FILED April 4, 2024 INDIANA UTILITY REGULATORY COMMISSION

#### On Behalf of Petitioner, DUKE ENERGY INDIANA, LLC

#### VERIFIED DIRECT TESTIMONY OF TIMOTHY S. HILL

Petitioner's Exhibit 19

April 4, 2024

#### DIRECT TESTIMONY OF TIMOTHY S. HILL VICE PRESIDENT OF CCP PROJECTS AND OPERATIONS DUKE ENERGY BUSINESS SERVICES, LLC ON BEHALF OF DUKE ENERGY INDIANA, LLC BEFORE THE INDIANA UTILITY REGULATORY COMMISSION

1		I. <u>INTRODUCTION</u>
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	My name is Timothy S. Hill, and my business address is 525 South Tryon Street,
4		Charlotte, North Carolina.
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	A.	I am employed as the Vice President of Coal Combustion Products ("CCP") Projects
7		and Operations for Duke Energy Business Services, LLC, a service company affiliate
8		of Duke Energy Indiana, LLC ("Duke Energy Indiana," "Petitioner" or "Company").
9	Q.	WHAT ARE YOUR DUTIES AND RESPONSIBILITIES AS VICE
10		PRESIDENT OF CCP PROJECTS AND OPERATIONS?
11	A.	As Vice President of CCP Projects and Operations, I am responsible for
12		implementing Duke Energy Corporation's ("Duke Energy") CCR management and
13		closure plans for all affiliates and jurisdictions served by Duke Energy. This includes
14		closure of all CCR impoundments and other ash management areas, as well as all
15		aspects of landfill and dam construction, operations and maintenance, closure and
16		decommissioning, and post closure care. My team is accountable to ensure that all
17		state or federal regulatory deadlines associated with CCR Units1 are met in a safe and

<sup>&</sup>lt;sup>1</sup> The term "CCR Unit" is defined in the Federal CCR Rule at 40 CFR § 257.53 for units subject to the Rule. In my testimony, as well as in previous Cause Nos. 45253 S1, 45749, and 45940, I also use the terms "ash

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judicious manner. I also oversee the retirement and demolition of Duke Energy's coal
 and gas units.

#### **3 Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND**

4

#### PROFESSIONAL BACKGROUND.

5 A. I received my Bachelor of Science degree in Nuclear Engineering from the University 6 of Florida in 1989, and my Master of Science in Engineering from the University of 7 Central Florida in 1994. From 1978 to 1999, I served in various roles in the U.S. 8 Navy, retiring from the nuclear surface fleet. After the U.S. Navy, I served as the 9 General Manager Technical Operations for Delta Air Lines for five years, overseeing 10 the engineering and maintenance for Delta's fleet of Boeing aircraft. In 2003, I joined 11 Duke Energy Progress, LLC's ("Duke Energy Progress") fossil fleet operations, 12 where I served in various roles including engineering manager, maintenance manager, 13 and plant manager across Duke Energy Progress' fleet of coal plants in the Carolinas. 14 In 2009, I joined Duke Energy Progress' nuclear fleet, serving as the maintenance 15 manager at the Shearon Harris nuclear plant. In 2014, I joined the newly formed CCP 16 business unit as the General Manager of CCP Operations and Maintenance. In this 17 role, I oversaw a team of engineers, maintenance technicians, and contractors that 18 performed all aspects of maintenance and operations of the landfills, dams, and other 19 coal ash facilities in the Carolinas and Florida, including the Plant Demolition and 20 Retirement group. In this role, I also oversaw the creation of all the necessary 21 processes and procedures required to ensure compliance with all state and federal

management area and ash basin" for units that may or may not be subject to the Rule. For the purposes of this testimony, I use the term "CCR Unit" to describe these areas even if not subject to the Federal CCR Rule.

1		regulatory requirements, such as the federal CCR Rule and various state coal ash
2		requirements. In May 2021, I assumed the role of Vice President CCP Operations &
3		Governance, expanding my oversight to include CCR policy as well as operations for
4		all jurisdictions in the Midwest. In January of 2023, I assumed my current role of
5		Vice President of CCP Projects and Operations, which expanded my responsibilities
6		to include all CCR closure projects across Duke Energy, including the Company's
7		CCP operations in Indiana.
8	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?
9	A.	The purpose of my testimony is to describe the impact of the U.S. EPA's Coal
10		Combustion Residuals Rule ("CCR Rule") on the Company's generating facilities. In
11		addition, I will discuss the Company's current progress and future plans for closing
12		surface impoundments and other ash management areas in order to comply with the
13		CCR Rule. My testimony will also describe coal ash-related remediation projects
14		mandated by Indiana's Solid Waste Management Program, which is overseen by the
15		Indiana Department of Environmental Management ("IDEM"). Finally, I support the
16		operating and maintenance ("O&M") and capital expense in the 2025 forward-
17		looking test period ("Test Period") for the CCP group.
18	Q.	HOW IS YOUR TESTIMONY ORGANIZED?
19	A.	In Section I, I have provided information concerning my background and the purpose
20		of my testimony.
21		In Section II, I provide an overview of the Federal CCR Rule and Indiana's
22		Solid Waste Management Regulations, and how these regulations impact the
23		Company's CCR Units, requiring their closure and post closure care. I also

