BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Power and Light Company for Authority to Adjust Electric and Natural Gas Rates — **Docket No. 6680-UR-124**

SURREBUTTAL TESTIMONY OF ERIC BORDEN ON BEHALF OF CLEAN WISCONSIN

I. INTRODUCTION AND SUMMARY FINDINGS

Q Are you the same Eric Borden who submitted direct testimony in this docket on behalf of Clean Wisconsin?

A Yes.

Q Are you sponsoring any exhibits with your surrebuttal testimony?

A No.

Q What is the purpose of your surrebuttal testimony?

A I address several issues related to the Wisconsin Power and Light's ("WPL" or "Company") proposal for a successor tariff to the current net energy metering ("NEM") tariff:

- I respond to rebuttal testimony of WPL Witnesses Cook and McMahon regarding the accuracy and justification for the proposed Performance Incentive Mechanism ("PIM") and base earnings mechanism ("BEM").
- I respond to rebuttal testimony of WPL Witness McMahon regarding the contention that Power Partnership collects more distribution revenue than the NEM rate.

- I respond to rebuttal testimony of WPL Witness Michek regarding the calculation of utility return on the System Asset Value Charge ("SAVC") presented in my direct testimony.

II. PERFORMANCE INCENTIVE MECHANISM AND BASE EARNINGS MECHANISM

Q What PIM did the Company propose in its direct testimony?

A WPL proposed additional earnings, increasing from 10 percent up to 12 percent, for each year from 2023-2025 if actual solar DG deployment exceeds "the baseline of linearly forecasted increase in interconnected facilities over the three [prior] years with full data available."[1] These returns would increase in 0.5 percent increments starting at 105 percent of the linear forecast, up to 120 percent forecast (a 2 percent adder, for a 12 percent total earnings on the SAVC).[2]

Q How does the Company respond to criticism of this proposal in rebuttal testimony?

A Witness Cook states that a data request response to staff demonstrates "the proposed methodology would result in an average variance [of] less than one percent…. [T]his data shows that the proposed methodology is an appropriate baseline for adoption trends…."[3]

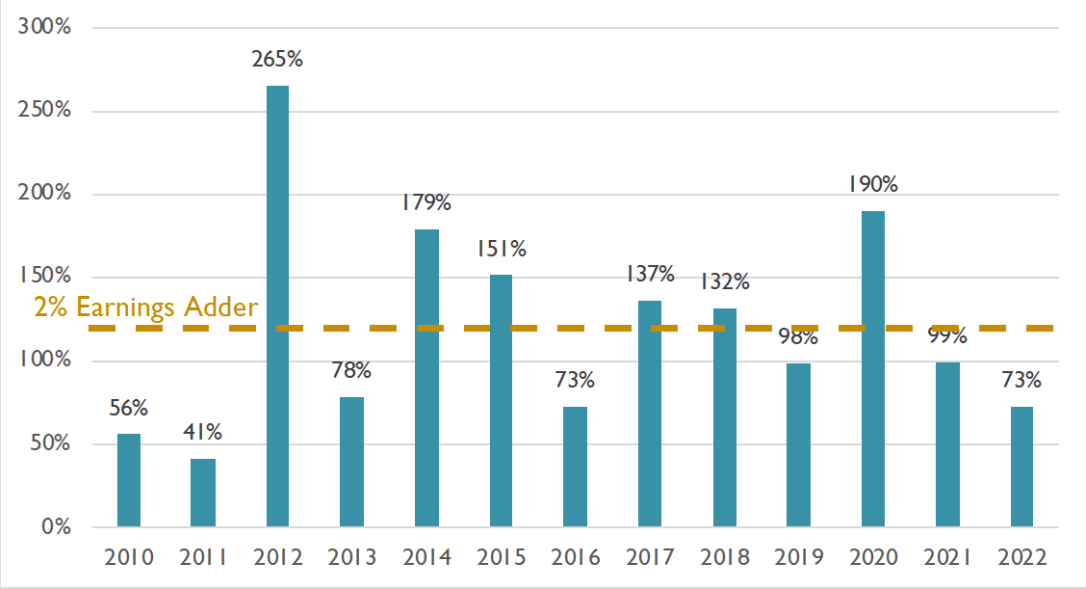
Q Does this change your conclusions from direct testimony?

A No, and if anything, my concerns are even greater having now examined the data response referenced above.[4] First, the variance of actual to forecasted systems varies widely from year to year; the fact that the "average" variance is only 2 systems from 2010-2022 is more a random mathematical anomaly than proof that the "linear forecast"

[1] Direct-WPL-Cook-p-14.
[2] Direct-WPL-Cook-p-14-15.
[3] Rebuttal-WPL-Cook-32.
[4] *See* Ex.-PSC-Data Request Response: Response CMB-1.10.

is accurate. Second, I conducted a "back-test" of the proposed PIM mechanism, to see how often WPL would have earned additional earnings based on its proposal. In six of the 13 prior years, not only would WPL have earned additional earnings, the earnings would have been at the highest level proposed, an additional 2 percent (total of 12 percent earnings on the SAVC).

Figure 1. Annual Percent Difference of DG Solar Installed (Actual/Forecast)



Q What do you conclude from this analysis?

A In addition to my concerns presented in direct testimony that the PIM is poorly designed because the amount of solar installed in the utility territory is outside the utility's control and WPL seeks additional shareholder returns for "simply performing one of its duties as a utility,"[5] the back-test analysis presented above shows that whether or not WPL receives additional earnings is essentially a coin flip. And since the PIM is asymmetrical – the utility faces no penalty for not achieving the forecast – the proposal is essentially a "heads I win, tails you lose" proposition for the utility.

[5] Direct-CW-Borden-23-24.

Q Does this change your recommendation?

