#### **BEFORE THE**

#### MAINE PUBLIC UTILITIES COMMISSION

CENTRAL MAINE POWER: Re: Request for Approval of an Alternative Rate Plan (Arp 2014) Pertaining to Central Maine Power Company.

Docket No. 2013-00168

#### SURREBUTTAL TESTIMONY

OF

#### TIM WOOLF

### ON BEHALF OF THE MAINE PUBLIC ADVOCATE OFFICE

March 21, 2014

Office of the Public Advocate 112 State House Station Augusta, Me 04333-0112

### **Table of Contents**

1.	INTRODUCTION AND QUALIFICATIONS 1
2.	ROLE OF THE ALTERNATIVE RATE PLAN IN SETTING RATES 2
3.	REVENUE DECOUPLING MECHANISM: ADJUSTMENT CAP 4
4.	REVENUE DECOUPLING MECHANISM: RISK VERSUS VOLATILITY 6
5.	THE SEPARATE CRM&B SURCHARGE 10

1	1.	INTRODUCTION AND QUALIFICATIONS
2	Q.	Please state your name, title, and employer.
3	A.	My name is Tim Woolf. I am Vice President at Synapse Energy Economics, located at
4		485 Massachusetts Avenue, Cambridge, MA 02139.
5	Q.	Have you previously testified in this docket?
6	А.	Yes. I provided direct testimony on December 12, 2013.
7	Q.	On whose behalf are you testifying in this case?
8	А.	I am testifying on behalf of the Maine Office of Public Advocate (OPA).
9	Q.	What is the purpose of your testimony?
10	A.	The purpose of my testimony is to respond to three issues raised in the rebuttal testimony
11		of Central Maine Power Company (CMP, or the Company) and other interveners. The
12		three issues that I will address are: (1) the role of the Alternative Rate Plan (ARP), (2) the
13		Revenue Decoupling Mechanism (RDM), and (3) the treatment of the Customer
14		Relationship Management & Billing System (CRM&B) surcharge.
15	Q.	Please summarize your testimony.
16	A.	My primary conclusions and recommendations are as follows:
17		• If the Commission decides to continue with an Alternative Ratemaking Plan for
18		CMP, then the OPA's proposal is the best way to design the ARP. However, if the
19		Commission wishes to consider a return to traditional cost-of-service regulation, the
20		OPA would not be opposed to such a move.
21		• The OPA's proposed RDM mechanism does not increase risks for customers. In fact,
22		the RDM will make customers better off, as long as the OPA's recommended
23		consumer protection measures are also adopted.
24		• The OPA opposes the recovery of CRM&B costs prior to the project being placed in
25		service and used and useful. The costs for the project should be recovered through a
26		surcharge only at the time that the project becomes operational in order to avoid

1 2		carrying costs and to ensure that customers are receiving the benefit for which they are paying
2		are paying.
3	2.	ROLE OF THE ALTERNATIVE RATE PLAN IN SETTING RATES
4 5	Q.	Please summarize the Staff's proposal regarding the overall role of the Company's Alternative Ratemaking Plan.
6	A.	Staff has numerous concerns with the Company's ARP proposal and therefore
7		recommends taking a "hiatus" from the ARP mechanism. The Staff proposes a return to
8		traditional cost-of-service ratemaking, at least for sufficient time to assess the best
9		option. <sup>1</sup>
10	Q.	What is your position regarding the Staff's proposal?
11	A.	As I noted in my direct testimony, a return to traditional cost-of-service ratemaking is a
12		viable alternative to the Alternative Rate Plan. <sup>2</sup> However, if the Commission decides to
13		continue with an ARP, the OPA believes that its proposal is the best way to design the
14		ARP mechanism under current conditions.
15 16	Q.	Why do you believe that the OPA's proposal represents the best means of continuing the ARP?
17	A.	The OPA's ARP proposal, taken as a whole, includes several components that will
18		protect customers, while maintaining the overall construct of an Alternative Ratemaking
19		Plan and providing the Company with sufficient revenues to provide safe, reliable, low-
20		cost electricity services.
21		First, the OPA's proposal requires the Company to treat the cost recovery of the CRM&B
22		separately from the other capital costs. As noted in my direct testimony "I think that a
23		big challenge facing the Company in this docket is caused by its plan to make the large
24		capital investment in its CRM&B system before the next rate case." <sup>3</sup> Many of the
25		concerns about the Company's productivity factor arise from the fact that the CRM&B is
26		a large, atypical, and infrequent type of investment. The OPA's proposal addresses this