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1		summarize how the Company has proceeded with seeking cost recovery associated
2		with these CCR Units, and the costs being requested in this proceeding.
3		In Section III, I provide a summary of the Company's progress towards
4		closure of each CCR Unit where the Company has completed closure, has work in
5		progress or work is planned to be complete by 2028.
6		In Section IV, I describe the Company's plans for the closure of its remaining
7		CCR Units, which are included in the Decommissioning Study filed in this
8		proceeding as Attachment 11-A (JTK), supplementing Company witness Mr. Kopp's
9		testimony.
10		In Section V, I discuss coal ash-related insurance proceeds and the Company's
11		proposal for sharing the proceeds with customers.
12		In Section VI, I describe the O&M and capital expense in the Test Period for
13		the CCP group.
14	II.	THE CCR RULE AND IDEM'S SOLID WASTE MANAGEMENT PROGRAM
15	Q.	PLEASE DESCRIBE THE CCR RULE.
16	A.	The Resource Conservation and Recovery Act ("RCRA") provides the EPA with the
17		authority to regulate coal combustion residuals. The CCR Rule established
18		requirements under Subtitle D of RCRA, meaning that coal combustion residuals are
19		regulated as non-hazardous waste. The CCR Rule was self-implementing when
20		originally finalized in 2015; however, in 2016, the Water Infrastructure
21		Improvements for the Nation ("WIIN") Act was passed, requiring that federal coal
22		ash regulations be implemented through a permit program. States can submit a permit
23		program for regulating CCR units to the EPA for its approval. The state program

1		must show that it is as protective as the federal CCR Rule. If an approved permit
2		program is not in effect for a state, CCR units will be subject to a federal permit
3		program.
4		In 2016, the Indiana Environmental Rules Board adopted an emergency rule
5		incorporating the CCR Rule requirements into Indiana Code. In 2017, IDEM adopted
6		an amendment to Indiana's Solid Waste Management Plan describing IDEM's plan to
7		update Indiana's regulations for regulating CCR disposal facilities to standards
8		equivalent to the EPA's CCR Rule. IDEM has initiated a rulemaking to propose
9		additional changes to the Indiana CCR standards, offer compliance alternatives and
10		flexibility, while meeting the federal CCR standards, and establish a permit program
11		for CCR units. IDEM's rulemaking remains underway as of the date of this
12		testimony.
13	Q.	PLEASE DESCRIBE HOW THE CCR RULE APPLIES TO DUKE ENERGY
14		INDIANA'S GENERATING FACILITIES.
15	A.	The CCR Rule applies to existing and new landfills and existing surface
16		impoundments that were actively receiving waste on or after the effective date of the
17		rule – October 19, 2015. Existing surface impoundments not receiving waste on the
18		effective date of the rule, but still containing water, are considered "inactive" and are
19		also covered by the federal CCR Rule. Pursuant to a court ruling from the D.C.
20		Circuit Court of Appeals, <sup>2</sup> EPA has initiated a regulatory process to address "legacy

<sup>2</sup> See 85 <u>Federal Register</u> 65015 (October 14, 2020).

19		CCR RULE?
18	Q.	HAVE THERE BEEN ANY RECENT DEVELOPMENTS RELATED TO THE
17		CCR Rule.
16		CCR Website. <sup>4</sup> Attachment 19-A (TSH) shows which CCR Units are subject to the
15		other operating information required by the Rule can be found on the Company's
14		required to close due to one or more of these requirements <sup>3</sup> . Specifics for closure and
13		of coal combustion residuals. All CCR Units in Indiana subject to the CCR Rule are
12		closure whenever a landfill or surface impoundment receives its last known quantity
11		on CCR Rule-required sampling. Finally, CCR units may also be required to initiate
10		trigger closure requirements by exceeding an applicable groundwater standard based
9		safety factor results. In addition to the location restrictions, CCR units may also
8		CCR unit. These include location restrictions, structural integrity results, and/or
7		Under the CCR Rule, there are certain events that may trigger closure of a
6		internet.
5		post-closure care and recordkeeping, notification and posting of information to the
4		criteria, operating criteria, groundwater monitoring and corrective action, closure and
3		Compliance requirements include location restrictions, impoundment design
2		testimony.
1		impoundments" in a revision to the CCR Rule, which I will describe later in my

<sup>&</sup>lt;sup>3</sup> The CCR Landfills at Cayuga, Gallagher, and Gibson stations, which are subject to the CCR Rule and meet all Rule requirements, will be subject to closure after receipt of last known waste.

<sup>&</sup>lt;sup>4</sup> <u>https://www.duke-energy.com/our-company/environment/compliance-and-reporting/ccr-rule-compliance-data</u>

1	А.	Yes. On May 18, 2023, the EPA published in the Federal Register a proposed rule,
2		referred to as the "Legacy Rule." The proposed rule, if enacted as written, would
3		expand the scope of units regulated under the CCR Rule to include both legacy
4		impoundments (inactive surface impoundments at inactive generating facilities) that
5		contained CCR and liquids on or after the CCR Rule's effective date of October 19,
6		2015, and additional CCR Management Units at facilities otherwise subject to the
7		CCR Rule.
8		Duke Energy Indiana does not have any impoundments that meet the definition
9		of a legacy CCR impoundment, as Duke Energy Indiana's impoundments are all at
10		facilities that were active on October 19, 2015.
11		In addition, the Legacy Rule proposes to regulate CCR Management Units, a
12		term defined in the proposed Rule as any area of land on which any non-containerized
13		accumulation of CCR is received, placed, or otherwise managed at any time. This
14		definition includes inactive CCR landfills and CCR Units that closed prior to
15		October 17, 2015, including those that were properly closed under state regulations.
16	Q.	IS THE PROPOSED LEGACY RULE EFFECTIVE?
17	A.	No. The Legacy Rule remains proposed as of the date of this testimony. EPA has
18		received numerous comments from stakeholders concerning the proposed rule, which
19		it will need to evaluate and address prior to issuing the final rule. Duke Energy
20		Indiana will monitor the EPA's recent rulemaking on this proposed rule and will
21		advise the Commission if the Legacy Rule becomes effective and, if so, how the
22		revised regulation could affect the federally mandated closure projects at the
23		Company's facilities. This update will most likely occur through the Company's

