

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF SOUTHERN INDIANA GAS AND)
ELECTRIC COMPANY d/b/a CENTERPOINT ENERGY)
INDIANA SOUTH (“CEI SOUTH”) FOR (1) ISSUANCE OF)
A CERTIFICATE OF PUBLIC CONVENIENCE AND)
NECESSITY PURSUANT TO IND. CODE CH. 8-1-8.5 FOR)
THE CONSTRUCTION OF TWO NATURAL GAS)
COMBUSTION TURBINES (“CTs”) PROVIDING)
APPROXIMATELY 460 MW OF BASELOAD CAPACITY)
 (“CT PROJECT”); (2) APPROVAL OF ASSOCIATED)
RATEMAKING AND ACCOUNTING TREATMENT FOR)
THE CT PROJECT; (3) ISSUANCE OF A CERTIFICATE)
OF PUBLIC CONVENIENCE AND NECESSITY)
PURSUANT TO IND. CODE CH. 8-1-8.4 FOR)
COMPLIANCE PROJECTS TO MEET FEDERALLY)
MANDATED REQUIREMENTS (“COMPLIANCE)
PROJECTS”); (4) AUTHORITY TO TIMELY RECOVER)
80% OF THE FEDERALLY MANDATED COSTS OF THE)
COMPLIANCE PROJECTS THROUGH CEI SOUTH’S)
ENVIRONMENTAL COST ADJUSTMENT MECHANISM)
 (“ECA”); (5) AUTHORITY TO CREATE REGULATORY)
ASSETS TO RECORD (A) 20% OF THE FEDERALLY)
MANDATED COSTS OF THE COMPLIANCE PROJECTS)
AND (B) POST-INSERVICE CARRYING CHARGES, BOTH)
DEBT AND EQUITY, AND DEFERRED DEPRECIATION)
ASSOCIATED WITH THE CT PROJECT AND)
COMPLIANCE PROJECTS UNTIL SUCH COSTS ARE)
REFLECTED IN RETAIL ELECTRIC RATES; (6) IN THE)
EVENT THE CPCN IS NOT GRANTED OR THE CTS)
OTHERWISE ARE NOT PLACED IN SERVICE,)
AUTHORITY TO DEFER, AS A REGULATORY ASSET,)
COSTS INCURRED IN PLANNING PETITIONER’S)
2019/2020 IRP AND PRESENTING THIS CASE FOR)
CONSIDERATION FOR FUTURE RECOVERY THROUGH)
RETAIL ELECTRIC RATES; (7) ONGOING REVIEW OF)
THE CT PROJECT; AND (8) AUTHORITY TO ESTABLISH)
DEPRECIATION RATES FOR THE CT PROJECT AND)
COMPLIANCE PROJECTS ALL UNDER IND. CODE §§ 8-)
1-2-6.7, 8-1-2-23, 8-1-8.4-1 ET SEQ., AND 8-1-8.5-1 ET SEQ.)

CAUSE NO. 45564

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

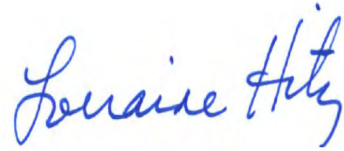
PUBLIC'S EXHIBIT NO. 3

PUBLIC (REDACTED) TESTIMONY OF OUCC WITNESS

CYNTHIA M. ARMSTRONG

NOVEMBER 19, 2021

Respectfully submitted,

A handwritten signature in blue ink that reads "Lorraine Hitz". The signature is written in a cursive style with a prominent initial "L".

Lorraine Hitz
Attorney No. 18006-29
Deputy Consumer Counselor

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**TESTIMONY OF OUCC WITNESS
CYNTHIA M. ARMSTRONG
CAUSE NO. 45564
SOUTHERN INDIANA GAS AND ELECTRIC COMPANY
D/B/A CENTERPOINT ENERGY INDIANA SOUTH**

I. INTRODUCTION

1 **Q: Please state your name and business address.**

2 A: My name is Cynthia M. Armstrong, and my business address is 115 W. Washington
3 St., Suite 1500 South, Indianapolis, IN, 46204.

4 **Q: By whom are you employed and in what capacity?**

5 A: I am employed as a Senior Utility Analyst in the Electric Division for the Indiana
6 Office of Utility Consumer Counselor (“OUCC”). A summary of my qualifications
7 can be found in Appendix A.

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

9 A: I provide input on environmental issues impacting the OUCC’s recommendation
10 the Indiana Utility Regulatory Commission (“Commission”) regarding CenterPoint
11 Energy Indiana South’s (“CEIS” or “Petitioner”) request in this Cause for:

12 1) a Certificate of Public Convenience and Necessity (“CPCN”) to construct
13 two combustion turbines (“CTs”) at the A.B. Brown Generating Plant
14 (“Brown” or “Brown Plant”);

15 2) a CPCN pursuant to Ind. Code ch. 8-1-8.4 (“Federally Mandated
16 Requirements statute”) for projects to comply with the Coal Combustion
17 Residuals (“CCR”) Rule;

18 and

19 3) a proposed Dry Fly Ash Project.

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1 I also provide analysis regarding the environmental impacts and requirements CEIS
2 will be obligated to comply with if the Commission approves the OUCC's
3 recommendation that CEIS retrofit the two Brown units to burn natural gas.

4 **Q: What are your ultimate recommendations?**

5 A: Based on CEIS' delayed compliance decisions, there is no U.S. Environmental
6 Protection Agency ("EPA") approval for CEIS' proposed CCR-compliant pond
7 projects at the Brown and F.B. Culley Generating Plants ("Culley" or "Culley
8 Plant"). In addition, CEIS' case presents inadequate cost estimates. I find CEIS did
9 not provide adequate support to recommend Commission approval at this time.
10 Therefore, I recommend the Commission deny these projects. If the Commission
11 approves the Pond projects, the OUCC alternatively recommends that the
12 Commission require CEIS to bear fifty percent of the cost of the ponds. I find CEIS'
13 proposed Dry Fly Ash Project to be reasonable and recommend Commission
14 approval. My testimony supports the positions offered by OUCC witnesses Peter
15 Boerger, Ph.D., Anthony A. Alvarez, and Kaleb Lantrip.

16 **Q: How did you evaluate issues presented in this Cause?**

17 A: I reviewed Petitioner's verified petition, pre-filed direct testimony, and responses
18 to the OUCC and other Intervenors' discovery requests relevant to the topics I
19 discuss. I also reviewed CEIS' (at that time "Vectren's") 2016 and 2020 Integrated
20 Resource Plans ("IRPs") and the OUCC's and other stakeholders' comments on
21 CEIS' 2020 IRP.

22 **Q: To the extent you do not address a specific item in your testimony, should it be**
23 **construed to mean you agree with Petitioner's proposals?**

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1 A: No. Exclusion of any topics, issues, or items Petitioner proposes does not indicate
2 my approval of these topics, issues, or items. Rather, the scope of my testimony is
3 limited to the specific topics discussed herein.

II. ENVIRONMENTAL COMPLIANCE PROJECTS

4 **Q: Please describe the environmental compliance projects CEIS requests in this**
5 **Cause.**

6 A: CEIS requests the Commission issue a CPCN under the Federally Mandated
7 Requirements (Ind. Code ch. 8-1-8.4, *et seq.*) statute for projects to comply with
8 the CCR Rule and its amendments. This includes constructing: 1) a new dry fly ash
9 loading facility to load and transport dry ash from CEIS' coal-fired generating
10 facilities for beneficial reuse ("Dry Ash Compliance Project"), 2) a small CCR-
11 compliant pond to handle bottom-ash wastewater from Culley Unit 2, and 3) a small
12 CCR-compliant pond at Brown to handle current coal pile runoff, FGD wastewater,
13 and other non-CCR wastewater streams.¹ CEIS refers to the latter two projects
14 collectively as the "Pond Compliance Project."

15 **Q: What do you recommend regarding the environmental compliance projects**
16 **CEIS requests in this proceeding?**

17 A: For the reasons I describe below, I recommend denying the Pond Compliance
18 Project.

19 1. CEIS has not yet received approval from the EPA that the proposed
20 Brown and Culley ponds will allow it to qualify for the extension to use

¹ Please note that for the purposes of this testimony, when I refer to the "Brown CCR Pond," I am referring to the new CCR pond CEIS requests in this Cause and not the existing Brown Ash Pond currently undergoing closure.

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1 the existing Brown Ash Pond until October 2023. The possibility that
2 the EPA will order CEIS to take other actions to meet these obligations
3 makes a Commission approval of these projects too speculative, despite
4 the fact that the deadline is approaching.

5 2. CEIS has not provided reasonably accurate cost estimates for the Brown
6 and Culley 2 CCR-Compliant ponds, nor has it accounted for the
7 associated closure costs in its estimates. Even absent additional EPA
8 approval-related changes, CEIS' project cost estimates are so imprecise
9 that they could double. CEIS has not met the Commission's standards
10 for requisite particularity with regard to cost estimates. Should the
11 Commission approve the Pond Compliance Projects, CEIS shareholders
12 should bear responsibility for one-half of the costs.

13 3. CEIS has not provided adequate evidence that continuing to operate
14 Brown Units 1 and 2 and Culley Unit 2 until October 2023 by
15 constructing the new CCR-compliant ponds is less costly than retiring
16 the units immediately.

17 I recommend denial of the Pond Compliance projects, but if the Commission
18 decides to approve them, I recommend that CEIS' shareholders be responsible for
19 fifty (50) percent of the costs. This recognizes that even though its CCR obligations
20 were known to be pending many years ago, CEIS unreasonably delayed decisions,
21 and has now submitted speculative cost estimates that could result in higher costs
22 for consumers.

