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Public Service Commission of Wisconsin
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BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Madison Gas and Electric Company for Authority to Change Electric and Natural Gas Rates — Docket No. 3270-UR-123

SURREBUTTAL TESTIMONY OF DEVI GLICK ON BEHALF OF SIERRA CLUB

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1. Introduction and Purpose of Testimony

Q Are you the same Devi Glick that submitted direct testimony on behalf of Sierra Club in this docket?

A Yes.

Q What is the purpose of your testimony in this proceeding?

A The purpose of my testimony is to respond to Madison Gas and Electric Company's ("MGE" or the "Company") witness Carl J. Weinert's rebuttal testimony.

2. Response to Company Witness Weinert's Testimony

Q Please summarize your surrebuttal testimony and the claims from Mr. Weinert's testimony that you respond to here.

A In my surrebuttal testimony, I respond to several claims from Mr. Weinert.

First, I respond to the assertions that MGE's bidding strategy currently aligns with my description of best practices for unit commitment (as outlined in my direct testimony). Specifically, I describe how MGE's unit commitment practices fundamentally conflict with my recommendations. I also highlight my concerns with Witness Weinert repeated assertions that that the Company's unit commitment practices have historically *not* been found to be *imprudent* by the Public Service Commission of Wisconsin ("PSCW") Staff, and thus the implication that on that basis alone the practices are currently prudent.

Next, I discuss Mr. Weinert's reply to my stated concern that MGE is omitting a portion of Variable Operations and Maintenance (variable O&M) costs from its unit commitment decision-making process. I provide evidence to support my concern that Columbia's variable O&M costs are being underreported. I also summarize my findings on the inconsistences between MGE's characterization of the role of variable O&M costs in its unit commitment decision-making process in Mr. Weinert's testimony, on the one hand, and its discovery responses, on the other. I then repeat my concerns with Mr. Weinert's reliance on the general claim that prior rulings of prudence by PSCW staff imply that current practices are prudent.

I then address Mr. Weiner's assertion that MGE fuel cost plans reflect the best look into the future "at a moment in time." I express my concerns that MGE is in fact modeling its fuel plan in a manner that is both likely to yield imprudent commitment decisions if followed and is not aligned with how it actually expects to operate its units.

I end with a brief discussion of the importance of ensuring that MGE's fuel plan accurately reflects the impacts of COVID-19.

Q Mr. Weinert asserts that MGE's bidding strategy currently aligns with your description of best practices for unit commitment and asserts that these strategies have been reviewed and approved PSCW staff. How do you respond?

A I disagree with Mr. Weinert that MGE's bidding strategies currently align with my description of proper unit commitment practices. To the contrary, MGE's stated strategies conflict with both of my suggested alternative approaches. First, MGE states that, [redacted].[1] This statement is clearly inconsistent with the first option I recommend, that the Company commit the unit in economic status. Second, MGE states that "a formal analytic framework is not currently utilized by MGE to determine commitment status and therefore no analytic work papers exist that are responsive to [my request for such papers]."[2] This statement is inconsistent with the second option I recommend, that the Company choose between must-run and economic unit commitment statuses based on projected net margins (which inherently requires the use of a formal analysis tool or process). Because MGE's approach is inconsistent with both of my recommended options, it is impossible that MGE is actually following—or otherwise matching—my recommendations in its unit commitment practices.

I also disagree with the implication that MGE's commitment strategies are reasonable because they have not been found to be imprudent in the past. To be clear, my testimony does not state an opinion as to whether the unit commitment decisions at Columbia and Elm Road for which MGE was previously

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[1] Ex-PSC-Data Request Response FCP-DM-14.

[2] SC Data Request Response 2.8.

compensated as part of prior Fuel Cost Plans or elsewhere were appropriate. But coal plants can no longer be presumed to be competitive in the current energy market because the market faces downward price pressure from renewables and natural gas plants. As a result, coal-fired plants cannot be presumed to be economic when operated as they were in the past. The Commission and Staff need to base their evaluation of prudence on current data and the most current best practices and understanding of market conditions.

Q Mr. Weinert claims that your hypothesis that MGE has very likely omitted a significant portion of its variable O&M costs from its unit commitment decision-making process and fuel cost plan modeling is without merit. How do you respond?

A The Company's reported variable O&M costs for Columbia, at [redacted] [redacted],[3] are exceptionally low relative to industry-standard variable O&M costs. Horizon's Energy, which prepares a U.S. National Database that is used in the EnCompass model, estimates that variable O&M costs for a coal-fired power plant the size of Columbia should be between \$8.51 – \$9.75/MWh.[4] This is in the range of what I have seen at other coal plants throughout the country. Even MGE's other coal plant, Elm Road, reports O&M costs [redacted] than Columbia Energy Center, at [redacted][5]

[3] Ex-PSC-Data Request Response FCP-DM-11.

[4] Horizon's Energy, North American Market Database. Variable O&M data in Horizons is based on FERC Form 1 data.

[5] Ex-PSC-Data Request Response FCP DM-11.

In my experience, when reported variable O&M costs are [redacted] the level of other company plants and less than [redacted] of standard industry levels, that does not indicate that the company actually operates the plant at [redacted] the variable cost of similar plants. Rather this indicates that the company is erroneously classifying the majority of its O&M costs as fixed. More specifically, the Company appears to be reporting artificially low variable O&M because it is omitting routine maintenance activities that vary with the Company's commitment decisions—that is, output—over periods of days or weeks. There are many types of routine maintenance that are knowable and predictable based on the frequency of use. Just like you know you need to change the oil in your car or switch out your engine air filter after driving a certain number of miles, there are tasks at a power plant that are directly tied to frequency of use.