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1		semi-annual Rider 62 ("ECR") proceedings. If the proposed rule were to become final
2		without change, it would likely impact Duke Energy Indiana's Cayuga, Gallagher,
3		Gibson and Wabash River generating sites. Duke Energy Indiana could expect, at a
4		minimum, additional facility evaluations and reporting, as well as additional
5		installation of monitoring wells. In summary, the Company will be able to better
6		assess any impacts to closure and post closure maintenance, decreasing uncertainty of
7		their estimates, after the rule is published.
8	Q.	PLEASE DESCRIBE HOW INDIANA'S SOLID WASTE MANAGEMENT
9		REGULATIONS APPLY TO DUKE ENERGY INDIANA'S GENERATING
10		FACILITIES.
11	A.	For any CCR Unit that is not covered by the Federal CCR Rule, closure is required
12		under Title 329 of the Indiana Administrative Code ("IAC"), Article 10 (Solid Waste
13		Land Disposal Facilities), Rules 3 and 24 through 38. Under this regulation, the
14		owner or operator of an impoundment is required to submit a detailed proposal for
15		design, construction, and post-closure care under the requirements for Restricted
16		Waste Sites depending on the characteristics of the impoundments. For all CCR Units
17		regulated by IDEM under this code, the IDEM-approved closure plans are required to
18		be protective of the public health and environment.
19	Q.	WHAT ACTIONS MUST DUKE ENERGY INDIANA TAKE TO PROPERLY
20		CLOSE A CCR UNIT?
21	A.	Whether closure is required by the CCR Rule or IDEM Solid Waste regulations, there
22		are significant closure and post-closure care requirements for CCR Units. Both

1		provide for closure by leaving the coal combustion residuals in place (referred to as
2		"closure-in-place") and for closure-by-removal.
3		Closure-in-place requires the removal of free liquids from the impoundment.
4		Once the impoundment is dewatered, the remaining coal combustion residuals must
5		be graded and stabilized. Sloping, grading and channeling must be done for positive
6		storm water drainage. Finally, a final cover must be constructed, and a vegetative
7		surface must be established.
8		Closure-by-removal requires both dewatering and removal of all coal
9		combustion residuals from the CCR unit, with the material being disposed in an
10		approved landfill or beneficially reused. Closure-by-removal is not complete until
11		groundwater monitoring concentrations do not exceed groundwater protection
12		standards.
14		standards.
12	Q.	IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER
	Q.	
13	<b>Q.</b> A.	IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER
13 14		IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER CLOSURE IS COMPLETE?
13 14 15		IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER CLOSURE IS COMPLETE? Yes. For CCR Units closed by closure in place, once closure is complete, Duke
13 14 15 16		IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER CLOSURE IS COMPLETE? Yes. For CCR Units closed by closure in place, once closure is complete, Duke Energy Indiana will be responsible for maintaining the integrity and effectiveness of
13 14 15 16 17		IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER CLOSURE IS COMPLETE? Yes. For CCR Units closed by closure in place, once closure is complete, Duke Energy Indiana will be responsible for maintaining the integrity and effectiveness of the final cover system, the leachate collection system (if present), and the
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>		IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER CLOSURE IS COMPLETE? Yes. For CCR Units closed by closure in place, once closure is complete, Duke Energy Indiana will be responsible for maintaining the integrity and effectiveness of the final cover system, the leachate collection system (if present), and the groundwater monitoring system. This includes making repairs to the final cover as
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>		IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER CLOSURE IS COMPLETE? Yes. For CCR Units closed by closure in place, once closure is complete, Duke Energy Indiana will be responsible for maintaining the integrity and effectiveness of the final cover system, the leachate collection system (if present), and the groundwater monitoring system. This includes making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>		IS THE UTILITY STILL RESPONSIBLE FOR A CCR UNIT AFTER CLOSURE IS COMPLETE? Yes. For CCR Units closed by closure in place, once closure is complete, Duke Energy Indiana will be responsible for maintaining the integrity and effectiveness of the final cover system, the leachate collection system (if present), and the groundwater monitoring system. This includes making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover.