 <sup>&</sup>lt;sup>1</sup> Bench Analysis, December 12, 2013, p. 20
 <sup>2</sup> Woolf Direct Testimony, December 12, 2013, p. 9.
 <sup>3</sup> Woolf Direct Testimony, December 12, 2013, p. 17.

challenge directly by removing the CRM&B from the ARP, and therefore from the
 productivity analysis. The CRM&B cost recovery would be comparable to cost treatment
 under traditional cost-of-service ratemaking. Thus, the OPA's proposal is essentially
 taking a step in the direction of traditional cost-of-service ratemaking, as recommended
 by Staff, but only for the most significant and most challenging of the Company's future
 capital expenditures.

Second, the OPA proposes a more meaningful and appropriate productivity offset for
O&M expenses than the Company's proposal. The OPA is proposing a productivity
offset of positive 0.95 percent,<sup>4</sup> which is much greater than the Company's proposed
productivity offset of negative 1.85 percent.<sup>5</sup> The OPA's greater productivity offset will
reduce the revenue requirements that customers would otherwise have to pay for, and
provide a stronger incentive for the Company to be more efficient with regard to O&M
expenses.

14Third, the OPA proposes an allowed return on equity (ROE) of 8.5 percent.<sup>6</sup> This is15significantly lower than the Company's proposed allowed ROE of 10.15 percent.<sup>7</sup> The

16 OPA's lower allowed ROE provides the appropriate ratepayer risk reduction to account

17 for the proposed decoupling mechanism, the Company's rate of return adjustment

18 proposal, as well as the OPA's proposed adjustment to inflation proposal that allows

- 19 CMP to earn its authorized rate of return.<sup>8</sup>
- Fourth, the OPA proposes a revenue decoupling mechanism (RDM) that incorporates appropriate consumer protection measures. The OPA's RDM proposal, taken as a whole, is likely to provide net benefits to customers, without exposing them to increased risks. I elaborate upon this important point in the following two sections.
- In sum, if the Commission decides to continue with an Alternative Ratemaking Plan for
  CMP, then the OPA's proposal is the best way to design the ARP mechanism under

<sup>&</sup>lt;sup>4</sup> King Direct Testimony, December 12, 2013, p. 38.

<sup>&</sup>lt;sup>5</sup> Adams, Stinneford, and Policy Brown, Rebuttal Testimony, February 4, 2014, p. REB-POL-6

<sup>&</sup>lt;sup>6</sup> King Direct Testimony, December 12, 2013, p. 3.

<sup>&</sup>lt;sup>7</sup> Adams, Stinneford, and Brown, Policy Rebuttal Testimony, February 4, 2014, p. REB-POL-10.

<sup>&</sup>lt;sup>8</sup> King Direct Testimony, December 12, 2013, p. 28-29.

1		current conditions. However, if the Commission wishes to consider a return to traditional
2		cost-of-service regulation, the OPA would not be opposed to such a move.
3	3.	<b>REVENUE DECOUPLING MECHANISM: ADJUSTMENT CAP</b>
4 5	Q.	Please summarize the RDM adjustment cap that you proposed in your direct testimony.
6	A.	In my direct testimony I recommended that the Commission establish a cap on the
7		amount of revenues that can be recovered from customers in any one RDM adjustment. I
8		recommended that "The cap should be set at one percent of total allowed revenues for
9		CMP for the period covered by the annual adjustment. Applying this cap would
10		guarantee that customers will not see their total bill go up by more than one percent
11		between rate cases as a result of the RDM adjustments."9 Further, I recommended that
12		unrecovered revenues could be rolled over from one year to the next, but that the
13		Company would not be able to recover any unrecovered revenues that might remain at
14		the end of the ARP2014 period. <sup>10</sup>
15	Q.	Did you provide any clarification of your proposal in response to discovery?
16	A.	Yes. The Company asked several discovery requests regarding the details of my proposed
17		RDM adjustment cap.
18	Q.	Would you like to clarify these details at this time?
19	A.	Yes. First, I recommend that the cap be based on the revenues estimated for the first rate
20		year in ARP2014. <sup>11</sup> This approach would be simpler than estimating a different RDM
21		adjustment cap for each year throughout the ARP. It also provides more certainty
22		regarding the magnitude of the cap throughout the ARP.
23		Second, I recommend that the cap should be applied separately to each of the two
24		reconciliation groups defined by the Company (residential and commercial/industrial). In
25		this way, each group will have some assurance that their RDM adjustments will be no
26		more than one percent each year.

