudino-9, line 1.

customer allocation of minimum costs is appropriate because the allocated minimum cost per customer decreases from $50,000 to $20,000 as the number of residential customers served increases from one to four. However, Mr. Baudino fails to recognize that the *incremental* minimum cost to serve the three additional residential customers is zero, so that the allocated minimum cost per customer should drop to $12,500, not $20,000. In other words, the share of total minimum cost allocated to the residential class should be the same whether one or four customers are served by the feeder, since the minimum cost of the feeder does not increase as the number of residential customers served by that feeder increases.

This discussion illustrates the fundamental problem with the minimum distribution system approach. Even if one could reasonably estimate the cost of a minimum system to serve the Company's customers, there is no reason to believe that those costs would vary directly with the number of customers. Instead, such costs would more likely vary with such factors as customer density or topography.

Consequently, the Commission should give little weight to Mr. Baudino's finding that the Company's reliance on the minimum distribution system method is reasonable.

Q: How does Mr. Baudino respond to your illustration of the flaws in the minimum-size classification approach in Figures 2a and 2b of your direct testimony?

A: Mr. Baudino claims that the example in these figures misrepresents how the minimum-size approach would classify the costs of the hypothetical single-feeder system assumed for these examples. Specifically, Mr. Baudino claims that my examples overstate the minimum-size cost of the hypothetical feeder

because the feeder is capable of carrying 130 kW of load. Instead, Mr. Baudino asserts that:

> Ideally, the minimum cost of the feeder would include the minimum or no-load customer-related portion of the feeder and be allocated to customers based on customer count. The portion that did carry the 130 kW of load would be classified as demand-related and allocated based on non-coincident demand.[12]

Mr. Baudino apparently misses the point of this example, which is to illustrate the flaw in the minimum-size approach that allows the minimum feeder cost to be based on a minimum-size feeder that is capable of carrying load. Thus, while "ideally" the minimum feeder cost would be set at the cost of a feeder that carries no load, the reality, as illustrated in this example, is that the minimum-size feeder used to set the minimum cost is typically capable of carrying load. As shown in Figure 2a of my direct testimony, the minimum-size feeder is capable of carrying all of the residential and commercial load on that feeder. As shown in Figure 2b, a larger-than-minimum feeder is required to serve additional commercial load. In this case, the minimum-size approach would inappropriately allocate to the residential class a portion of this larger feeder's cost in excess of the minimum cost (as demand-related cost), even though such costs would not have been incurred without the additional commercial load on the system.

As I noted above, the Company explicitly recognizes this problem with the minimum-size approach and applies an ad hoc adjustment to the minimum-size classification to correct for this flaw.

Q: Does this conclude your surrebuttal testimony?

A: Yes.

[12] Rebuttal-WIEG-Baudino-11, ll. 10-14.