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1		(30) years, depending on Federal CCR Rule applicability or IDEM-specific
2		requirements. If future groundwater sampling and analysis demonstrate an impact
3		from the closed CCR unit, additional remedial actions may be required. I refer to
4		these requirements as post closure care and monitoring <sup>5</sup> ("PCM") in my testimony.
5	Q.	PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S CCR UNITS
6		IMPACTED BY THE CCR RULE AND IDEM REQUIREMENTS.
7	A.	Attachment 19-A (TSH) lists all existing CCR Units, their closure methodology,
8		regulatory driver, closure status, and costs being requested in this proceeding.
9	Q.	WHAT COAL ASH-RELATED COSTS DESCRIBED IN YOUR TESTIMONY
10		ARE BEING REQUESTED IN THIS PROCEEDING?
11	A.	The Company's Decommissioning Study (sponsored by Company witness
11 12	A.	The Company's Decommissioning Study (sponsored by Company witness Mr. Kopp), includes estimated future CCR closure costs as a cost of removal
	A.	
12	A.	Mr. Kopp), includes estimated future CCR closure costs as a cost of removal
12 13	A.	Mr. Kopp), includes estimated future CCR closure costs as a cost of removal incorporated into depreciation expense, the treatment of which is also supported from
12 13 14	A.	Mr. Kopp), includes estimated future CCR closure costs as a cost of removal incorporated into depreciation expense, the treatment of which is also supported from an accounting perspective by Company witness Mr. Riley. Those include costs
12 13 14 15	A.	Mr. Kopp), includes estimated future CCR closure costs as a cost of removal incorporated into depreciation expense, the treatment of which is also supported from an accounting perspective by Company witness Mr. Riley. Those include costs associated with <u>future closures</u> of CCR Units not previously included in Cause Nos.

<sup>&</sup>lt;sup>5</sup> Both the Federal CCR Rule and IAC require maintenance and monitoring after a CCR Unit is closed, regardless of closure method. In my testimony, I refer to this body of work as Post Closure Maintenance ("PCM"), which encompasses the activities described here. These activities are also referred to as "coal ash management" costs in Cause Nos. 45253 S1 and 45940.

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1	In addition, the Company's request includes recovery of certain other incurred
2	costs not included in the Decommissioning Study but incorporated in the depreciation
3	study. These consist of closure and PCM costs incurred between January 1, 2019 and
4	November 3, 2021, which were not allowed to be recovered under the federal
5	mandate statute in accordance with the Indiana Court of Appeals decision. <sup>6</sup> The
6	Company is proposing in this proceeding to recover these costs through traditional
7	ratemaking as costs of removal rather than through the special ratemaking allowable
8	in the federal mandate statute. Company witness Mr. Riley describes this proposal in
9	more detail in his testimony. In her testimony, Company witness Ms. Lilly describes
10	the Company's proposal to recover the forecasted Test Period amount of the 20% of
11	the federally mandated closure costs included in Cause Nos. 45253 S1 and 45940
12	pursuant to the federal mandate statute.
13	Table 1 below summarizes the coal ash-related costs described in my
14	testimony. See Attachment 19-A (TSH) for more detail.

15

#### Table 1: Summary of Costs in Current Proceeding

Request	Amount
Future CCR Closures	\$131,408,311
45253 S1 Pre-Order Costs	\$92,075,402
Total	\$223,483,713

## 16 III. <u>CURRENT STATUS OF DUKE ENERGY INDIANA'S CLOSURE PLANS</u> 17 Q. ARE THE COMPANY'S CLOSURE ACTIVITIES PROCEEDING ON 18 SCHEDULE?

<sup>&</sup>lt;sup>6</sup> Ind. Office of Util. Consumer Couns. v. Duke Energy Ind., LLC, 204 N.E.3d 947 (Ind. Ct. App. 2023).

1	A.	Yes. Complex projects require coordination between Company personnel, permitting
2		authorities, and contractors. To that end, the Company has developed extensive and
3		detailed plans and schedules related to each aspect of the overall site closure.
4		The closure plans and schedules the Company has developed for each site
5		detail the tasks and strategy being executed to meet its regulatory deadlines and
6		performance standards. Where applicable, plans were submitted to and approved by
7		regulatory agencies and made available to the public, and the Company developed
8		schedules to meet the approved commitments. Schedules are reviewed, at a minimum,
9		monthly with senior management to ensure adherence to regulatory requirements and
10		deadlines. Inevitably, all complex projects face complicating factors which may
11		require modification of plans and schedules. Duke Energy Indiana's managerial
12		oversight of these projects ensures that the Company will still be able meet its
13		regulatory obligations despite these complications. Duke Energy Indiana also
14		maintains a direct line of communication with regulators through its semi-annual
15		ECR filings, as well as communications with IDEM, in the event plans or schedules
16		may need to be modified. Through my visits to the sites, meetings with site managers
17		where we discuss the status and progress of closure projects, my review of site
18		closure plans and schedule, and my review of status reports, I have concluded that the
19		Company has been properly managing its closure projects to ensure compliance with
20		project schedules, performance standards, and regulatory deadlines.
21	Q.	HAS THE COMPANY TAKEN SUFFICIENT MEASURES TO ENSURE
22		THAT COSTS FOR ITS CLOSURE PROJECTS ARE APPROPRIATELY
23		MANAGED AND EFFICIENT?

1	A.	Yes. The Company has a robust system in place to review the costs of its CCR Unit
2		closure projects from inception to payment. Specifically, Duke Energy Indiana has
3		implemented and followed strict contracting policies and procedures to receive and
4		evaluate bids for its closure activities. Purchases are procured under the purview of
5		the Duke Energy Purchasing Controls Policy, which lays out requirements for
6		competitive bidding, vendor selection and purchase order use. All expenditures
7		against purchase orders are reviewed and approved under the requirements
8		documented in the Delegation of Authority Policy.
9		The Company also maintains detailed budgets, which are updated quarterly to
10		incorporate the knowledge and experience the Company has gained during the
11		execution of projects. Scope changes or estimate deviations are documented and
12		approved, as appropriate. These processes are utilized to ensure the costs that the
13		Company has incurred and will incur for tasks associated with the CCR Rule and
14		state regulatory requirements are reasonable and appropriate and are consistent with
15		the costs of similar services on the open market. The costs incurred for all closure
16		activities were, and continue to be, reviewed through rigorous purchasing and
17		expenditure review processes.
		A. <u>CAYUGA GENERATING STATION</u>
18	Q.	PLEASE DESCRIBE THE STATUS OF THE CCR UNITS AT THE CAYUGA