Pond Compliance Project

1 **Q: What are the activities and associated costs for the new Brown CCR-compliant**
2 **pond CEIS requests in this proceeding?**

3 A: CEIS plans to construct a 10-acre CCR compliance pond that will divert a portion
4 of CCR waste streams from the existing pond.² CEIS will clean out and reconstruct
5 the current South Side Run-off Pond with a composite liner system and expand the
6 pond to the west by 4.2 acres. To make room for the new pond, the current mercury
7 removal wastewater treatment system must also be relocated or reconstructed to an
8 area adjacent to the proposed lined pond.³ The specific CCR waste the new pond
9 will hold is FGD wastewater.⁴ However, it will also hold non-CCR plant water
10 flows such as landfill leachate and runoff from storm water, the coal-pile, and
11 landfill, currently managed within the Brown Ash Pond.⁵ The proposed pond will
12 not handle bottom ash wastewater from Brown Units 1 and 2, as this waste stream
13 will continue to be sent to the existing Brown Ash Pond.⁶

14 **Q: What is CEIS' timeframe for construction and the cost CEIS projects for the**
15 **new pond?**

16 A: CEIS estimates the pond can be completed by July 1, 2023, at a cost of \$13 million.
17 This estimate is a Class 5 estimate⁷ which, according to the Association for the
18 Advancement of Cost Engineering ("AACE"), is a conceptual cost estimate with
19 an accuracy range of -20% to -50% on the low end and +30% to +100% on the high

² Direct Testimony of Wayne D. Games, p. 51, lines 27-29.

³ *Id.*, p. 53, lines 4-16. *See also*, OUCC Attachment CMA-1, pp. 16-17.

⁴ OUCC Attachment CMA-1, p. 32.

⁵ OUCC Attachment CMA-1, p. 16-17, and Games, p. 53, lines 8-11.

⁶ Games, p. 53, lines 12-14.

⁷ *Id.*, lines 20-23. Note this estimate is approximate, and the actual cost estimate is found in OUCC Attachment CMA-1, p. 19.

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1 end.⁸ Additionally, CEIS estimates the annual operation and maintenance
2 (“O&M”) costs associated with the pond at \$250,000.⁹

3 **Q: Did CEIS provide detailed cost support for its proposed projects in its case-in-**
4 **chief?**

5 A: No. CEIS did not provide detailed support for the Pond Compliance Project
6 estimate with its case-in-chief, and the OUCC recommends that CEIS provide
7 detailed cost support for all future projects for which it seeks Commission approval.
8 However, CEIS provided this information in response to the OUCC’s Data Request
9 2-7, which I include in OUCC Attachment CMA-1.¹⁰

10 **Q: What are the activities and associated costs for the Culley 2 CCR pond?**

11 A: CEIS plans to construct a two- to three-acre lined, CCR-compliant pond at the
12 Culley station to handle bottom ash wastewater from Culley 2.¹¹ CEIS also
13 indicates the pond could be used to store FGD wastewater from Culley 3 in the
14 event the wastewater treatment facility approved in Cause No. 45052 is delayed.¹²
15 CEIS indicates the pond could be completed by March 1, 2023, at a Class 5 cost
16 estimate of \$6 million.¹³ CEIS estimates annual O&M expenses associated with the
17 pond to be \$100,000.¹⁴

18 **Q: Why is CEIS requesting the Brown and Culley 2 CCR-compliant Ponds?**

⁸ AACE (2005). *AACE International Recommended Practice No. 18R-97. Cost Estimate Classification System—As Applied in Engineering, Procurement, & Construction for the Process Industries.* https://www.costengineering.eu/Downloads/articles/AACE_CLASSIFICATION_SYSTEM.pdf.

See also, OUCC Attachment CMA-1, p. 20.

⁹ Games, p. 53, lines 31-32.

¹⁰ OUCC Attachment CMA-1, pp. 14-19.

¹¹ Games p. 52, lines 6-8.

¹² OUCC Attachment CMA-1, pp. 24-25.

¹³ Games, p. 52, line 31. Please note this is an approximate estimate, and the actual estimate is found in OUCC Attachment CMA-1, p. 19.

¹⁴ Games, p. 53, lines 31-32.

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1 A: Mr. Games and CEIS witness Angila M. Retherford indicate Petitioner must pursue
2 the fastest technically-feasible option for alternative capacity to qualify for the
3 extension under the CCR Part A Reconsideration Rule, and the proposed Brown
4 and Culley 2 Ponds are the fastest technically-feasible options to provide storage
5 for the CCR wastes Brown Units 1 and 2 and Culley Unit 2 produce.¹⁵ If CEIS does
6 not construct this new pond, Culley will not be able to use the existing ash ponds
7 through October 2023 and must shut the units down immediately.¹⁶ Additionally,
8 the newest pond at Culley, which was approved in Cause No. 45052, cannot accept
9 Culley 2's bottom ash wastewater because it was not constructed to hold CCR
10 wastes.¹⁷

11 **Q: Does the OUCC agree with CEIS' assessment that the proposed Brown and**
12 **Culley 2 CCR-compliant ponds are necessary?**

13 A: No. The OUCC has multiple concerns regarding CEIS' CCR compliance strategy
14 for the Brown and Culley Plants. First, CEIS has not adequately shown continuing
15 to operate Brown Units 1 and 2 and Culley Unit 2 until October 2023 is the most
16 reasonable, least-cost option for meeting resource needs. Second, there is
17 significant uncertainty as to whether the new pond will allow Brown Units 1 and 2
18 and Culley Unit 2 to operate until October 2023 while complying with the CCR
19 Rule. Third, the cost estimates CEIS presents are preliminary and likely to increase
20 significantly as the project's design and construction are Class 5 estimates.

¹⁵ Games, p. 51 and Petitioner's Direct Testimony of Angila M. Retherford, pp. 6-9.

¹⁶ *Id.*

¹⁷ Games, p. 52, lines 17-27. A CCR-compliant pond requires a composite liner, and the new Culley contact storm water pond was not expected to hold CCR waste and does not have a composite liner.

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1 Therefore, I recommend the Commission deny these projects. Finally, CEIS'
2 estimates do not include the future costs to close the ponds.

3 **Q: CEIS provided its 2020 IRP and provided testimony regarding its preferred**
4 **resource portfolio in this case. Please explain how CEIS has not adequately**
5 **shown Brown Units 1 and 2 and Culley Units 2 are reasonable to continue**
6 **operating until October 2023.**

7 A: CEIS did not evaluate any resource portfolio where Brown Units 1 and 2 and Culley
8 Unit 2 were retired prior to 2023 in its 2020 IRP.¹⁸ The deadlines for triggering
9 closure of a CCR impoundment are before 2023. The CCR Part A Reconsideration
10 Rule requires all unlined CCR surface impoundments, CCR units showing
11 groundwater exceedances for multiple constituents, and CCR units failing the
12 aquifer location restriction to cease receiving CCR by April 11, 2021, unless a
13 source is seeking a compliance extension.¹⁹ The original 2015 CCR Rule required
14 CCR impoundments showing groundwater exceedances or failing the aquifer
15 location restriction to cease placing CCR and non-CCR waste streams in the
16 impoundment by no later than April 2018 or April 2019, respectively.²⁰ In the 2018
17 Phase 1, Part 1 Amendments to the 2015 CCR Rule, the EPA extended the date for
18 ceasing placement of CCR and non-CCR waste streams in surface impoundments
19 to October 31, 2020, for CCR impoundments failing to meet the aquifer location

¹⁸ Petitioner's Attachment MAR-1, Vectren's 2020 IRP, pp. 231-232. Please note that I refer to Vectren and CEIS interchangeably, even though the Company had not officially changed its name to CenterPoint at the time of releasing its 2020 IRP.

¹⁹ 85 Fed. Reg. 53561-53563.

²⁰ 80 Fed. Reg. 21467-21491. Under the original CCR Rule, an operator was required to determine that a surface impoundment met structural stability requirements by October 17, 2016, to complete groundwater sampling for background and downgradient wells and determine that there were no exceedances of groundwater standards for several constituents by October 17, 2017, and the surface impoundment was located at least five feet above the uppermost aquifer by October 17, 2018. If the surface impoundment failed the restrictions, it was required to cease sending CCR material and begin closure or retrofit within six months.

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1 restriction or impacting groundwater in excess of groundwater protection
2 standards.²¹ Without the ability to sluice, store, or dispose of CCR waste streams
3 in the ash ponds, Brown Units 1 and 2 and Culley Unit 2 cannot operate. CEIS'
4 position is that the only compliance option available for Brown Units 1 and 2 and
5 Culley Unit 2 are to construct the new CCR-compliant ponds,²² but an alternative
6 compliance option would have been to stop generating CCR and retire these units
7 by the April 11, 2021, deadline.²³ If CEIS had taken this option, it would have
8 avoided the requirement for CCR-compliant ponds. Further, CEIS can still revise
9 its site-specific alternative deadline applications and avoid constructing the CCR-
10 compliant ponds if it immediately retires the coal-fired generating units.²⁴

11 Ind. Code § 8-1-8.4-6(b)(1)(D) requires a utility to provide alternative plans
12 demonstrating the proposed compliance plan is reasonable and necessary. Without
13 an economic analysis comparing the costs of 2021 retirement dates for Brown Units
14 1 and 2 and Culley Unit 2 with the costs of continuing to operate these units until
15 2023, it is not possible to determine the reasonableness of CEIS' request for the
16 new ponds. CEIS' decision presents unreasonable risks to the ratepayers regarding
17 whether CEIS' pond proposal will be accepted and what the ultimate costs will be.

18 Until CEIS filed this case, the OUCC was unaware these ponds would be used for

²¹ 83 Fed. Reg. 36454-36455. The Phase 1, Part 1 Amendment also allowed the EPA or Participating State Permitting Authority to suspend groundwater monitoring requirements for up to 10 years if a CCR unit owner or operator showed there is no potential for migration for any of the monitored constituents to the uppermost aquifer during the active life of the CCR unit and the post-closure period. (83 Fed. Reg. 36452-36453)

²² OUCC Attachment CMA-1, pp. 3-5.

²³ The CCR Part A Reconsideration Rule was finalized August 28, 2020, (see 85 Fed. Reg. 53516) after CEIS/Vectren filed its 2020 IRP, but the CCR Phase 1, Part 1 Amendment Rule extending the deadline for the aquifer location restriction to October 31, 2020, was finalized July 30, 2018 (see 85 Fed. Reg. 36435).

²⁴ OUCC Attachment CMA-1, pp. 10-12, 24.

