

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

IN RE:)
) DOCKET NO. EPB-2020-0156
)
MIDAMERICAN ENERGY COMPANY)
ELECTRIC POWER GENERATION)
FACILITY EMISSIONS PLAN)
) DIRECT TESTIMONY
)

(PUBLIC) DIRECT TESTIMONY OF
STEVEN C. GUYER

ON BEHALF OF
ENVIRONMENTAL LAW & POLICY CENTER
IOWA ENVIRONMENTAL COUNCIL

DECEMBER 17, 2020

1 **I. INTRODUCTION**

2 **Q. Please state your name, business name and address, and role in this proceeding.**

3 A. My name is Steven C. Guyer. I am the Energy & Climate Policy Specialist with the Iowa
4 Environmental Council, located at 505 Fifth Ave, Suite 850, in Des Moines, Iowa. I appear
5 here in my capacity as a witness on behalf of the Environmental Law and Policy Center
6 and the Iowa Environmental Council (collectively “Environmental Intervenors”).

7 **Q. Please describe your background.**

8 A. I have an Associate of Arts degree in Electronics Engineering from Hawkeye Institute of
9 Technology in Waterloo, Iowa, a Bachelor of Arts degree in Physics from the University
10 of Northern Iowa in Cedar Falls, Iowa, and a Juris Doctorate from the University of Iowa
11 in Iowa City, Iowa. I have been working in the energy field since 1988. From 1988 through
12 2007, I worked in legal and environmental positions at Iowa Southern Utilities, IES
13 Industries, Alliant Energy, and MidAmerican Energy. Since 2008, I have designed and
14 built solar energy systems across Iowa as the owner and president of GWA Solar. In
15 addition to my continued work at GWA Solar, I have worked for the Iowa Environmental
16 Council (IEC) since 2019. The Iowa Environmental Council is a 501(c)(3) non-profit,
17 member-based corporation that works to advance public policies that provide a safe,
18 healthy environment and sustainable future for all Iowans. In my capacity at IEC, I work
19 primarily on renewable energy, energy efficiency, and climate policy.

20 **Q. Have you testified with the Iowa Utilities Board before?**

21 A. No. However, I have drafted or assisted in drafting comments, compliance filings, and
22 siting proceedings dockets before the IUB during my years at the utilities.

1 **Q: What is the purpose of your testimony?**

2 A: The purpose of my testimony is to support the position that if facilities are not operated,
3 the facilities are in compliance with air emission regulations, and that emission control
4 expenditures for Neal 3 and Neal 4 should not be approved for recovery.

5 **Q: Can MidAmerican Energy be in compliance with the air emission regulations if a coal**
6 **unit is not operated?**

7 A: Yes. All air emission requirements are based on establishing limits expressed either as
8 emission rates or quantities for regulated pollutants. Those limits are contained in the
9 facility permits. However, if a plant is not operating and has zero emissions, it would
10 clearly be in compliance with any air emission regulation.

11 **Q: Is MidAmerican Energy incurring expenses at Neal 3 and Neal 4 to control emissions?**

12 A: Yes. As noted in the direct testimony of MidAmerican witness Bill Whitney, operation of
13 the coal plants results in operation and maintenance expenses associated with operating the
14 emission control equipment.

15 **Q: Did MidAmerican Energy quantify the O&M expenses to operate the emission**
16 **controls at Neal 3 and Neal 4?**

17 A: Yes. MidAmerican Energy Confidential Exhibit 2 shows total O&M expenses to operate
18 the pollution controls at Neal 3 and Neal 4 for the years 2020, 2021, and 2022 to be
19 [REDACTED].

20 **Q: Are the Neal 3 and Neal 4 coal plants cost effective?**

21 A: No. As pointed out in the direct testimony of IEC witness David Posner, operation of Neal
22 3 and Neal 4 is not cost effective and the plants should be retired.

1 **Q: Do you have an example in Iowa of early retirement of coal being more cost effective**
2 **than continued operation?**

3 A: Yes. Interstate Power and Light (IPL) conducted an integrated resource planning process
4 in 2020. IPL analyzed its existing and future resource needs in a process that balanced
5 costs, environmental requirements, economic development potential, and the reliability of
6 the electric generation and transmission system. As a result of the process, IPL announced
7 on October 29, 2020, the closure of the Lansing coal plant and the addition of 400 Mw of
8 solar as a part of Alliant Energy’s Clean Energy Blueprint that will potentially save
9 customers more than \$300 million over the next 35 years.¹

10 **Q: Do you have other examples of it being more cost effective for a utility to retire a coal**
11 **facility than keep operating it?**

12 A: Yes. Many other utilities are required to analyze the same considerations as required in
13 Iowa’s Emission Plan and Budget statute– the utility’s existing and future resource needs,
14 balancing costs, environmental requirements, economic development potential, and the
15 reliability of the electric generation and transmission system. Because the considerations
16 are complex with interacting factors, in many cases this full analysis is handled by utilities
17 through an integrated resource planning process. Recently, many utilities engaging in
18 such analyses have concluded it is most cost effective to retire coal plants and replace
19 them with renewables and storage. As a part of the MidAmerican Wind XII proceeding
20 in RPU-2018-0003, Environmental Law & Policy Center and Iowa Environmental
21 Council witness Kerri Johannsen submitted direct testimony regarding Consumers
22 Energy, Xcel Energy, NV Energy, and PacifiCorp (Johannsen testimony, page 5 line 17

¹ [“Sun shines bright in Alliant Energy’s Iowa Clean Energy Blueprint,”](#) Alliant Energy, Oct. 29, 2020.