Although these costs vary according to the Company's commitment decisions, the Company apparently ignores these costs when actually making its commitment decisions. These costs are still passed onto customers in rates, even if they are erroneously omitted from commitment and dispatch decision-making processes. This can result in the plant being committed and dispatched more than it should be, to the detriment of ratepayers.

Q How does MGE factor variable O&M costs into its unit commitment decisions?

A It is unclear whether or how MGE factors variable O&M costs into its unit commitment decision-making process based on the Company's conflicting statements on the matter. In Rebuttal testimony, Mr. Weinert states that "MGE takes variable operation and maintenance costs at all its generation units into account when determining unit commitment."[6] But, in a discovery response MGE states "[redacted]"[7] This lack of clarity is very concerning.

Q Does MGE provide any details on how it calculates the variable O&M costs for its coal plants?

A No, in fact MGE admits that it does not actually calculate its own variable O&M costs for Columbia. Rather, it relies on costs provided by WPL.[8] Therefore, the Company's assertion that its variable O&M costs are reasonable is really based solely on the fact that its costs were not previously challenged by Staff and Commission. Specifically, Mr. Weinert states: "These types of costs that have been part of MGE's fuel cost plan or MISO offers have been audited by the PSCW in the past and found to be prudent."[9]

Q How do you respond to MGE's assertion that its variable costs are reasonable because they have been approved in the past?

A Once again, my testimony does not state an opinion as to whether the amount of variable O&M MGE expends at its plants is imprudent or not. Nor does it state an opinion as to whether the variable O&M expenses for which MGE was previously compensated as part of prior Fuel Cost Plans or elsewhere were appropriate.

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[6] Rebuttal-MGE-Wienert-4.
[7] Ex-PSC-Data Request Response FCP-DM-11.
[8] Rebuttal-MGE-Wienert-4.
[9] *Id*.

Rather, I am asserting that *all* variable O&M expenses—including maintenance costs that increase predictably with the hours a plant operates—must be taken into account in the Company's commitment decisions.

Further, these expenses should be incorporated when evaluating the resulting economic performance of the unit. The prudence of fuel expenses incurred depends on the prudence of the commitment and operational decisions that lead to the incursion of those fuel expenses. It is therefore also essential to evaluate the outcome of the commitment decisions by comparing the short-run marginal costs (including fuel and variable O&M costs) to actual market revenues.

Regardless of whether prior Commission and Staff reviews have returned findings of no imprudence, it is still reasonable to expect the Commission to regularly evaluate whether the assumptions and analysis underlying past commitment decisions (and associated fuel and variable O&M costs) are still relevant and in the best interest of ratepayers.

Q If you use MGE's reported variable O&M costs, what do you find about the economics of operating Columbia Units 1 and 2?

A As discussed in my direct testimony, I find that MGE likely incurred net losses in 2019 and the first five months of 2020 based on fuel costs *alone*. This means that even without the inclusion of any variable costs, I still find that Columbia likely incurred net losses.[10]

[10] Direct-SC-Glick-21-22.

Q Mr. Weinert asserts that MGE's fuel cost plan reflects "the best look into the future at a moment in time"[11] and asserts that there is no need to change the requirements for addressing utility fuel costs to ensure the fuel cost plan is consistent with actual commitment practices. How do you respond?

A I do not believe that MGE is actually modeling its coal units based on the best look into the future at the time the modeling was conducted. I believe that MGE is instead modeling its coal units [redacted] whenever they are available regardless of economics. Indeed, MGE stated it modeled the Columbia and Elm Road units [redacted] for its 2021 fuel cost plan.[12]

It is reasonable and desirable that MGE would make its day-ahead unit commitment decisions based on the most current information available, and that those decisions would sometimes differ from what the Company previously modeled in its fuel cost plan. But it is not reasonable for MGE to either (a) model a unit assuming imprudent commitment behavior or (b) model a unit in a manner that the Company knows is wholly inconsistent with actual operational practices. It appears to be doing both of those things.

Specifically, MGE's decision to model Columbia and Elm Road units [redacted] whenever they are available is not aligned with prudent commitment behavior. MGE is modeling both plants in a manner that it knows, if followed, would very likely yield imprudent unit commitment decisions. If MGE *does* engage in market-based adjustments to its commitment strategy on an ongoing basis, the proposed fuel plan will overstate fuel costs. MGE stated that WEPCO *actually*

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[11] Rebuttal-MGE-Weinert-4.

[12] Ex-PSC-Data Request Response FCP-DM-14.

commits Elm Road [redacted] in the day-ahead market [redacted] This means that MGE models the Elm Road unit [redacted] for its fuel cost plant, despite knowing that Elm Road is NOT expected to operate [redacted] whenever it is available.

Q Mr. Weinert challenges your suggestion that MGE update its fuel cost plan to reflect the impacts of COVID-19. How do you respond?

A Mr. Weinert presents several pieces of analysis on locational marginal prices and wholesale market prices in support of his claim that the downward pressure on market prices from COVID-19 may be easing. I do not dispute any of his specific claims. But as the Company has already conducted analysis and gathered information on the impacts of COVID-19 on the energy market, MGE should have no problem incorporating this analysis into its fuel cost plan model. Given the novel and dramatic impact of COVID-19 on the economy, this is hardly an unreasonable request. In fact, in nearly every utility docket I was involved in this summer, utilities have offered updated load forecasts and model run sensitivities with COVID-19 impacts. I am concerned that by refusing to refresh the analysis underlying its fuel cost plan, MGE is over-projecting fuel burn and therefore will unnecessarily over-collect fuel costs from customers.

Q Does this conclude your testimony?

A Yes.