A While my recommendation that the Power Partnership ("PP") proposal and the related PIMs be denied has not changed, if the Commission *does* adopt any version of this PIM it should at least make it symmetrical. For example, utility shareholders should face a penalty, growing in size based on the level of shortfall, if the forecasted adoption is not met. An illustrative proposal is presented below.

Table 1. Hypothetical allowed earnings if Actual Solar DG Installations are below forecast

Percent of Forecast Achieved	Earnings
100%	10%
95%	-0.50%
90%	-1.00%
85%	-1.50%
<85%	-2.00%

The penalty should be calculated in the same way as the earnings mechanism, and returned to all ratepayers or invested in low-income solar programs.

III. COST SHIFT

Q What evidence does WPL provide regarding the impact of PP on the potential cost shift between solar and non-solar customers?

A Witness McMahon presents an analysis that PP would allow for greater collection of distribution costs. WPL's witness claims distribution revenue would decrease by 69 percent under the current NEM rate, but only 31 percent on the PP rate.[6]

[6] Rebuttal-WPL-McMahon-11.

Q Is this testimony accurate?

A I have not checked the accuracy of these calculations, and several assumptions lack citations.[7] However, for purposes of this testimony I assume the calculations are accurate.

Q Does this testimony alter your conclusions about the Power Partnership proposal?

A They do not. First, I would note that no WPL witness refuted my assertion from direct testimony that the total cost shift under the PP rate is approximately the same as the NEM rate, as I have calculated it.[8] This is because other components of the PP rate, namely the SAVC, will also add to the cost shift, in addition to self-consumption at retail rates, and other elements included in my direct testimony calculation; none of these additional elements are included in Witness McMahon's analysis. While I do not disagree that hourly netting is likely a more accurate interval over which to net solar production and consumption compared with monthly netting, the testimony presented does not alter the fundamental conclusion that PP does not solve cost shift issues solved by NEM.

IV. EXPECTED WPL RETURNS ON THE SAVC

Q What clarifications did WPL provide regarding the calculation of earnings on the SAVC?

A Related to my calculation of these earnings in direct testimony, Witness Michek clarified that the "deferred balance of the regulatory asset established under Power Partnership accrue carrying costs at WPL's applicable short-term debt rate."[9] Mr. Michek believes

[7] For example, the contention at Rebuttal-WPL-McMahon-9 that, for an average customer, "27% of the residential fixed customer charge is related to distribution […] while the remaining $304 is recovered from volumetric rates."
[8] Direct-CW-Borden-20.
[9] Rebuttal-WPL-Michek-p-24-25.

that reflecting the short-term debt rate would reduce the carrying costs I presented in direct testimony by "more than half."[10]

Q Is witness Michek correct that the carrying cost figures you presented in direct testimony were overstated by more than half?

A No, though I do not disagree with Witness Michek's clarification that the deferral portion of the regulatory asset is intended to earn only the short-term interest rate. However, the error made in my testimony was more due to the nomenclature I used rather than the calculations I presented.

To clarify, my intention in direct testimony was to calculate total return that would accrue to WPL due to its proposed BEM (earnings and debt that accrues to the utility). My testimony (wrongly) assumed that all of these costs would be included in the regulatory asset pursuant to the utility's capital structure and weighted average cost of capital ("WACC") – this is what Witness Michek accurately points out is inconsistent with a later data request response. I now understand that the regulatory asset part of this proposal would be comprised only of the annual *deferred balance* on which WPL will earn the short-term debt rate, meaning the regulatory asset does not include the utility's earnings, nor does it incorporate the capital structure of the Company. Earnings are included as part of the SAVC and set at the utility return on equity, 10 percent, unless the PIM mechanism is achieved, discussed above.

I have re-calculated my figures from testimony using the data request response cited by Witness Michek,[11] but converting them to cents per kWh based on the Company's

[10] Rebuttal-WPL-Michek-p-25.
[11] Ex.-WPL-Michek-18.

current estimate of SAVC and multiplying this by the level of solar production expected from the solar capacity shown below.

Table 2. Revised utility return estimates based on various levels of DG adoption

Systems	Solar DG as Percent of Load (%)	Solar DG Capacity (MW)	*Direct Testimony*	Annual Return due to SAVC Earnings and Reg Asset
5,000	2%	35	*$219,573*	$ 342,476
15,000	5%	106	*$658,719*	$ 1,027,427
30,000	10%	212	*$1,317,437*	$ 2,054,854
48,000	15%	339	*$2,107,900*	$ 3,287,766
62,000	20%	438	*$2,722,704*	$ 4,246,697

Q Has this altered your conclusions about the utility's proposed BEM?

A My primary concerns expressed in my direct testimony remain, that the utility seeks to earn shareholder returns for activities for which it has been given a monopoly. However, I do have additional concerns now that I have reviewed these calculations. First, the utility's request for short-term debt carrying costs of 4.2 percent due to a very short time lag between rate cases is overly generous and unnecessary. Second, the earnings mechanism is not akin to a capital expenditure as I originally thought: it rewards 10 percent on the SAVC, which is equal to the utilities ROE but has no further justification, and does not incorporate the capital structure of the Company. The BEM is therefore *more* lucrative to the Company than a traditional capital expenditure, since the Company's capital structure is 54 percent equity. Put another way, for each $1,000 of capital expenditure the Company earns about **$54** (54% common equity * 10% ROE *$1000); for each $1,000 of expenditure on SAVC the Company earns **$100** ($1,000 * 10% earnings with no PIM) *plus* short-term carrying costs on the regulatory asset (4.2 percent), for a total return of around 14 percent (again, before the PIM mechanism).

I therefore reiterate my recommendation that the Commission reject the BEM and PIM.

Q Does this conclude your testimony?

A Yes, it does.