1 through page 7 line 16) where the integrated resource planning process resulted in the coal
2 plants being retired and replaced with renewables plus storage.

3 **Q: Is this an exhaustive list of utilities retiring coal plants and replacing them with**
4 **renewables and storage?**

5 A: No. Because renewables and storage are now the lowest cost generation, the utilities that
6 have done a comprehensive analysis of resource needs, costs, environmental
7 requirements, economic development, and reliability through an integrated resource
8 planning process are finding it more cost effective to retire their coal plants and replace
9 them with renewables and storage. Another example is the Northern Indiana Public
10 Service Company (NIPSCO), which used an integrated resource planning process in 2018.
11 The 2018 IRP² process included a formal request for proposal that shaped the plan. The
12 result is that NIPSCO is retiring the majority of its coal units no later than 2023, and all
13 coal units by 2028. It will replace them with solar, wind and storage.

14 **Q: Should the IUB approve the emission plan and budget as proposed by MidAmerican**
15 **Energy?**

16 A: No. Iowa code section 476.6(19)(a) calls for a multiyear plan and budget that manages the
17 “regulated emissions in a cost-effective manner.” The testimony of Environmental
18 Intervenor witness Posner provides evidence that Neal 3 and Neal 4 are not cost-effective
19 to operate. Therefore, the O&M expenditures to control the emissions certainly cannot be
20 deemed cost effective and should not be approved. In addition, the Board should direct

² 2018 IRP executive summary, NIPSCO, available at
<https://www.nipSCO.com/docs/librariesprovider11/rates-and-tariffs/irp/irp-executive-summary.pdf?sfvrsn=9>

1 MidAmerican to consider retiring the plants and replacing them with renewables using all
2 of the factors of the EPB statute in the consideration.

3 **Q: Is MidAmerican required to operate Neal 3 and Neal 4?**

4 A: No. Even if MidAmerican maintains Neal 3 and Neal 4 for purposes of accredited capacity,
5 they are not required to operate the plant unless called upon to meet a peak demand or for
6 accreditation demonstration purposes.

7 **Q: Would closing Neal 3 and Neal 4 cause capacity issues?**

8 A: No. As a part of the MidAmerican Wind XII proceeding in RPU-2018-0003, MidAmerican
9 witness Neal Hammer testified that the net reserve surplus for 2020-2021 would be 674
10 Mw (Hammer testimony, page 15, Table 3), while the total summer accredited capacity for
11 Neal 3 and Neal 4 is 638 Mw (Hammer testimony, page 11, Table 2). Even by 2024-2025,
12 MidAmerican shows a net reserve surplus of 467 Mw (Hammer testimony, page 15, Table
13 3). MidAmerican has multiple options and time to cover the shortfall in 2024-2025 of 171
14 Mw caused by closing Neal 3 and Neal 4. MidAmerican could address a future capacity
15 shortfall through market purchases or building its own generation that would comply with
16 emissions requirements. For example, because MISO currently accredits solar at 50%,
17 MidAmerican could build or purchase 342 Mw of solar to cover the future shortfall caused
18 by closing Neal 3 and Neal 4. If MidAmerican closed only Neal 3, there would be surplus
19 capacity until 2028-2029 without any additional resources (Hammer testimony, page 15,
20 Table 3).

21

1 **Q: What conclusions do you have regarding the proposed MidAmerican Energy**
2 **emission plan and budget?**

3 A: If Neal 3 and Neal 4 are closed or did not operate, they would be in compliance with air
4 emission regulations. Since Neal 3 and Neal 4 are not operating cost effectively, then any
5 emission control expenditures are not cost effective and the IUB should not approve the
6 O&M expenses for Neal 3 and Neal 4 included in MidAmerican Energy Confidential
7 Exhibit 2. In the alternative, the Board could direct MidAmerican to evaluate retiring the
8 plants and replacing them with renewables, considering all of the factors of the EPB statute.

9 **Q: Does this conclude your testimony?**

10 A: Yes.

AFFADAVIT OF STEVEN C. GUYER

STATE OF ILLINOIS)
COUNTY OF)
COOK

ss.

I, Steven C. Guyer, being first duly sworn on oath, state that I am the same Steven C. Guyer identified in the testimony being filed with this affidavit, that I have caused the testimony to be prepared and am familiar with its contents, and that the testimony is true and correct to the best of my knowledge and belief as of the date of this affidavit.

/s/ Steven C. Guyer
Steven C. Guyer

State of Illinois County of Cook
Subscribed and sworn before me the 17th day of December, 2020
By Steven C. Guyer

/s/ Elizabeth Praker
Notary Public in and for the
State of Illinois