**GENERATING STATION.** 

A. As shown in Attachment 19-A (TSH), the Company has six (6) CCR Units at the
Cayuga station: the Lined Ash Disposal Area, Ash Disposal Area 1, the Primary Ash
Settling Basin, Secondary Ash Settling Basin, West Ash Fill Area, and the Restricted

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1		Waste Landfill supporting station operations. The Company has completed closure of
2		the Lined Ash Disposal Area, Ash Disposal Area 1, the Primary Ash Settling Basin,
3		and the Secondary Ash Settling Basin. Closure of the Restricted Waste Landfill,
4		which supports on-going station operations, and the West Ash Fill Area, which has
5		operational Flue Gas Desulfurization ("FGD") structures built over it and that also
6		support station operations, will occur after station retirement.
7	Q.	WHAT CAYUGA-RELATED COSTS ARE INCLUDED IN THIS
8		PROCEEDING?
9	А.	The Company is requesting recovery of the following costs incurred for closure and
10		PCM at Cayuga as costs of removal, as supported from an accounting perspective by
11		Company witness Mr. Riley and described in Section IV of my testimony:
12		• Future closure costs for the West Ash Fill Area and the Restricted Waste Landfill.
13		• Closure and PCM costs incurred from January 1, 2019 through November 3,
14		2021.
15		Table 2 below summarizes the costs requested for Cayuga in this proceeding. See
16		Attachment 19-A (TSH) for more detail.
17		Table 2: Cayuga Estimated Costs

Request	Amount
Future CCR Related Closures	\$57,947,570
45253 S1 Pre-Order Costs	\$19,366,121
Total	\$77,313,691

1		B. <u>GALLAGHER GENERATING STATION</u>
2	Q.	PLEASE DESCRIBE THE STATUS OF THE CCR UNITS AT THE
3		GALLAGHER GENERATING STATION.
4	A.	As shown in Attachment 19-A (TSH), the Company has seven (7) CCR Units at the
5		Gallagher station: the North Ash Pond, the Primary Pond, the Primary Pond Ash Fill
6		Area, the Coal Pile Ash Fill Area, Ash Pond A, the Secondary Settling Pond, and a
7		Landfill. The Company has completed closure of the Coal Pile Ash Fill Area and the
8		Secondary Settling Pond. Closure of the North Ash Pond, the Primary Pond Ash Fill
9		Area, Ash Pond A, and the on-site landfill are in-progress and were previously
10		approved in Cause No. 45253 S1. Closure of the Primary Pond is also underway and
11		was included in pending Cause No. 45940.
12	Q.	WHAT GALLAGHER-RELATED COSTS ARE INCLUDED IN THIS
13		PROCEEDING?
14	A.	The Company is requesting recovery of the following costs incurred for closure and
15		PCM at Gallagher as costs of removal, as supported from an accounting perspective
16		by Company witness Mr. Riley and described in Section IV of my testimony:
17		• Closure and PCM costs incurred from January 1, 2019 through November 3,
18		2021.
19		Table 3 below summarizes the costs requested for Gallagher in this proceeding. See
20		Attachment 19-A (TSH) for more detail.

#### **Table 3: Gallagher Estimated Costs**

Request	Amount
45253 S1 Pre-Order Costs	\$31,046,505
Total	\$31,046,505

2		C. <u>GIBSON GENERATING STATION</u>
3	Q.	PLEASE DESCRIBE THE STATUS OF THE CCR UNITS AT THE GIBSON
4		GENERATING STATION.
5	А.	As shown in Attachment 19-A (TSH), the Company has eight (8) CCR Units at the
6		Gibson station: the North Ash Pond, the North Settling Basin, the South Ash Fill
7		Area, the South Settling Basin, the East Ash Pond, the East Settling Basin, the South
8		Aggregate Landfill, and a small area underneath station service roads. The Company
9		has completed closure of the East Ash Pond, the East Settling Basin, the South
10		Settling Basin, and the accessible portion of the South Ash Fill Area (Phase 1).
11		Closure of the North Ash Pond and North Settling Basin are underway and
12		have been requested to be approved under pending Cause No. 45940.
13		Closure of areas that are currently supporting station operations will
14		commence upon station retirement and are discussed further in Section IV of my
15		testimony. These areas include the South Aggregate Landfill, the remaining portion
16		of the South Ash Fill Area (Phase II), which has operating station infrastructure on it,
17		as well as some areas underneath service roads adjacent to the North and South
18		Settling Basins.
19	Q.	WHAT GIBSON-RELATED COSTS ARE INCLUDED IN THIS
20		PROCEEDING?