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1 holding CCR for only three months at Brown and six months at Culley prior to the
2 October 2023 cessation/retirement date.

3 CEIS should not presume the only pathway to compliance is to rely on its
4 own generation. Even though Brown Units 1 and 2 represent a significant amount
5 of CEIS' owned capacity, if it is possible to replace these resources over the short-
6 term with energy and capacity purchases, CEIS should explore that option.

7 **Q: Did the OUCC discuss CEIS' plan to comply with the CCR Rule in its**
8 **comments on CEIS' 2020 IRP?**

9 A: Yes. The OUCC recognized at the time of CEIS' 2020 IRP that changes to the CCR
10 and ELG Rules made during the Trump Administration were unlikely to extend the
11 lives of Brown Units 1 and 2 and Culley Unit 2 as coal-fired units past 2023. The
12 2020 IRP was not clear regarding how CEIS would be able to operate Brown Units
13 1 and 2 in compliance with the CCR Rule when the deadline for ceasing to send
14 CCR to the Brown Ash Pond was October 31, 2020.²⁵ The OUCC participated in a
15 teleconference with CEIS' environmental staff on September 9, 2020, to clarify
16 how Petitioner intended to comply with the CCR Rule after the cessation deadline.
17 CEIS' environmental staff indicated they were evaluating the possibility of
18 constructing the CCR-compliant pond.

19 **Q: Once the OUCC learned of CEIS' plan to comply with the CCR Rule by**
20 **constructing the ponds, why did the OUCC not address the ponds in its IRP**
21 **comments?**

²⁵ At the time Vectren filed its 2020 IRP, the cessation deadline was October 31, 2020, but the Final Part A Reconsideration Rule extending the cessation deadline to April 11, 2021, was published during the OUCC's review of the IRP.

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1 A: The OUCC did not know the complete details of CEIS' compliance plan until
2 Petitioner filed for relief in this case. The OUCC usually cannot obtain the level of
3 detail during the IRP review process that it receives in CPCN cases and is limited
4 to specific details and costs the utility provides during the IRP process. As the
5 OUCC stated in its comments regarding CEIS' 2020 IRP:

6 That said, the OUCC wishes to make clear, as it has in the past, that
7 IRPs are utility documents. The selection of a preferred portfolio is
8 not a democratic process arrived at by voting of stakeholders (which
9 itself would probably not be a good approach), rather it is a result
10 shaped by a myriad of choices a utility makes in preparing its
11 analysis and selecting its preferred portfolio. Even in a public IRP
12 process, the selection of input variables, modeling choices, and
13 weighting of resource characteristics in the selection of a preferred
14 portfolio all run the risk at arriving at a utility's predetermined plan,
15 rather than a plan that would result purely from the pursuit of the
16 public interest.

17 OUCC's Comment Regarding Vectren's 2020 IRP, p. 1.²⁶

18 As noted above, the OUCC was unaware these ponds would be used for holding
19 CCR for only three months at Brown²⁷ and six months at Culley²⁸ prior to the
20 October 2023 cessation/retirement date.

21 **Q: Why is there uncertainty surrounding CEIS' plan to construct the new CCR-**
22 **compliant pond to allow Brown Units 1 and 2 and Culley Unit 2 to operate**
23 **until October 2023?**

24 A: CEIS filed its compliance extension requests with the EPA for the Brown Plant on
25 November 25, 2020, and the Culley Plant on November 24, 2020.²⁹ However, as of
26 the filing date of this testimony, the EPA's Part A Implementation website states

²⁶ <https://www.in.gov/iurc/energy-division/electricity-industry/integrated-resource-plans/>.

²⁷ Games, p. 53, line 20.

²⁸ *Id.*, p. 52, line 31.

²⁹ EPA. CCR Part A Implementation website: <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-implementation>.

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1 CEIS' applications for Brown and Culley are still undergoing completeness
2 reviews.³⁰ Until the EPA finalizes its review of CEIS' extension request, there is
3 no certainty CEIS' plan to construct the new ponds will comply with the CCR Part
4 A Reconsideration Rule. Thus, the OUCC does not support approving CEIS'
5 request for the new ponds until there is more certainty from the EPA that it will
6 meet the CCR Part A Reconsideration Rule's compliance requirements.

7 ***Cost Concerns***

8 **Q: Please explain your concerns regarding the cost estimates for the Pond**
9 **Compliance Projects.**

10 A: CEIS' estimates for both the Brown and Culley 2 ponds are Class 5 estimates. Class
11 5 estimates are conceptual, with a wide accuracy range, and Mr. Games describes
12 these costs estimates as a very high-level estimate.³¹ The estimates CEIS provided
13 could increase by 30%-100%. Based on this range, the final costs could be as high
14 as ██████████ for the Brown Pond and ██████████
15 ██████████ for the Culley 2 Pond.³² Given the low capacity prices observed in
16 the MISO Zone 6 in recent years,³³ significant potential cost increases in the Pond
17 Compliance Project could impact the economics of constructing the new ponds and
18 allowing Brown Units 1 and 2 and Culley Unit 2 to continue operating until October
19 2023.

³⁰ *Id.*

³¹ Games, p. 52, lines 31-33 and p. 53, lines 1-2 and lines 20-24.

³² OUCC Attachment CMA-1, p. 19. Please note accuracy ranges represent the most likely final project cost at the estimate's classification. While unlikely, actual project costs could increase beyond the uppermost range of 100%.

³³ MISO Capacity Markets 2021/2022 Planning Resource Auction Results.
<https://cdn.misoenergy.org/PY21-22%20Planning%20Resource%20Auction%20Results541166.pdf>

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1 It is important for a utility to present accurate project cost estimates at the
2 time it first seeks project approval from the Commission. Cost deviations from the
3 final project amount could change the reasonableness of selecting that resource or
4 compliance option to meet customers' needs. If the true project costs are not known
5 upfront, CEIS may forego another option that would have possibly provided greater
6 customer benefits. However, once a project is approved, it is difficult to change
7 course and select a better option. Generally, when a utility seeks subsequent
8 approval regarding additional investment associated with a project, the issue
9 becomes the incremental investment's reasonableness instead of the entire project's
10 reasonableness. As project development proceeds, rejecting cost increases becomes
11 increasingly difficult.

12 Within the past 15 years, the OUCC and the Commission dealt with several
13 utility projects greatly exceeding their original estimates.³⁴ Utilities should not be
14 able to shift the risk of these cost overruns to customers. Utilities defended these
15 significant cost increases by maintaining they were due to unforeseen or
16 uncontrollable events such as increases in material prices. However, in my
17 experience reviewing these projects, these cost increases should have been expected
18 due to the utility providing conceptual, highly-variable Class 5 estimates at the time
19 it initially sought a CPCN for the projects. Because of their inherent unreliability,

³⁴ OUCC Attachment CMA-2, Summary of Utility Project Overruns.

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1 Class 5 estimates cannot be used to establish that the costs represent the most
2 reasonable alternative.

3 **Q: Please explain your concern with respect to the Pond Compliance Project's**
4 **future closure costs.**

5 A: CEIS has not included the costs to close the new CCR ponds in its project estimate
6 for the Pond Compliance Project.³⁵ It is important to consider closure costs when
7 deciding to construct a new CCR pond, as the CCR Rule has strict requirements on
8 how CCR surface impoundments must be closed. If the CCR impoundment is
9 closed in place, it must have a final cover system that minimizes infiltration in
10 compliance with the specific standards set forth in the rule.³⁶ CCR units closed in
11 place are also subjected to post-closure care requirements for at least 30 years after
12 closure of the CCR unit is complete.³⁷ If a CCR impoundment is closed through
13 removing CCR material, the CCR impoundment owner or operator must ensure
14 any areas affected by releases from the CCR unit are removed and groundwater
15 monitoring concentrations do not exceed groundwater protection standards.³⁸ The
16 costs of these closure requirements and post-closure care activities are significant.
17 While they are not incurred when the CCR ponds are constructed, they have the
18 potential to impact the economic analysis of choosing to construct the CCR pond.
19 In recent years, Indiana electric IOUs have spent - or will be spending - hundreds
20 of millions of dollars closing and remediating their ash ponds.³⁹ While the closure

³⁵ OUCC Attachment CMA-1, pp. 26-27.

³⁶ 40 C.F.R. §257.102(d).

³⁷ 40 C.F.R. §257.104.

³⁸ 40 C.F.R. §257.102(c).

³⁹ See Cause Nos. 45253, 45253 S1, and 45280. NIPSCO also provided estimated closure costs in its previous rate case, Cause No. 45159. See Cause No. 45159, Petitioner's Exhibit 12-E.

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1 costs associated with the proposed Brown and Culley 2 ponds will be less than the
2 costs associated with closing larger and older unlined ponds, these closure costs
3 could be significant enough to shift the results of the economic analysis to construct
4 the ponds and keep operating Brown 1 and 2 and Culley 2.

5 Additionally, the environmental liability of a new pond carries unknown
6 risks of additional remediation costs if the unit were to be compromised in any way
7 that releases material from the pond. The CCR Rule requirements for constructing
8 new surface impoundments reduce this risk, but the potential of incurring
9 remediation costs still exists.

10 *Timeline of CCR Rule Development*

11 **Q: If CEIS must continue developing the new Brown and Culley ponds while**
12 **waiting for the EPA to determine whether an extension request for the existing**
13 **ponds will be granted, should Petitioner be allowed to recover these**
14 **development costs?**

15 A: No, it is premature to determine whether these costs should be recovered.
16 Additionally, the OUCC finds CEIS should have revealed its full CCR compliance
17 strategy for the Brown and Culley Plants prior to this filing. While the CCR Rule
18 was amended several times since the original rule was finalized in 2015 due to
19 litigation and changes made during the previous Administration, it has been clear
20 for some time CEIS would need to eventually stop sending waste to the existing
21 ponds and close them. Since 2016, CEIS assumed Brown Units 1 and 2 and Culley
22 2 could delay compliance with the CCR Rule and ELGs until 2023 and avoid
23 installing bottom ash and FGD wastewater treatment facilities,⁴⁰ but CEIS' delay

⁴⁰ Vectren's 2016 IRP, pp. 204-219, and 2020 IRP, pp. 229-230.