<sup>&</sup>lt;sup>9</sup> Woolf Direct Testimony, December 12, 2013, pp. 28-29.
<sup>10</sup> Woolf Direct Testimony, December 12, 2013, p. 29.
<sup>11</sup> OPA Response to CMP-013-001.

1 Third, I wish to clarify that my proposed cap of one percent would be based on the 2 Company's total distribution and transmission revenues combined with standard offer 3 revenues. In its rebuttal testimony, the Company estimates that a one percent cap based 4 on its total delivery rates (including standard offer revenues) would be approximately 5 \$8.4 million.<sup>12</sup>

# Q. Why do you recommend that the RDM adjustment cap be based on total revenues, including standard offer revenues, given that the Company does not control standard offer revenues or costs?

9 A. The purpose of the RDM adjustment cap is to protect customers from significant swings 10 in prices as a result of the RDM. There are several benchmarks that could be used to set 11 such a cap. The two most obvious benchmarks are a percent of distribution revenues, and 12 a percent of total revenues. I prefer that the RDM cap be based on total revenues, because 13 this provides a better overall indication of the extent to which customers' total electric 14 bills might be affected by the adjustment. A one percent RDM cap based on total 15 revenues means that in general customers' total electric bills will not increase by more 16 than one percent as a result of the RDM adjustment. This benchmark in terms of total 17 electric bills helps to place in context concerns about price volatility and risk, as 18 described in the next section of my testimony.

# 19Q.Do you recommend that the RDM adjustment cap be symmetrical? That is, in the20event that the Company collects more than its target revenues, should it limit the21amount that it returns to customers through the RDM adjustment?

22 No. In this instance there is good reason for an asymmetrical mechanism. In the event Α. 23 that the Company collects significantly more than its target revenues (as a result of 24 increased sales), the Company is not harmed in any way by returning the excess to 25 customers. Even after returning the excess revenues to customers, the Company would 26 have collected its target revenues, and the revenues collected should be sufficient to cover 27 its costs, based upon the construct of the ARP and the RDM. Thus, the Company is not 28 harmed in any way by returning all excess revenues to customers in each RDM 29 adjustment.

<sup>&</sup>lt;sup>12</sup> Lahtinen Rebuttal Testimony, February 4, 2014, p. 17.

1 On the other hand, in the event that the Company collects significantly less than its target 2 revenues (as a result of reduced sales), customers could be harmed as a result of price 3 increases at the time of the RDM adjustment. The reason for the RDM adjustment cap is 4 to limit the extent to which customers will be exposed to such price increases. There is no 5 need to have a comparable cap on rate decreases, to limit any harm to the Company from 6 returning excess revenues to customers, because there is no harm in that instance.

Q. CMP believes that any RDM adjustment balance (either positive or negative) at the
 end of the ARP should be fully recovered or returned to customers in a subsequent
 rate period.<sup>13</sup> Do you agree?

A. No. I recommend that if there remains some uncollected revenues at the end of the 2014
 ARP period, then the Company would not be allowed to collect those remaining
 uncollected revenues.<sup>14</sup> Again, this is simply a measure to protect customers in the event
 that uncollected revenues turn out to be greater than expected at the end of the ARP
 period.