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1	А.	The Company is requesting recovery of the following costs incurred for closure and
2		PCM at Gibson as costs of removal, as supported from an accounting perspective by
3		Company witness Mr. Riley and described in Section IV of my testimony:
4		• Future closure costs for the South Aggregate Landfill and the remaining portion
5		of the South Ash Fill Area and the North & South Settling Basin Service Roads
6		upon station retirement.
7		• Closure and PCM costs incurred from January 1, 2019, through November 3,
8		2021.
9		Table 4 below summarizes the costs requested for Gibson in this proceeding.
10		See Attachment 19-A (TSH) for more details.
11		Table 4: Gibson Estimated Costs

Request	Amount
Future CCR Related Closures	\$55,049,000
45253 S1 Pre-Order Costs	\$15,132,920
Total	\$70,181,920

# 12 D. WABASH RIVER GENERATING STATION 13 Q. PLEASE DESCRIBE THE STATUS OF THE CCR UNITS AT THE WABASH 14 RIVER GENERATING STATION. 15 A. As shown in Attachment 19-A (TSH), the Company has six (6) CCR Units at the

- 16 Wabash River station: the North Ash Pond, Ash Pond A, Ash Pond B, the Secondary
- 17 Settling Pond, the South Ash Pond, and a small inaccessible area currently leased to
- 18 Wabash Valley Resources Inc. that is supporting their plant operations (this is
- 19 referred to as the "Pet Coke Area").

1		Closure of the above ponds is in progress, and with the exception of the North
2		Ash Pond's Future Pet Coke Area closure, are included in Cause Nos. 45253 S1 and
3		45940.
4		Future closure work will consist of closing the Pet Coke Area currently leased
5		by Wabash Valley Resources Inc. upon termination of the lease. These closures are
6		described in Section IV of my testimony.
7	Q.	WHAT WABASH RIVER-RELATED COSTS ARE INCLUDED IN THIS
8		PROCEEDING?
9	А.	The Company is requesting recovery of the following costs incurred for closure and
10		PCM at Wabash River as costs of removal, as supported from an accounting
11		perspective by Company witness Mr. Riley and described in Section IV of my
12		testimony:
13		• Future closure for the Pet Coke Area.
14		• Closure and PCM costs incurred from January 1, 2019 through November 3,
15		2021.
16		Table 5 below summarizes the costs requested for Wabash River in this proceeding.
17		See Attachment 19-A (TSH) for more details.
18		Table 5: Wabash River Estimated Costs

Request	Amount
Future CCR Related Closures	\$11,250,000
45253 S1 Pre-Order Costs	\$12,177,841
Total	\$23,427,841

1		E. <u>NOBLESVILLE GENERATING FACILITY</u>
2	Q.	PLEASE DESCRIBE THE STATUS OF THE CCR UNITS AT
3		NOBLESVILLE GENERATING STATION.
4	A.	The Company completed closure of the CCR Units at the Noblesville station in 2021,
5		with the exception of approximately 4 acres of ash adjacent to facility infrastructure
6		that is required for plant operation, as described in Section IV of my testimony.
7	Q.	WHAT NOBLESVILLE-RELATED COSTS ARE INCLUDED IN THIS
8		PROCEEDING?
9	A.	The Company is requesting recovery of the following costs incurred for closure and
10		PCM at Noblesville as costs of removal, as supported from an accounting perspective
11		by Company witness Mr. Riley and described in Section IV of my testimony:
12		• Future closure for the CCR adjacent to facility infrastructure.
13		• Closure and PCM costs incurred from January 1, 2019, through November 3,
14		2021.
15		Table 6 below summarizes the costs requested for Noblesville in this proceeding. See
16		Attachment 19-A (TSH) for more detail.
17		Table 6: Noblesville Estimated Costs

Request	Amount
Future Closure	\$5,911,741
for Inaccessible Site Areas	
45253 S1 Pre-Order Costs	\$12,817,629
Total	\$18,729,370

#### 1 F. <u>DRESSER GENERATING FACILITY</u>

## 2 Q. PLEASE DESCRIBE THE STATUS OF THE CCR UNITS AT THE DRESSER 3 GENERATING STATION.

4 A. The Company completed closure of the CCR Units at the Dresser station in 2021.

#### 5 Q. WHAT DRESSER-RELATED COSTS ARE INCLUDED IN THIS

#### 6 **PROCEEDING**?

- 7 A. Table 7 below summarizes the costs requested for Dresser in this proceeding. The
- 8 Company is requesting recovery of costs incurred for closure and PCM at Dresser as
- 9 supported from an accounting perspective by Company witness Mr. Riley. See
- 10 Attachment 19-A (TSH) for more detail.

#### **Table 7: Dresser Estimated Costs**

Request	Amount
45253 S1 Pre-Order Costs	\$1,534,386
Total	\$1,534,386

#### 11 G. EDWARDSPORT GENERATING STATION

#### 12 Q. PLEASE DESCRIBE THE STATUS OF THE CCR UNITS AT THE

#### 13 EDWARDSPORT GENERATING STATION.

14 A. As shown in Attachment 19-A (TSH), the Company plans to complete closure of the

- 15 Edwardsport CCR areas in two phases. The first phase will excavate portions of the
- 16 site, covering the consolidated ash with a cover system. The Company is awaiting
- 17 IDEM approval of its proposed closure plan for Phase 1 and expects to begin work in
- 18 2025. Phase 1 scope has been requested for approval in the pending Cause No. 45940.
- 19 The second phase will commence on station retirement and will remove ash

#### DUKE ENERGY INDIANA 2024 BASE RATE CASE DIRECT TESTIMONY OF TIMOTHY S. HILL

		Decovery Decovert Amount
9		Table 8: Edwardsport Estimated Costs
8		proceeding. See Attachment 19-A (TSH) for more detail.
7		Table 8 below summarizes the costs requested for Edwardsport in this
6		areas underneath an operating rail spur.
5	A.	As described above, the Company is requesting the expected future costs to close
4		PROCEEDING?
3	Q.	WHAT EDWARDSPORT-RELATED COSTS ARE INCLUDED IN THIS
2		will be recovered in the future as described in Section IV of my testimony.
1		underneath the rail line that is currently used to support station operations. Phase 2