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1 is now resulting in additional compliance costs. CEIS' delayed action is coupled
2 with the OUCC's earlier concern that CEIS did not evaluate a 2021 retirement date
3 for Brown Units 1 and 2 and Culley Unit 2. If CEIS failed to plan for alternative
4 compliance options and quickly respond to CCR Rule changes, the OUCC would
5 not support recovery of pond development costs.

6 With the exception of Indiana Michigan Power Company, all IOUs
7 presented plans for their existing facilities to continue operating in compliance with
8 the CCR Rule in the 2016-2018 timeframe.⁴¹ Duke Energy Indiana ("DEI"),
9 Indianapolis Power & Light ("IPL"), and Northern Indiana Public Service
10 Company ("NIPSCO") recognized their facilities were unlikely to meet the
11 structural stability requirements or aquifer location restrictions by the deadlines in
12 the original CCR Rule and any available compliance options would take more than
13 two years to implement. Due to the rapid compliance deadlines within the 2015
14 CCR Rule, DEI, IPL, and NIPSCO planned compliance strategies in advance of the
15 October 2016 structural stability assessment deadline,⁴² the October 2017 initial
16 groundwater sampling deadline,⁴³ and the October 2018 location restrictions
17 determination deadline⁴⁴ to ensure their generating facilities could continue
18 operating beyond the 2017-2019 timeframe. Since the 2015 ELG revisions required
19 existing units to stop discharging bottom ash transport water and install a closed-

⁴¹ See Cause Nos. 44765 (DEI), 44794 (IPL), and 44872 (NIPSCO).

⁴² 80 Fed. Reg. 21475-21477.

⁴³ 80 Fed. Reg. 21485.

⁴⁴ 80 Fed. Reg. 21471-21472.

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1 loop bottom ash wastewater handling system,⁴⁵ DEI, IPL, and NIPSCO's CCR
2 Compliance Plans included strategies to also comply with the updated ELGs.

3 **Q: Previously you mentioned changes to the original 2015 CCR Rule. Were these**
4 **changes significant enough to change CEIS' expectations regarding continued**
5 **operation of the Brown and Culley ponds until 2023?**

6 A: While the Part A Reconsideration Rule significantly changed the Alternative
7 Closure Requirements set forth in 40 C.F.R. §257.103 from the original 2015 Rule,
8 there was some ambiguity in the 2015 CCR as to a unit's ability to qualify for the
9 date-certain boiler cessation provisions without having to make additional
10 investments in disposal capacity. The original Alternative Closure Requirements
11 allowed a source to continue operating past the cessation deadline as long as: 1) the
12 operator could show there was no alternative disposal capacity and 2) the
13 generating unit and the ash pond were closed by 2028 (for ash ponds 40 acres or
14 greater).⁴⁶ However, the operator was required to make efforts to obtain alternative
15 disposal capacity, and increases in operating costs or the inconvenience of
16 obtaining such disposal capacity were not sufficient to support the "no alternative
17 disposal capacity" qualification.⁴⁷ In the cases I evaluated and testified in regarding
18 utility compliance plans in the 2016-2017 timeframe,⁴⁸ other Indiana utilities were
19 reluctant to make use of the Alternative Closure Requirements, as they were not
20 certain if the costs to continue to obtain or develop additional capacity would result

⁴⁵ 80 Fed. Reg. 67896.

⁴⁶ 80 Fed. Reg. 21495.

⁴⁷ *Id.*

⁴⁸ Cause Nos. 44765, 44794, and 44872. Although I did not testify in Cause No. 44765 because the OUCC settled the case prior to filing direct testimony, I evaluated DEI's compliance plan and provided internal advice to other OUCC staff involved in settlement negotiations.

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1 in actual cost savings. In comparing the rules, it seems the Part A Reconsideration
2 Rule provides more clarity as to what actions the EPA considers necessary for a
3 utility to demonstrate a CCR unit has no alternative disposal capacity.

4 **Q: What do you recommend regarding the environmental compliance projects**
5 **CEIS requests in this proceeding?**

6 A: For the reasons I describe above, I recommend denying the Pond Compliance
7 Project. CEIS has not provided adequate evidence that continuing to operate Brown
8 Units 1 and 2 and Culley Unit 2 until October 2023 by constructing the new CCR-
9 compliant ponds is less costly than retiring the units immediately. Furthermore,
10 CEIS has not yet received approval from the EPA that the proposed Brown and
11 Culley ponds will allow it to qualify for the extension to use the existing Brown
12 Ash Pond until October 2023. Finally, CEIS has not provided reasonably accurate
13 cost estimates for the Brown and Culley 2 CCR-Compliant ponds, nor has it
14 accounted for the associated closure costs in its estimates.

15 **Q: If the Commission approves the Pond Compliance Projects, what is your**
16 **recommendation regarding CEIS being responsible for fifty percent of the**
17 **costs?**

18 A: If the Commission approves the Pond Compliance Projects, the OUCC
19 recommends that CEIS shareholders be responsible for fifty percent of the costs.
20 The OUCC's recommendation is based on the current uncertainty of EPA approval
21 because of CEIS' delayed compliance decisions; the failure to analyze alternatives;
22 and the unreliable nature of the Class 5 estimate, which places the risk of cost
23 overruns on customers. Through these actions, CEIS has unreasonably increased

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1 the risk to its customers and failed to consider cost effective alternatives, and should
2 therefore assume some of the costs.

Dry Ash Compliance Project

3 **Q: What equipment does the Dry Ash Compliance Project entail?**

4 A: The Dry Ash Compliance Project involves constructing a silo to accept dry fly ash
5 from CEIS' coal-fired generating units and a barge loading facility to load ash on
6 barges to send downriver to CEIS' ash customer. The project will be constructed at
7 the Archer Daniels Midland site located on the Ohio River in Evansville, Indiana.⁴⁹
8 CEIS estimates the Dry Ash Compliance Project will cost \$12 million,⁵⁰ which it
9 states is a Class 3 estimate.⁵¹

10 **Q: What is CEIS' reason for requesting the Dry Ash Compliance Project?**

11 A: As part of the Brown Ash Pond Closure project approved in Cause No. 45280, the
12 conveyor system for the current ash barge loading facility at the Brown site has
13 been converted to handle ponded ash for beneficial reuse. Due to this conversion,
14 CEIS can no longer transport or load dry fly ash on barges as it has in the past.⁵²
15 Currently, CEIS is either trucking fly ash to Missouri to deliver to the CEIS ash
16 customer or to a coal mine for beneficial reuse or disposal.⁵³ While currently legal,
17 the option to deposit fly ash in coal mines could be impacted by future

⁴⁹ Games, p. 44, lines 5-12.

⁵⁰ *Id.*, p. 45, lines 13-14.

⁵¹ OUCC Attachment CMA-1, p. 42.

⁵² Games, p. 44, lines 19-25.

⁵³ *Id.*, p. 50, lines 15-18.

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1 environmental rule changes,⁵⁴ weather-related restrictions, and mine bankruptcy.⁵⁵

2 The other options CEIS considered for future fly ash disposal were either not

3 possible, more expensive, or riskier to implement over a longer period.

4 Constructing the Dry Ash Compliance Project allows for a long-term, consistent

5 manner for handling dry ash that mitigates future environmental liabilities

6 associated with disposal.⁵⁶

7 **Q: Does the OUCC object to CEIS' request for the Dry Ash Compliance Project?**

8 A: No. CEIS appears to have considered multiple options for continued dry fly ash

9 disposal. Even though many of CEIS' coal-fired units are expected to retire within

10 the next three years, Culley Unit 3 is still expected to operate past 2024. Therefore,

11 CEIS has a long-term need to dispose of fly ash. While it was not the least cost

12 option that CEIS considered, the proposed Dry Ash Compliance Project is

13 preferable because it does not carry the same risks of future availability and

14 environmental liability that the coal mine and landfill disposal options present.

III. ENVIRONMENTAL CONSIDERATIONS FOR GENERATION REPLACEMENT OF BROWN UNITS 1 AND 2

15 **Q: CEIS indicates it is not economic to continue operating Brown Units 1 and 2**
16 **as coal-fired generation past 2023 due to numerous retrofits necessary for**
17 **future environmental compliance. Do you agree with CEIS' environmental**
18 **compliance assumptions regarding operating Brown Units 1 and 2 beyond**
19 **2023?**

⁵⁴ The U.S. Department of Interior's ("DOI") Office of Surface Mining Reclamation and Enforcement ("OSM") issued an advance notice of proposed rulemaking ("ANOPR") in March 2007 announcing its intention to propose regulations on placing CCRs in active surface mines or abandoned mines. (72 Fed. Reg. 12026-12030) OSM has not yet acted further on this potential rulemaking, but the 2015 CCR Rule mentioned OSM would address CCR management in mines in a separate regulatory action. (80 Fed. Reg. 21341)

⁵⁵ Games, p. 47.

⁵⁶ *Id.*, pp. 47-49.

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1 A: Yes. CEIS' assumptions for environmental equipment necessary to comply with
2 the CCR Rule and the Electric Steam Generation Effluent Limitation Guidelines
3 ("ELGs") beyond 2023 are consistent with other Indiana electric investor-owned
4 utilities' ("IOU") compliance costs. Additionally, CEIS is concerned about the age
5 of the current Flue Gas Desulfurization systems ("FGDs") installed on Brown Units
6 1 and 2 and expects the FGDs would need replaced to continue operating past 2024.
7 New FGDs will cost hundreds of millions of dollars and create additional
8 wastewater treatment and waste disposal issues for the plant.⁵⁷

9 Regarding the Affordable Clean Energy ("ACE") Rule, CEIS' assumed
10 compliance costs for the ACE Rule are no longer applicable. The ACE Rule was
11 vacated earlier this year, and the U.S. Environmental Protection Agency's ("EPA")
12 Administrator issued a memo indicating the agency did not intend to reinstate the
13 Clean Power Plan at this time.⁵⁸ ACE Rule costs were not as significant for Brown
14 Units 1 and 2 as other anticipated environmental compliance costs. The costs and
15 timing of complying with the CCR and ELG rules and expected replacement of the
16 FGDs are driving the retirement decision for Brown Units 1 and 2.