15 **4.** 

#### **REVENUE DECOUPLING MECHANISM: RISK VERSUS VOLATILITY**

#### 16 Q. Does Staff support the adoption of a Revenue Decoupling Mechanism?

A. No. Staff is concerned that revenue decoupling (together with other mechanisms in
CMP's proposal) "reduces the likelihood that the ARP will produce predictable and
stable rates since rates will change annually based on a number of factors other than
inflation," and "significantly shifts risks onto customers and away from shareholders."<sup>15</sup>

#### 21 Q. Do you agree with Staff's point that RDM will lead to unstable rates?

A. No. Any RDM adjustments for CMP will be based on deviations in revenues from one
year to the next, and are thus likely to be small. That is, rates will be set on an on-going
basis to recover the following year's target revenues, and will utilize recently forecasted
customer counts and sales. Actual deviations from such forecasts are likely to be small,
and therefore RDM adjustments will also be small. While fluctuations in the economy

and therefore RDM adjustments will also be small. while indituations in the econor

<sup>&</sup>lt;sup>13</sup> Lahitinen Rebuttal Testimony, February 4, 2014, p.REB-JAL-18.

<sup>&</sup>lt;sup>14</sup> Woolf Direct Testimony, December 12, 2013, p. 29.

<sup>&</sup>lt;sup>15</sup> Bench Analysis, p. 85

1		and weather will cause some deviation from forecasts, it is reasonable to expect that such
2		adjustments will be both up and down, and will generally balance out over time.
3 4	Q.	Do you agree with Staff's point that the RDM will shift risk from the Company onto customers?
5	A.	No. It is a commonly held misconception that decoupling will result in shifting risk from
6		the utility to its customers. With regard to the OPA's proposal, this is not the case. It is
7		very important to recognize that the RDM shifts volatility from the utility to the
8		customers, but while this shift in volatility reduces risk for the utility, it does not
9		materially increase risk for customers.
10	Q.	Please explain what you mean by RDM shifts volatility from the utility to customers.
11	А.	Under the RDM, electricity rates will be adjusted annually to correct for over-recovery or
12		under-recovery relative to the target revenues. This means that electric rates will be
13		slightly more volatile than they would be in the absence of the RDM. At the same time,
14		utility revenues will be less volatile than they would be in the absence of RDM.
15		Consequently, it is volatility that is shifted from the utility to the customers.
16	Q.	Is there a difference between volatility and risk?
17	A.	That depends upon whether you are a customer or a utility shareholder.
18	Q.	What is the impact of revenue volatility on utility shareholders?
19	А.	For the utility, revenue volatility translates into profit volatility. For utility shareholders,
20		profit volatility is essentially the same thing as risk. Volatility, frequently measured as the
21		standard deviation of returns, is the most common measure of financial risk, as it exposes
22		investors to uncertain change. <sup>16</sup> A reduction in volatility is equivalent to a reduction in
23		risk for shareholders. From the utility shareholder perspective, reduced volatility from the
24		RDM is equivalent to reduced risk. This is why it is important to reduce a utility's
25		allowed ROE when rates are decoupled.

<sup>&</sup>lt;sup>16</sup> See, for example, the definitions of risk and volatility given in: Gary Gastineau and Kritzman,M., *Dictionary of Financial Risk Management*, American Stock Exchange, New York: 1999; and Jon Danielsson, *Financial Risk Forecasting: The Theory and Practice of Forecasting Market Risk, with Implementation in R and MATLAB*, Wiley & Sons, Chichester, United Kingdom: 2011.

#### 1 Q. What is the impact of price volatility on customers?

A. The impact of volatility on customers is very different than for utility shareholders. For
customers, increased volatility means that their bills will be slightly higher or lower over
time. If the cause of the volatility (e.g., weather or economic conditions) is roughly
symmetrical, then their long-term costs will be the same. From a long-term cost
perspective, customers are no worse off. Thus, from the customers' perspective,
increased volatility is not equivalent to increased risk.

Furthermore, the magnitude of the volatility will be quite small, by design. The OPA proposes that the RDM adjustments be capped at one percent of total revenues. This means that RDM will cause customers' bills to change by a maximum of only one percent each year. This is a very small increase in the volatility of electric bills, especially compared with the extent to which customer bills typically fluctuate from month to month, season to season, and year to year based on changing consumption levels and changing costs.