<b>Recovery Request</b>	Amount
Future Closure	\$1,250,000
Total	\$1,250,000

#### 10 IV. FUTURE COAL ASH-RELATED CLOSURE AND PCM REQUIREMENTS

#### 11 Q. DOES DUKE ENERGY INDIANA HAVE OTHER COAL ASH-RELATED

#### 12 CLOSURE AND PCM OBLIGATIONS?

- 13 A. Yes. Duke Energy Indiana has future coal ash-related obligations under both the
- 14 Federal CCR Rule and Indiana's Solid Waste Regulations. These include closure and
- 15 PCM for CCR Units subject to Indiana's Solid Waste Management Program and the
- 16 Federal CCR Rule. I have mentioned some of these requirements in Section III of my
- 17 testimony but will describe these requirements in additional detail here.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> PCM costs for the future closure work described in this section of my testimony are not requested in this proceeding, only the future closure costs.

1	Q.	HOW DOES THE COMPANY PROPOSE TO RECOVER THESE COSTS IN
2		THIS PROCEEDING?
3	А.	The Company has included its reasonably anticipated future coal ash-related closure
4		obligations in the Decommissioning Study provided with this proceeding and is
5		proposing to collect these through traditional ratemaking (cost of
6		removal/depreciation), as supported from an accounting perspective by Company
7		witness Mr. Riley.
8	Q.	PLEASE DESCRIBE THE FUTURE CLOSURE-RELATED ACTIVITIES
9		INCLUDED IN THE DECOMMISSIONING STUDY.
10	А.	The Company has future known closure requirements for CCR Units as described
11		below:
12		A. <u>CAYUGA</u>
13		The following closure-related activities will occur after station retirement. See
14		Attachment 19-B (TSH) for a depiction of these areas.
15		• West Ash Fill Area – The Company plans to install an IDEM-approved
16		engineered cover system atop a 63.5-acre area, which currently has FGD
17		equipment and structures on it, following station retirement and demolition of the
18		FGD structures.
19		• RWS I Landfill – The Company plans to close the 33 acre RWS I landfill, which
20		is subject to the Federal CCR Rule, by installing a CCR Rule compliant cover
21		system.

1	B. <u>EDWARDSPORT</u>
2	The following closure-related activities will occur after station retirement. See
3	Attachment 19-C (TSH) for a depiction of this area.
4	• Railroad Track Area – An area of approximately 4 acres is underneath an existing
5	rail spur that supports station operation. Once the rail is demolished, the ash
6	below the rail spur will be addressed.
7	C. <u>GIBSON</u>
8	The following closure-related activities will occur after station retirement. See
9	Attachment 19-D (TSH) for a depiction of these areas.
10	• South Ash Fill Area Phase 2 - The Company plans to install an IDEM-approved
11	cover system atop a 56-acre area that currently has plant infrastructure (FGD
12	equipment) on it required to support plant operations.
13	• South Aggregate Landfill cells 1, 2 and 3, as well as future cells 4 and $5^8$ – The
14	Company plans to close the 190-acre South Aggregate Landfill, which is subject
15	to the Federal CCR Rule, upon its retirement by installing a CCR Rule complaint
16	cover system.
17	• North and South Settling Basin Service Roads – The Company plans to close
18	approximately 9 acres of CCR under or adjacent to service roads upon retirement
19	and demolition of the station.

<sup>&</sup>lt;sup>8</sup> South Aggregate Landfill cells 4 and 5 are currently under construction and are anticipated to be in service by 2026. All of the cells in the South Aggregate Landfill meet federal CCR Rule requirements and will be subject to closure upon receipt of last known waste.

1		D. <u>WABASH RIVER</u>
2		The following closure-related activities will occur after the lease is terminated with
3		Wabash Valley Resources, Inc. See Attachment 19-E (TSH) for a depiction of this
4		area.
5		• Pet Coke Area – The Company plans to close an 11-acre area owned by the
6		Company, but currently leased to Wabash Valley Resources Inc. to support the
7		operation of their synthetic gasification plant.
8		E. <u>NOBLESVILLE</u>
9		The following closure-related activities will occur after station retirement. See
10		Attachment 19-F (TSH) for a depiction of these areas.
11		• Right of Way / Cooling Tower Areas – An area of approximately 4 acres which
12		has a right-of-way for distribution and natural gas lines, as well as existing
13		cooling towers, both supporting plant operations.
14	Q.	PLEASE DESCRIBE THE ESTIMATED COSTS FOR THESE FUTURE
15		CLOSURES.
16	A.	Table 9 below summarizes the anticipated future closure costs expected upon
17		retirement of the Company's generating facilities and other facilities from Attachment
18		19-A (TSH) and included in the Company's Decommissioning Study in this
19		proceeding.