17 While the OUCC agrees continuing to operate Brown Units 1 and 2 as coal-
18 fired generating units past 2023 is not a viable option, as Dr. Boerger and Mr.
19 Alvarez discuss, the OUCC recommends converting Brown Units 1 and 2 to operate

⁵⁷ Petitioner's Exhibit No. 5 (Confidential), Attachment MAR-2, pp. 209-210, 2887-2992.

⁵⁸ https://www.epa.gov/sites/default/files/2021-02/documents/ace_letter_021121.doc_signed.pdf.

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1 on natural gas as a feasible generation option that could result in lower costs for
2 ratepayers.

3 **Q: What are the environmental benefits of switching from coal-fired generation**
4 **to natural gas generation?**

5 A: Natural gas generation emits far less sulfur dioxide (“SO₂”), nitrogen oxide
6 (“NO_x”), particulate matter, and CO₂ than coal-fired generation. Additionally,
7 burning natural gas generates significantly less quantities of waste and wastewater
8 compared to burning coal.

9 **Q: Is there any benefit in constructing the CTs at the Brown Plant?**

10 A: Yes. Since CEIS would construct the CTs at the Brown Plant at the same time it
11 retires Brown Units 1 and 2, Petitioner would be able to take advantage of emissions
12 netting when applying for the Brown CTs’ air permits. This would allow
13 construction of the CTs to avoid Prevention of Significant Deterioration (“PSD”)
14 applicability, which results in a more complicated permitting process that can result
15 in additional operating limits for the units. According to CEIS witness Wayne
16 Games, CEIS’ consultants project the CTs can operate ██████████
17 ██████████ without exceeding anticipated
18 air permit limits.⁵⁹

19 **Q: Would gas conversion of Brown Units 1 and 2 also be able to take advantage**
20 **of and benefit from emissions netting?**

21 A: Yes. ██████████
22 ██████████

⁵⁹ Petitioner’s Confidential Direct Testimony of Wayne D. Games, p. 31, lines 29-33, through p. 32, lines 1-3.

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1 A: No. Consistent with Commission practice, the OUCC expects the opportunity to
2 review and respond to CEIS' analysis in testimony. Given the concerns Dr. Boerger
3 and Mr. Alvarez raise regarding CEIS' analysis for the CTs, the OUCC may have
4 concerns with any updated analysis. I also note CEIS assumes capacity prices much
5 higher than MISO's historical PRM Auction prices.⁶⁴

6 I recommend approving the Dry Ash Compliance Project at a cost of \$12
7 million. CEIS will have a continued need to dispose of fly ash generated from its
8 coal-fired units for the foreseeable future. Additionally, Petitioner presented a more
9 reliable Class 3 cost estimate for the Dry Ash Compliance Project; therefore, unlike
10 the Pond Compliance Project, the project is not as likely to experience substantial
11 increases from the initial cost estimate.

IV. RECOMMENDATIONS

12 **Q: What do you recommend in this proceeding?**

13 A: I recommend:

- 14 1. The Commission deny CEIS' request for a CPCN under Ind. Code ch. 8-1-8.4
15 for the Pond Compliance Project, which totals approximately \$19 million (\$13
16 million at the Brown Plant and \$6 million at the Culley Plant);
- 17 2. If the Commission approves the Pond Compliance Project, require CEIS
18 shareholders to cover fifty percent (50%) of the costs;
- 19 3. The Commission approve CEIS' requested CPCN under Ind. Code ch. 8-1-8.4
20 for the Dry Ash Compliance Project for \$12 million; and

⁶⁴ OUCC Attachment CMA-1, p. 28.

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1 4. If CEIS presents an economic analysis in its rebuttal testimony showing retiring
2 Brown Units 1 and 2 and Culley Units 2 in 2021 is more expensive than
3 continuing to operate these units until October 2023, the OUCC requests it and
4 other Intervenors be provided an opportunity to review and respond to any such
5 study in subsequent testimony and that the Commission adjust the procedural
6 schedule to allow for full consideration of the issues.

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

8 **A: Yes.**

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APPENDIX A

1 **Q: Summarize your professional background and experience.**

2 A: I graduated from the University of Evansville in 2004 with a Bachelor of Science
3 degree in Environmental Administration. I graduated from Indiana University,
4 Bloomington in May 2007 with a Master of Public Affairs degree and a Master of
5 Science degree in Environmental Science. I have also completed internships with
6 the Environmental Affairs Department at Vectren in the spring of 2004, with the
7 U.S. Environmental Protection Agency in the summer of 2005, and with the U.S.
8 Department of the Interior in the summer of 2006. During my final year at Indiana
9 University, I served as a research and teaching assistant for a Capstone course
10 offered at the School of Public and Environmental Affairs. I have been employed
11 by the OUCC since May 2007. I have completed my initial 40-hour OSHA
12 Hazardous Operations and Emergency Response (“HAZWOPER”) Certification
13 training and have attended three 8-hour refresher courses. Due to COVID-19
14 restrictions, I have been unable to complete the annual 8-hour HAZWOPER
15 refresher course in the past year, but once I am able to do so, I will maintain this
16 certification. As part of my continuing education at the OUCC, I have attended
17 both weeks of the National Association of Regulatory Utility Commissioners’
18 (“NARUC”) seminar in East Lansing, Michigan, the Indiana Chamber of
19 Commerce’s (“COC”) Environmental Permitting Conference, and the COC’s
20 Indiana Environmental Conference annually.

21 **Q: Describe some of your duties at the OUCC.**

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1 A: I review and analyze utilities' requests and file recommendations on behalf of
2 consumers in utility proceedings. Depending on the case at hand, my duties may
3 also include analyzing state and federal regulations, evaluating rate design and
4 tariffs, examining books and records, inspecting facilities, and preparing various
5 studies. Since my expertise lies in environmental science and policy, I assist in
6 many cases where environmental compliance is an issue.

7 **Q: Have you previously provided testimony to the Indiana Utility Regulatory**
8 **Commission ("Commission")?**

9 A: Yes. I have provided testimony in more than 100 proceedings during my
10 employment with the OUCC.

1-1. Please describe how the Brown Generating facility is continuing to operate the ash pond past the cessation deadline of April 11, 2021, without the CCR compliance projects in this case.

Response:

Petitioner filed a timely application for a site specific alternative deadline under Section 257.103(f) of the CCR Part A Rule revision. Petitioner's application is still pending review by EPA. In discussions between EPA and industry with respect to implementation of the CCR Part A Rule revisions, EPA indicated that it expects utilities filing site specific alternative deadline applications to proceed with activities outlined in the applications during the pendency of EPA's review.

1-2. Will CenterPoint incur any penalties or be liable for continuing to operate the Brown ash pond after April 11, 2021? Please explain.

Response:

Petitioner is not anticipating civil penalties since, as noted in Petitioner's response to 45564 OUCC DR1-1, Petitioner filed a timely application for a site specific alternative deadline under the CCR Part A Rule revision for the A.B. Brown ash pond. In discussions between EPA and industry, EPA has indicated that in the event that EPA issues a final decision denying a utility's application for an alternative timeline, EPA would then work with the utility to finalize a Consent Order setting out a compliance schedule.

1-3. Has CenterPoint considered retiring Brown Units 1 and 2 earlier than July 2023 to avoid constructing the CCR compliant ash pond? Please explain.

Response:

Under the CCR Part A Rule revision, the only provision that would allow Petitioner to take into consideration retirement plans is the *Permanent cessation of a coal-fired boiler(s) by a date certain* provision in Section 257.103(f)(2). In order to take advantage of this provision and potentially avoid the need to construct the proposed CCR compliant ash pond, Petitioner would need to cease operation and complete closure of the existing (150 acre) ash pond no later than October 2028. Even if Petitioner ceased operation of the A.B. Brown units today and commenced closure activities, Petitioner would be unable to complete all closure activities by October 2028 under its current beneficial reuse and removal plan for the existing ash pond (approved in Cause No. 45280).

1-4. Would retiring Brown Units 1 and 2 before July 2023 and seeking a shorter extension to coincide with this retirement date allow CenterPoint to avoid constructing the CCR compliant pond while still meeting the “no alternative capacity” requirements Ms. Retherford discusses on p. 7 of her Direct testimony? Please explain.

Response:

No, Petitioner would still need a new compliance pond for stormwater runoff from the new CTs and for the collection of leachate from the existing landfill. See Petitioner’s Response to 45564 OUCC DR 1-3.

1-5. Has CenterPoint conducted an economic analysis which retires A.B. Brown Units 1 and 2 before 2023?
If so, please provide the study and its results.

Response:

No. As described in Section 8 (Portfolio Development and Evaluation) of Petitioner's Exhibit No. 5, Attachment MAR-1, portfolios were developed through a stakeholder process. No portfolios considered retiring A.B. Brown Units 1 and 2 before the end of 2023 were developed or studied. In addition, earlier retirement of the A.B. Brown Units 1 and 2 would not eliminate the need for the CCR-compliant ash pond. See Petitioner's Responses to 45564 OUCC DR 1-3 and 1-4.

1-6. Does CenterPoint expect to retire Brown Units 1 and 2 by the end of May 2023 to better align with the beginning of the MISO PRM planning year? Please explain.

Response:

No. All indications from MISO are that they will implement a seasonal capacity market that will include up to four (4) separate capacity seasons. To limit the amount of capacity purchased as well as energy purchased from the MISO market, Petitioner currently plans to operate the Brown units until the last day permitted by environmental regulations (October 15, 2023).

1-7. Would there be any difference in the cost of constructing a pond to hold only non-CCR wastewater streams in comparison to a CCR-compliant pond to hold both CCR and non-CCR wastewater streams? Please explain and provide the difference in cost, if any.

Response:

Petitioner would need to complete additional engineering to identify a difference, if any, if a pond was designed to hold only non-CCR wastewater. However, it is highly unlikely that Petitioner would seek to not line a future process water pond under IDEM's surface impoundment rules.