15 I offer Figure 1 for illustrative purposes. It presents month-to-month electricity bill

16 volatility for a sample electricity customer. Each of the blue bars indicates the month-to-

- 17 month percent change in the customer's bill resulting from varying consumption levels
- 18 from one month to the next. Each of the smaller red bars indicates a one percent (positive
- 19 or negative) change in bills between rate years, as a result of the OPA's proposed
- 20 RDM.<sup>17</sup> As indicated, increased volatility of one percent of bills once a year is essentially
- 21 *de minimus*, relative to the month-to-month volatility that ratepayers experience.

<sup>&</sup>lt;sup>17</sup> For this illustration, an actual residential customer's historic monthly consumption levels were used to indicate the monthly percent change in bills. The historic monthly percent changes were then simply extended out over all of the rate years, without changing distribution, transmission or generation rates over time. In practice, actual bills would experience a different volatility pattern due to the changes in rates over this period.



#### Figure 1. Month-to-Month Volatility in the Electric Bill of a Sample Residential Customer

## Q. What, then, are the ultimate implications of shifting volatility from the utility to customers?

2

1

A. In sum, utility shareholders are better off with reduced volatility of revenues, while
customers are essentially no worse off with increased volatility of bills (as long as the
OPA's proposed cap is applied).

8 The Commission should accept the OPA's proposal to reduce the Company's allowed 9 ROE due to the reduced volatility of revenues, because this is fair to shareholders and 10 provides important additional benefits to customers in terms of lower rates. With this 11 additional component of the OPA's RDM proposal, customers are likely to be better off 12 with RDM than without it, despite the very small increase in the volatility of bills.

## 13Q.Please explain why you believe that customers will be better off with the RDM than14without it.

A. As described immediately above, customers have little, if anything, to lose from the
OPA's proposed RDM. While there will theoretically be an increase in the volatility of
rates, in practice this will be so small as to be un-noticeable, and will be offset by the
reduced ROE.

Furthermore, there will be additional benefits to customers as a result of the RDM. First,
as I describe in my direct testimony, an RDM eliminates the pressure to increase fixed
customer charges as the Company has requested in this docket. From the customers'

perspective, an RDM is a far superior way to address revenue uncertainty and volatility
 than increasing customer charges.

- Second, the RDM should result in greater investment in cost-effective energy efficiency
  and distributed generation resources. These resources can provide multiple benefits to
  customers, including lower-cost electricity services.
- 6 Third, in the context of the ARP, when sales are flat or declining, the RDM reduces the 7 need for inflation adjustments to the Revenue Index Mechanism. The RDM helps to 8 ensure the Company will recover the revenues needed to cover its costs, regardless of 9 actual sales volumes. In the absence of RDM, the Company's proposed X-factor would 10 need to be greater (under the Company's proposal), or the OPA's proposed inflation 11 adjustment<sup>18</sup> would need to be greater (under the OPA's proposal) to offset flat or 12 declining sales.
- Fourth, if the Commission decides to revert to traditional cost-of-service ratemaking
  (under the Staff's proposal), then the RDM will allow for less frequent rate cases.

15

#### 5 5. THE SEPARATE CRM&B SURCHARGE

#### 16 Q. Please summarize your proposal for a separate CRM&B surcharge.

17 A. As noted above, one of the biggest challenges in this rate case is how to provide the 18 Company with the flexibility to undertake large, atypical, infrequent capital projects such 19 as the CRM&B project. The ARP mechanism is not well-suited to account for this type of 20 major capital expenditure, because the year-to-year rate increases are based upon 21 inflation minus a productivity factor, which is not capable of adequately accounting for large, atypical, infrequent capital projects.<sup>19</sup> To address this challenge I recommend that 22 23 major capital expenditures such as the CRM&B be accounted for outside of the ARP, in a 24 separate surcharge. These major capital expenditures would be treated in a way that is 25 comparable to traditional cost-of-service ratemaking, where (a) the utility decides 26 whether and when to undertake major capital projects; (b) the capital costs are not put

<sup>&</sup>lt;sup>18</sup> Catlin Direct Testimony, December 12, 2013, p. 13.

<sup>&</sup>lt;sup>19</sup> Woolf Direct Testimony, December 12, 2013, p. 18.

into rates until the capital project is operational, used and useful; and (c) the Commission
 has the ability to review the capital project for prudence retrospectively when the costs
 are formally entered into rates during the subsequent rate case.