1-8. Has CenterPoint evaluated the possibility of constructing a pond to hold non-CCR wastewater streams at the Brown Generating plant and retiring Brown Units 1 and 2 earlier than 2023 to stop generating the CCR waste streams driving the need for the CCR-compliant pond at Brown? Please explain and provide any relevant studies exploring this possibility.

Response:

See discussion of how the existing ash pond at A.B. Brown would not qualify for early retirement options under the CCR Part A Rule revision in Petitioner's response to 45564 OUCC DR 1-3. Moreover, it is highly unlikely that Petitioner would seek to not line a future process water pond under IDEM's surface water impoundment rules, even if it was not designed to hold CCR waste streams.

1-10. Please explain if it is possible to modify Culley Unit 2 bottom ash transport system to tie into the Culley 3 equipment Vectren/CenterPoint received approval for in Cause No. 45052. Please provide supporting documents and the associated cost to complete such a project.

Response:

No, it is not possible. That option is discussed in Petitioner's CCR Part A site specific alternative deadline application for the Culley east pond, which can be found at https://midwest.centerpointenergy.com/assets/downloads/planning/ccr/Culley-East-Site-Specific-Alternative-to-Initiate-Closure_FINAL.pdf.

1-12. Would retiring Culley 2 before March 2023 avoid the need to construct a CCR-compliant pond for Culley Unit 2? Please explain.

Response:

If Petitioner were to revise its site specific alternative deadline application for the Culley east pond and immediately retire Culley Unit 2, Petitioner could avoid the need to construct the CCR-compliance pond. However, the decision must be viewed in conjunction with the resulting impact to Petitioner's capacity reserve as well as other operational considerations as they relate to environmental regulations.

1-13. Has CenterPoint considered retiring Culley Unit 2 earlier than March 2023 to avoid constructing the CCR compliant ash pond? Please explain.

Response:

See Petitioner's response to 45564 OUCG DR 1-12.

Original Information Requested:

1-13 Has CenterPoint considered retiring Culley Unit 2 earlier than March 2023 to avoid constructing the CCR compliant ash pond? Please explain.

Original Response:

See Petitioner's response to 45564 OUCC DR 1-12

Supplemental Information Requested (per e-mail from Jason Haas dated 8/27/2021):

For 1-13, we were wondering why CenterPoint couldn't provide a response for 1-13 like the one provided for 1-3, which is the same question except referring to Brown Units 1 and 2. However, if CenterPoint is still unable to provide a response to question as written with the qualifier "to avoid constructing the CCR compliant ash pond," can CenterPoint respond to the question without the qualifier?

Supplemental Response:

The considerations provided in the permanent cessation of a coal-fired boiler provision, as noted in CEIS's response to 1-3, do not apply to the retirement of Culley Unit 2, even though the unit is identified for retirement. The CCR compliant ash pond is still needed to handle wastewater from the scrubber that would continue to serve Culley Unit 3 through the completion of the wastewater treatment upgrades. Additionally, the decision must be viewed in conjunction with the resulting impact to Petitioner's capacity reserve as well as other operational considerations as they relate to environmental regulations.

- 1-14. Page 10, lines 21-23 of Ms. Retherford's Direct testimony states that CenterPoint is reviewing the option to continue to operate Culley Unit 2 through December 2025.
- a) Is there a deadline by which CenterPoint would have to make such a decision for continuing to operate Culley Unit 2? If so, what is this deadline?
 - b) For planning purposes, does CenterPoint consider it likely that it would be given the full extension until December 2025 for Culley 2 to comply with the ELGs or shut down, or would it be more likely that it would be given a shorter extension? Please explain and provide all analyses showing CenterPoint's consideration of this question.
 - c) Has CenterPoint discussed the possibility of an extension with the Indiana Department of Environmental Management (IDEM)? Please provide any details of such a discussion.
 - d) Has CenterPoint conducted an economic analysis of continuing to operate Culley Unit 2 until 2025 instead of retiring it in 2023? Please provide any such analysis.

Response:

- a) Currently the NPDES permit requires that Petitioner cease disposal of bottom ash transport water by December 31, 2023. Should Petitioner decide to continue to operate Culley 2 beyond the current December 2023 permit deadline, Petitioner would seek a permit modification to incorporate the new deadline provided in the ELG Reconsideration rule for bottom ash transport water.
- b) Petitioner has not yet sought to modify the NPDES permit for Culley 2, and has not initiated a discussion with IDEM. However, IDEM has previously agreed to modify permit terms to incorporate earlier revisions to the ELG regulations.
- c) Please see Petitioner's response to 45564 OUCC DR 1-14(b) above.
- d) Please see Petitioner's response to 45564 CAC DR 3-05.

“Excluded from public access per A.R. 9(G).”

“Excluded from public access per A.R. 9(G).”

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8-1. Please refer to CEIS's Supplemental Response to OUCC Data Request 1-13. CEIS states, "The CCR compliant ash pond is still needed to handle wastewater from the scrubber that would continue to serve Culley Unit 3 through the completion of the wastewater treatment upgrades."

- a) Is the CCR-compliant ash pond that CEIS describes above in its supplemental response referring to the lined process water and storm-retention pond that it received approval for in Cause No. 45052? Please explain.
- b) CEIS's response to OUCC Data Request 1-12 states, "If Petitioner were to revise its site specific alternative deadline application of the Culley east pond and immediately retire Culley Unit 2, Petitioner could avoid the need to construct the CCR-compliance pond." This statement seems contradictory to CEIS's Supplemental Response to OUCC DR 1-13. Please offer an explanation to reconcile these statements.
- c) Will the new CCR-compliant ash pond at Culley that CEIS specifically requests in this proceeding serve Culley Unit 3 in any capacity? Please explain.
- d) Is it CEIS's position that without the new CCR-compliant ash pond at Culley, Culley Unit 3 would no longer be able to continue operating? Please explain.
- e) Why is the CCR-compliant ash pond necessary to handle the wastewater from the scrubber through the completion of the wastewater treatment upgrades? Why was this not included in CEIS's/Vectren's compliance plan presented in Cause No. 45052?
- f) Has the schedule for the wastewater treatment upgrades been delayed? Please explain.
- g) If the schedule for the wastewater treatment upgrades has been delayed, how long has it been delayed for? Please provide an updated schedule.
- h) If the schedule for the wastewater treatment upgrades has been delayed, is this delay driving the need for the new CCR-compliant ash pond at Culley CEIS requests in this proceeding? Please explain.
- i) If the schedule for the wastewater treatment upgrades has been delayed, is there an impact on the cost of completing the project due to this delay? If so, please quantify this impact and indicate if it increases the total estimated project cost to an amount greater than the approved cost estimate in Cause No. 45052.

Response:

- a) No. The lined process water and storm-retention pond that was approved in Cause No. 45052 is not a CCR-compliant pond. It was not intended to receive CCR materials. The CCR-compliant ash pond that is described in the Supplemental Response to OUCC DR 1-13 is the pond that will be constructed in accordance with the federal CCR rule standards for new CCR surface impoundments (ponds); and is being constructed in accordance with the CCR Part A Rule requirements and the corresponding demonstration submitted to USEPA in order to request continued use of the existing East Ash Pond for the receipt of CCR materials past April 11, 2021 and until such time that the new lined CCR pond can be constructed and operational.
- b) If Petitioner were to retire Culley 2 earlier than March 2023 (the anticipated in-service date for the zero liquid discharge system for Culley 3), Petitioner would not need the pond assuming Petitioner were able to meet the March 2023 completion date in its application for the zero liquid discharge. If not, for instance due to COVID supply constraints, we would need the proposed pond for the interim.
- c) The current plan and schedule is for the new CCR-compliant pond at Culley and the FGD wastewater spray dryer evaporator zero liquid discharge system to both be constructed and operational by March 1, 2023. In the event of construction, installation, or commissioning

delays for the zero liquid discharge system, the new CCR-compliant pond at Culley could serve Culley Unit 3 in the event Petitioner is unable to continue utilizing the EAsh Pond for that CCR material; however such would have to be taken into consideration for the design of the pond to insure the appropriate infrastructure and capacity is factored into the design. Design work for the pond is currently underway.

- d) Please see Petitioner's Response to OUCC DR 8-1c which explained "the CCR-complaint pond could serve Culley Unit 3 in the even Petitioner is unable to continue utilizing the East Ash Pond for [] CCR material". In other words, the CCR-compliant pond would only be necessary for Culley Unit 3's continued operation in the event the upgrades approved in Cause No. 45052 were not installed by March 1, 2023.
- e) The CCR-compliant pond is not necessary to handle wastewater from the Culley 3 scrubber, provided the upgrades approved in Cause No. 45052 are installed by March 1, 2023. The CCR-compliant ash pond was not included in Cause No. 45052 because the CCR-compliant ash pond is being constructed as a result of the CCR Part A Rule and the determination of compliance options under the requirements of that Rule, which came after Cause No. 45052.
- f) No. The work and schedule are proceeding.
- g) N/A
- h) N/A
- i) N/A

8-3. Has CenterPoint estimated the cost of closing the new ash impoundments it seeks approval for in this Cause at the Brown and Culley generating stations? If so, please provide the estimated costs of closure for each impoundment and any supporting documentation for these estimates.

Response:

No. The design of the ponds are not yet complete, therefore Petitioner does not yet have an estimate for the closure costs.

8-4. Did CenterPoint include the costs of closing the new surface impoundments it requests in this Cause in its economic analysis of continuing to operate Culley Unit 2 and Brown Units 1 and 2 until 2023? If not, please explain why not.

Response:

Please see Petitioner's Response to 45564 OUCG DR 8-3 (above) – as explained, Petitioner has not yet completed the design, and until the designs for the ponds are fully complete, Petitioner cannot estimate the costs for closure.

“Excluded from public access per A.R. 9(G).”

8-6. Please refer to CEIS's Response to OUCC Data Request 1-6.

- a) The Mid-Continent Independent System Operator (MISO) has announced that it will delay its filing for the planned seasonal capacity market with the Federal Energy Regulatory Commission (FERC) until December 1, 2021, to allow stakeholders to become more comfortable with MISO's proposal. If this filing delay results in the seasonal capacity construct's implementation being delayed after the 2023/2024 planning year, will this impact CEIS's decision to continue operating A.B. Brown Units 1 and 2 until October 15, 2023? Please explain.
- b) Without implementation of the seasonal capacity construct, is it still possible for CEIS to only offer Brown Units 1 and 2 for part of the planning year under current MISO rules? Please explain.

Response:

- a) Delay of the seasonal capacity construct beyond 2023/2024 planning year does not impact Petitioner's decision to operate the A.B. Brown units until October 15th, 2023. Petitioner will not offer the A.B. Brown units in to the 2023/2024 capacity planning year - please see Petitioner's Response to 45564 OUCC DR 8-6.b. Even though the units would not receive capacity credit for 2023/2024, they would be offered into the energy market until retirement.
- b) A Market Participant can choose to participate with a resource that is retiring: however, they are required by MISO tariff to replace any cleared ZRCs from that resource for the balance of the planning year. For that reason, under the current annual construct, retiring units do not typically participate in the planning resource auction.

8-7. In Cause No. 45280, Vectren witness David M. Bowler explained the smaller ash impoundment that will be constructed toward the end of the Brown Ash Pond Closure Project would obtain a 3.33% depreciation rate. (Cause No. 45280, Final Order (Approved May 13, 2020), p. 8).

- a) Please confirm that this smaller ash impoundment Mr. Bowler refers to in Cause No. 45280 is not the same CCR-compliant ash impoundment CEIS requests in this Cause. If CEIS cannot confirm this, please explain.
- b) If the smaller ash impoundment referred to in Cause No. 45280 is the same CCR-compliant ash impoundment CEIS requests in this Cause, please explain why CEIS requests approval for this pond in this proceeding if it already received approval for the pond in Cause No. 45280.

Response:

- a) Petitioner confirms that the impoundment in Cause No. 45280 is not the same as the CCR-compliant ash pond requested in this Cause.
- b) Please refer to Petitioner's Response to 45564 OUCG 8-7.a.

8-8. Are there any additional CCR or ELG compliance projects CEIS expects to undertake at its generating facilities that have not already been approved by the Commission in Cause Nos. 45052 or 45280 or that CEIS is not requesting approval for in this Cause? If so, please provide these projects, their anticipated completion date, and their estimated costs.

Response:

Not at this time, based on the currently effective regulations and Petitioner's plans to comply with those regulations.

8-9. What specific CCR wastes will be stored in the new CCR-compliant pond at Brown CEIS requests in this proceeding between July 2023 and October 15, 2023?

Response:

FGD Wastewater. See the Part A demonstration submittal Section 5.1.1 Alternative 3 on pages 5-9 through 5-12 of the demonstration.

8-10. Will CCR wastes continue to be sent to the new CCR-compliant pond at Brown CEIS requests in this proceeding after October 15, 2023? Please explain.

Response:

Since the coal-fired units will no longer be operational after October 15, 2023, CCR wastes will no longer be generated.

1-30. If the U.S. Environmental Protection Agency issues a final decision denying CenterPoint's application for an alternative closure timeline for the Brown Ash Pond under 40 C.F.R. § 257.103(f)(1), how would that change CenterPoint's assertion of need for a 10-acre CCR-compliant lined pond at the A.B. Brown site, as stated in (e.g.) the Petition at page 12? Please explain in detail.

Response:

It would not. CenterPoint has timely applications on file with U.S. Environmental Protection Agency ("EPA") for the Brown Ash Pond. In the event that EPA issues a final decision denying CenterPoint's application for an alternative timeline EPA has previously indicated that it would then work with the utility to finalize a Consent Order phasing out use of the existing pond and setting a compliance schedule for compliance with the CCR rule. In discussions between EPA and industry, EPA indicated that it expected the utilities filing applications to proceed with activities outlined in the alternative timeline application during the pendency of EPA's review. Thus, CenterPoint must continue activities to comply with the proposed alternative timeline while EPA reviews its application. In the case of the Brown Ash Pond, CenterPoint's proposal includes the construction of the 10-acre CCR compliant lined pond for interim disposal of CCR waste streams until October 2023.

1-31. If the U.S. Environmental Protection Agency issues a final decision denying CenterPoint's application for an alternative closure timeline for the Culley East Ash Pond under 40 C.F.R. § 257.103(f)(1), how would that change CenterPoint's assertion of need for a 2-3 acre CCR-compliant lined pond at the Culley site, as stated in (e.g.) the Petition at page 12?

Response:

It would not. CenterPoint has timely applications on file with EPA for the Culley East Ash Pond. In the event that EPA issues a final decision denying CenterPoint's application for an alternative timeline EPA has previously indicated that it would then work with the utility to finalize a Consent Order phasing out use of the existing pond and setting an interim compliance schedule for compliance with the CCR rule. In discussions between EPA and industry, that CenterPoint participated in, EPA indicated that it expected the utilities filing applications to proceed with activities outlined in the alternative timeline application during the pendency of EPA's review. Thus, CenterPoint must continue activities to comply with the proposed alternative timeline while EPA reviews its application. In the case of the Culley East Ash Pond, CenterPoint's proposal includes the construction of the 2-3-acre CCR compliant lined pond for interim disposal of CCR waste streams until October 2023.

2-6. Ms. Retherford's Direct Testimony at page 12, lines 16-28, states:

“In order to keep Brown Units 1 and 2 in operation beyond October 15, 2023 Petitioner would be required to cease disposal at the existing ash pond, construct a new lined pond of sufficient size to recirculate the scrubber process water for both units and provide sufficient hydraulic capacity for solids to settle (to comply with current NPDES wastewater discharge limits for Total Suspended Solids), construct a new wastewater treatment system to ensure continued compliance with the current NPDES wastewater discharge limits for copper, mercury and selenium, complete the ash handling modifications necessary to cease discharge of both fly ash and bottom ash transport water (since there will no longer be an available CCR-compliant ash pond), and design, permit and construct a new CCR-compliant extension of the existing landfill.”

Ms. Retherford's testimony at page 12, lines 30-33, then states that the above-described CCR and ELG compliance requirements for A.B. Brown were modeled in the 2019-2020 IRP under the “business as usual” scenario.

Please identify where in the 2019-2020 IRP construction of a new lined pond and construction of a new CCR-compliant landfill extension at A.B. Brown were modeled.

Objection:

Response:

Please refer to pages 209-210 of Petitioner's Exhibit No. 5 (Public), Attachment MAR-1 for a description of what was included within the IRP modeling (copied in relevant part below): “The current modeling analysis primarily focused on evaluation of alternatives to comply with the CCR, ELG, 316(b) and ACE rule requirements. For CCR and ELG compliance, conversion to dry or closed loop bottom ash handling, wastewater treatment and landfill construction options were evaluated.”

The CCR-compliant pond was not modeled as part of Petitioner's 2019/2020 IRP given the requirement is driven by the CCR Part A Rule revisions which were published in the Federal Register on August 28, 2020 and became effective September 28, 2020, after Petitioner filed the 2019/2020 IRP on June 30, 2020.

- 5-2. Re: Petitioner’s Response to Data Request CAC 1.30 (“It would not. CenterPoint has timely applications on file with U.S. Environmental Protection Agency (‘EPA’) for the Brown Ash Pond. In the event that EPA issues a final decision denying CenterPoint’s application for an alternative timeline EPA has previously indicated that it would then work with the utility to finalize a Consent Order phasing out use of the existing pond and setting a compliance schedule for compliance with the CCR rule. In discussions between EPA and industry, EPA indicated that it expected the utilities filing applications to proceed with activities outlined in the alternative timeline application during the pendency of EPA’s review. Thus, CenterPoint must continue activities to comply with the proposed alternative timeline while EPA reviews its application. In the case of the Brown Ash Pond, CenterPoint’s proposal includes the construction of the 10-acre CCR compliant lined pond for interim disposal of CCR waste streams until October 2023.”):

To clarify, is CenterPoint saying that, if U.S. EPA denies the application for an alternative closure extension timeline for the A.B. Brown Ash Pond under the CCR Part A Rule, the new 10-acre lined pond will be needed from the old Ash Pond’s cessation-of-receipt date until the closure date of the A.B. Brown coal generating units in October 2023? If the answer is something other than an unequivocal Yes, please explain.

Response:

As explained in Petitioner’s Response to 45564 CAC Data Request 1.30, it is Petitioner’s understanding, through discussion with EPA, that EPA’s denial would result in implementation of a compliance schedule under a Consent Order. Moreover, EPA has made clear that it expects applicants to continue to take measures to complete the proposed ponds under the proposed alternative timeline while EPA completes its review of the application.

- 5-3. Re: Petitioner’s Response to Data Request CAC 1.31 (“It would not. CenterPoint has timely applications on file with EPA for the Culley East Ash Pond. In the event that EPA issues a final decision denying CenterPoint’s application for an alternative timeline EPA has previously indicated that it would then work with the utility to finalize a Consent Order phasing out use of the existing pond and setting an interim compliance schedule for compliance with the CCR rule. In discussions between EPA and industry, that CenterPoint participated in, EPA indicated that it expected the utilities filing applications to proceed with activities outlined in the alternative timeline application during the pendency of EPA’s review. Thus, CenterPoint must continue activities to comply with the proposed alternative timeline while EPA reviews its application. In the case of the Culley East Ash Pond, CenterPoint’s proposal includes the construction of the 2-3-acre CCR compliant lined pond for interim disposal of CCR waste streams until October 2023.”):

To clarify, is CenterPoint saying that, if U.S. EPA denies the application for an alternative closure extension timeline for the Culley East Ash Pond under the CCR Part A Rule, the new 2-acre lined pond will be needed for compliance from the East Ash Pond’s cessation-of-receipt date until the closure date of Culley Unit 2? If the answer is something other than an unequivocal Yes, please explain.

Response:

As explained in Petitioner’s Response to 45564 CAC Data Request 1.31, it is Petitioner’s understanding through discussion with EPA, that EPA’s denial would result in implementation of a compliance schedule under a Consent Order. Moreover, EPA has made clear that it expects applicants to continue to take measures to complete the proposed ponds under the proposed alternative timeline while EPA completes its review of the application.