Q. Would you like to provide more detail on your recommendation regarding the
 Commission review and approval of major capital expenditures that are placed into
 the separate surcharge?

7 A. Yes. I wish to expand upon my recommendation that "The Commission would not 8 review such capital projects in advance, and would not provide any sort of pre-approval for such capital projects."<sup>20</sup> By this I mean that the Commission would not pre-approve 9 10 the *magnitude* of capital expenditures associated with the proposed project. The 11 Company would have the responsibility to implement the capital project as efficiently as 12 possible, and to ensure that the magnitude of costs is reasonable and prudent. Any 13 concerns about the magnitude of the capital expenditures would be addressed after the 14 project is complete, in the subsequent rate case, consistent with traditional cost-of-service 15 ratemaking.

However, the Commission could make a finding with regard to the *need* for the proposed
capital project, or in this case, the need to replace the existing billing system. Such a
finding would provide the Company with some comfort that it is not likely to be subject
to a challenge at a future date about the decision to proceed with the proposed capital
project.

Q. Would you like to provide more detail on your recommendation regarding the
 timing of when major capital expenditures can be placed into the separate
 surcharge?

A. Yes. I wish to expand upon my recommendation that "When the Company undertakes a
 major capital project, it would be allowed to place those expenditures into an account for
 on-going recovery."<sup>21</sup> It is important to clarify when the capital project expenditures
 would be placed into the separate surcharge.

<sup>&</sup>lt;sup>20</sup> Woolf Direct Testimony, p. 19.

<sup>&</sup>lt;sup>21</sup> Woolf Direct Testimony, p. 19.

1 In its rebuttal testimony, the Company proposes that the CRM&B surcharge go into 2 effect beginning on July 1, 2016, despite the fact that the Company does not anticipate 3 that the CRM&B will go into service until January 2017. This timing is proposed in order 4 to avoid carrying costs on the project from February 2017 to June 2017, and to help 5 smooth the rate impact.<sup>22</sup>

6 The OPA does not agree with the Company's proposal of placing the costs of the 7 CRM&B into the surcharge before the project is operational. The costs of major capital 8 expenditures should not be placed into rates until the capital project is in-service, and is 9 used and useful. This is a standard concept that is applied under traditional cost-of-10 service ratemaking, and is relevant in this context as well. Put simply, customers should not be charged costs for a project that is not in-service and is therefore not providing 11 12 them benefits. In addition, there may be project delays or deviations from projected costs, making the costs placed in rates that much more inappropriate. 13

14 The OPA believes that the best option would be to place the capital project expenditures 15 into the capital cost surcharge at the time the project becomes operational. In the case of 16 the CRM&B, the Company expects this to be January 2017. At that point in time, the 17 appropriate costs would go into the capital cost surcharge. This would mean adjusting 18 rates in January, which would require a separate rate adjustment in addition to the CMP 19 rate adjustments that typically occur in July. The OPA believes that making the 20 adjustment at this time is preferable to making the adjustment in July, because it ensures 21 that rates are not increased until the project is operational, and it eliminates the need for 22 interest costs that would be incurred if the project costs were placed in the surcharge at a 23 later date.

## Q. Would you like to provide more detail on your recommendation regarding the types of costs that should be placed in the separate surcharge?

A. Yes. The rationale for the separate surcharge is to provide the Company with the ability
to undertake major, infrequent capital projects between rate cases during the ARP period
and still be able to recover those costs in a way that is comparable to what they would

<sup>&</sup>lt;sup>22</sup> Adams, Stinneford, and Brown, Policy Rebuttal Testimony, February 4, 2014, pp. REB-POL-48-49.

1 recover if there were a rate case. At the time of a rate case, capital costs are typically 2 placed into rate base, and the Company is allowed to collect the depreciation expense, 3 taxes, and the return on equity associated with those costs. The capital expenditure 4 surcharge should work the same way. Once the project enters service, the Company 5 should be able to recover in the surcharge the depreciation, taxes, and return on equity 6 associated with the costs. At the time of the next rate case, the surcharge account is 7 zeroed out, the undepreciated portion of the costs is added into the Company's rate base, 8 and the remainder of the project costs are recovered through rate base going forward.

- 9 Q. Does this conclude your surrebuttal testimony?
- 10 A. Yes, it does.