Data Requests - Set 8

8-1. Re: Petitioner's Response to data request CAC 5.1(a) (reading in part, "Prior to the finalization of the CCR Part A Rule revision in August 2020 (the third revision of the CCR Rule since 2015), the effective rule at the time of the 2019/2020 IRP filing contained a mechanism under Section 257.103(a)(1) for owners/operators to self-certify if "no alternative capacity" was available and therefore continue operating the ash ponds until such time that alternative capacity could be obtained. In June of 2020, the "no alternative capacity" provision in Section 257.103(a)(1)(ii) allowed the owner and operator to self-certify (for up to a period of 5 years), that the owner or operator has made and continues to make, efforts to obtain additional capacity."):

- a) Please admit or deny: as of June 30, 2020, the A.B. Brown ash pond had been determined by CenterPoint's retained engineer to be not in satisfaction of the aquifer location standard in 40 C.F.R. § 257.60(a) and therefore was required to cease receipt of waste by October 31, 2020 under 40 C.F.R. §§ 257.60(c)(4) and 257.101(b)(1) (unless extended pursuant to 40 C.F.R. §§ 257.103(a) or (b)). For any denial, please explain in detail.
- b) Please admit or deny: the text of 40 C.F.R. § 257.103(a)(1) in effect as of June 30, 2020, was the same as originally promulgated by U.S. EPA in April 2015 (80 Fed. Reg. 21,302, 21,495), requiring that in order to extend the cease-receipt date of a CCR unit otherwise required to cease receipt under 40 C.F.R. § 257.101(b)(1), the CCR unit's owner or operator would need to certify "the absence of alternative disposal capacity both on-site and off-site of the facility." For any denial, please explain.
- c) What was CenterPoint's basis as of June 30, 2020, to be able to certify the absence of off-site disposal capacity for CCR waste that would otherwise go into the A.B. Brown ash pond?

Response:

- (a) Admit
- (b) Admit
- (c) The certification had not been written as of June 30, 2020. However, as stated in the response to 45564 CAC DR 5-5.1(a), Petitioner was following the IRP Preferred Portfolio to retire ABB1&2 and was at the time undertaking efforts to design and procure an alternative dry fly ash loading facility in accordance with the self-certification provisions of Section 257.103(a)(1)(ii). This question implies a level of certainty with respect to the CCR regulations that is unwarranted given the extensive history of revisions to the rule since 2015. In September 2017 EPA granted petitions to reconsider provisions in the 2015 rule to better align with the requirements of the ELG rule. The first set of revisions was proposed in March of 2020, which included revisions to the cease-receipt date in Section 257.101 (a)(1). This series of revisions was finalized in July 2020 and extended the cease-receipt date to October 31, 2020. In yet another set of major revisions, finalized in July 2020, EPA again extended the cease-receipt date to April 2021, and more importantly significantly enhanced the demonstration requirements to apply for an alternative closure deadline to EPA.

8-2. Re: Petitioner's Response to data request CAC 5.2. To clarify CAC Data Request 5.2, the question was asking about the need for the proposed new 10-acre lined pond at the A.B. Brown site after the hypothetical completion of U.S. EPA's review of CenterPoint's CCR Part A application (with a denial decision) for the A.B. Brown ash pond and after the A.B. Brown ash pond hypothetically ceases receipt of CCR waste. Please explain (under the assumptions in the previous sentence):

- a) how the A.B. Brown coal generating units will dispose of coal ash waste after the old Brown ash pond ceases receipt of waste but before the new 10-acre pond is in service (assuming, hypothetically, the old pond's cessation date precedes the new pond's opening date);
- b) how the new 10-acre ash pond will be used for engineering and/or operational purposes from its in-service date until the A.B. Brown coal generating units' closure date; and
- c) how the new A.B. Brown 10-acre ash pond will be used for engineering and/or operational purposes after the A.B. Brown coal generating units' closure date.

Objection:

Petitioner objects on the grounds and to the extent it is based on a hypothetical set of circumstances and therefore asks for Petitioner to engage in speculation or otherwise seeks an analysis Petitioner has not performed and Petitioner objects to performing.

Response: Subject to and without waiver of the foregoing objections, Petitioner responds as follows:

- (a) In accordance with the application submitted to EPA, the new lined pond is scheduled to be constructed and operational prior to current ("old") ash pond ceasing receipt of waste. As EPA has yet to complete its review of Petitioner's submittal, we cannot speculate at this time what additional compliance measures, if any, EPA might require in an order on consent in the event EPA should deny Petitioner's application as submitted.
- (b) Please refer to Petitioner's Response to 45564 OUCC DR2-7(f) wherein Petitioner explained: The new pond is an expansion, lining, and re-purposing of the existing South Side Run-off Pond that currently collects the plant's treated sanitary wastewater and coal-pile runoff. Upon completion, the proposed CCR Pond will serve multiple purposes. It will provide alternative disposal capacity for CCR Wastestream (FGD wastewater) under the CCR Part A Revision, continue to collect the treated sanitary wastewater and coal pile runoff, and collect the landfill leachate and plant stormwater that currently goes into the existing ash pond. The proposed CCR will also collect the stormwater runoff from the A.B. Brown site. Additionally, flows treated within the pond would be returned to the plant for re-use or to the secondary wastewater treatment system."
- (c) The new pond is still in detailed design phase, however, conceptually, the pond is expected to collect the plant's treated sanitary wastewater, landfill leachate, and plant stormwater that currently goes to the existing ash pond. The proposed CCR pond will also collect the stormwater runoff from the A.B. Brown site. Additionally, the pond may be used to treat other waters (i.e. ash pond dewatering) prior to discharge from the facility.

8-3. If the Petitioner's alternative closure demonstration submission to U.S. EPA for the A.B. Brown ash pond under 40 C.F.R. § 257.103(f)(1) is approved in a final decision by U.S. EPA, and the A.B. Brown ash pond is thereby allowed to continue receiving CCR waste until October 15, 2023, then (under that scenario) please explain how the new 10-acre pond will be used for engineering and/or operational purposes:

- a) from the new 10-acre pond's in-service date until the date the old A.B. Brown ash pond ceases receipt of waste:
- b) from the old A.B. Brown ash pond's cessation-of-receipt date until closure of the A.B. Brown coal generating units; and
- c) after the A.B. Brown coal generating units' closure date.

Response:

- (a) The current ("old") ash pond will continue to receive fly ash transport water and bottom ash transport water until the coal-fired units cease operation.
- (b) Those two dates are the same. The current plans are for the ash pond to cease receipt of all flows when the coal generating units close.
- (c) Same response as Petitioner's Response to CAC DR 8-2(c). Post-retirement, the new pond will continue to collect stormwater from the site, and leachate from the landfill.

2-13. What is the AACE cost classification of the Dry Fly Ash Project estimate provided in Table WDG-7 of Witness Games' direct testimony?

Response:

AACE Class 3 estimate

EXAMPLES OF INDIANA INVESTOR-OWNED UTILITY

PROJECT COST OVERRUNS

Duke Energy Indiana (DEI): In Cause No. 43114, the Commission approved DEI's Integrated Gasification Combined Cycle ("IGCC") plant costs for \$1.985 billion. In IGCC-1, this cost was revised to \$2.350 billion. In Cause No. 43114 IGCC-4S1 (Phase 1), DEI requested another increase of the IGCC project to total \$2.88 billion, but the OUCC and other intervenors settled with DEI for a \$2.595 billion cost cap for the plant.

Indianapolis Power and Light (IPL's): In Cause No. 42700, the Commission approved \$182 million for the construction of the Harding Street Unit 7 Flue Gas Desulfurization (FGD) unit and the Petersburg Unit 3 FGD upgrade. In Cause No. 42170 ECR-5, IPL sought, and the Commission approved, a modification to the CPCN to increase the Unit 3 FGD Enhancement cost estimate by \$3 million. In 42170 ECR-7, the Unit 3 FGD enhancement increase was re-affirmed to a total project cost of \$27.5 million, compared to the original estimate of \$24.954 million. In Cause No. 42170 ECR- 8, IPL sought, and the Commission approved another increase for the Unit 3 FGD Enhancement to total \$29.5 million and a \$60 million increase for the Harding Street Unit 7 FGD to total \$220 million. In Cause No. 43403, the Commission approved \$90 million to construct the Petersburg Unit 4 FGD upgrade. In Cause No. 42170 ECR-14, IPL modified the CPCN for the Unit 4 FGD upgrade to increase the cost estimate to \$119.9 million, and the Commission approved IPL's request. In Cause No. 42170 16 and 16S1, IPL increased its cost estimate for the Unit 4 FGD Upgrade again to reflect the total project cost at \$128 million, and the Commission approved this increase. In Cause No. 42170 ECR-19, IPL once again sought a modification to its CPCN to increase the Petersburg Unit 4 FGD Enhancement to \$129.6 million, which the OUCC challenged. IPL and the OUCC settled and agreed the project amount recovered through the ECR would not exceed \$129.6 million, but IPL would have to seek additional costs beyond that cap in a future rate case. The OUCC reserved the right to challenge any such additional costs in the future rate case. The Commission approved the settlement and IPL's requested modification.

Northern Indiana Public Service Company (NIPSCO): In Cause No. 43913, NIPSCO requested a CPCN to install a FGD system on Schahfer Unit 14 for \$153,560,417, and the Commission approved this request. In Cause No. 44012 Phase 1, NIPSCO sought a CPCN for multiple environmental controls, which included an increase in the cost estimate for the Schahfer Unit 14 FGD to \$203 million. The Commission approved NIPSCO's CPCN, including the Unit 14 FGD revised estimates.

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.



Cynthia M. Armstrong

Senior Utility Analyst

Indiana Office of Utility Consumer Counselor

Cause No. 45564

CenterPoint Energy Indiana South

November 19, 2021

CERTIFICATE OF SERVICE

This is to certify that a copy of the Indiana OUCC's Testimony Filing of Cynthia M. Armstrong has been served upon the following parties of record in the captioned proceeding by electronic service on November 19, 2021.

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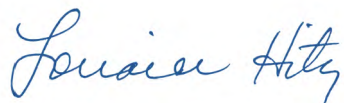
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