1

#### Table 9: Estimated Future Closure Costs (excluding PCM)

Site	CCR Unit	Estimated Closure Cost (excludes PCM)
Cayuga	West Ash Fill Area RWS I Landfill	\$47,758,570 \$10,189,000
Edwardsport	CCR Under Rail Spur	\$1,250,000
Gibson	South Aggregate Landfill Cells 1-5 South Ash Fill Area Phase II North & South Settling Basin Service Roads	\$34,845,875 \$17,500,000 \$2,703,125
Wabash River	Pet Coke Pile and Conveyor Area	\$11,250,000
Noblesville	Right-of-Way and Cooling Tower Areas	\$5,911,741
	Total	\$131,408,311

#### 2 Q. ARE THERE OTHER NON-COAL ASH RELATED COSTS INCLUDED IN

3

4

### THE DECOMMISSIONING STUDY THE COMPANY HAS PRESENTED IN THIS PROCEEDING?

5 A. Yes. Certain non-CCR impoundments that support plant operations as process water 6 treatment ponds will need to be retired and decommissioned after generation at the 7 site ceases. In some cases, these treatment ponds were installed as a result of the 8 Federal CCR Rule, since ash basins were historically water treatment units at stations. 9 In addition, the Company has included estimated costs associated with the 10 retirement and decommissioning of the cooling pond at Gibson Generating Station 11 and other process water and cooling ponds described in Company witness Mr. Kopp's 12 Decommissioning Study, Attachment 11-A (JTK).

#### TIMOTHY S. HILL -25-

1		V. <u>COAL ASH-RELATED INSURANCE PROCEEDS</u>
2	Q.	MR. HILL, ARE YOU AWARE OF TWO RECENT SETTLEMENTS
3		BETWEEN DUKE ENERGY INDIANA AND ITS INSURANCE PROVIDERS
4		RELATED TO COAL ASH CLOSURE COSTS?
5	A.	Yes, although I did not participate in the litigation or settlement, I am aware that
6		Duke Energy Indiana recently reached settlement with two insurance providers on
7		coverage.
8	Q.	PLEASE DESCRIBE AT A HIGH-LEVEL THE SETTLEMENTS REACHED.
9	А.	In 2023, Duke Energy Indiana reached settlements with two providers: AEGIS and
10		AmRe. The terms of the settlements remain confidential, both in accordance with the
11		agreements and because Duke Energy Indiana's litigation related to coal ash remains
12		ongoing. Disclosing confidential settlement terms could harm the Company's
13		continuing efforts in litigation.
14		With that said, the Company reached an agreement with AEGIS <b><begin< b=""></begin<></b>
15		CONFIDENTIAL>
16		<end confidential=""> The Company</end>
17		also reached agreement with AmRe <b><begin confidential=""></begin></b>
18		
19		
20		
21		
22		
23		

1		
2		<end confidential=""></end>
3	Q.	HOW IS THE COMPANY PROPOSING TO SHARE THE PROCEEDS OF
4		THESE INSURANCE SETTLEMENTS WITH CUSTOMERS?
5	A.	The Company is proposing to credit retail jurisdictional customers with their
6		proportionate share of the insurance proceeds, net of related expenses, through its
7		future ECR proceedings. As mentioned above, the Company's litigation continues, so
8		to the extent there are additional proceeds recovered, the Company will similarly
9		share those proceeds through its future ECR proceedings.
10	Q.	HOW IS THE COMPANY PROPOSING TO CALCULATE CUSTOMERS'
11		PROPORTIONATE SHARE OF THE INSURANCE PROCEEDS?
12	A.	The Company is proposing to first credit customers with the amount of the insurance
13		policy costs that were included in retail rates at the time those policies were in effect.
14		After that credit, the Company will then ascertain its overall closure-related expenses
15		incurred as a result of its past coal ash management and determine the portion of
16		those costs included in retail customers' rates. Once that is determined, the Company
17		is proposing to apply that proportion to its coal ash-related insurance proceeds. So,
18		for example, if Duke Energy Indiana's overall coal ash closure costs are equal to
19		\$100M with \$75M of that amount recovered through retail rates and with other non-
20		jurisdictional customers, joint owners, and Duke Energy shareholders paying for
21		\$25M, then the Company would apply that percentage of sharing to the proceeds
22		recovered. In this example, that \$75M plus the cost of the insurance policies paid for

#### DUKE ENERGY INDIANA 2024 BASE RATE CASE DIRECT TESTIMONY OF TIMOTHY S. HILL

1		through retail rates would be the credit included for retail customers in future ECR
2		proceedings.
3 4		VI. <u>PRODUCTION O&amp;M AND CAPITAL EXPENDITURES</u> (COAL COMBUSTION PRODUCTS)
5	Q.	BEYOND THE COSTS DESCRIBED ABOVE, ARE YOU SPONSORING THE
6		<b>CCP-RELATED POWER PRODUCTION O&amp;M AND CAPITAL</b>
7		EXPENDITURES IN THE FORECAST?
8	А.	Yes. I am sponsoring only the portion of the Power Production O&M and Capital
9		Expenditures related to CCP. Company witness Mr. Luke will also be sponsoring
10		portions of the Power Production O&M forecast. The CCP-related Test Period Power
11		Production O&M and Capital Expenditures are shown below in Table 10.
12		Table 10: Test Period Power Production O&M and Capital Expenditures

	CCP 2025 Forecast
Power Production O&M	\$21,425,540
Power Production Capital	\$25,174,754

#### 13 Q. PLEASE DESCRIBE THE TEST PERIOD CCP-RELATED POWER

#### 14 **PRODUCTION O&M 2025 FORECAST.**

- 15 A. The Company has the following anticipated O&M costs associated with Coal
- 16 Combustion Products in 2025:
- Costs to load, transport, place and compact the ash and fixated materials produced
- 18 by station operations at the Cayuga and Gibson stations.

1		• Costs to load and transport slag produced at the Edwardsport station to the South
2		Aggregate Landfill at the Gibson station, including placement and compaction in
3		the landfill.
4		• Costs to maintain the above referenced landfills, including required inspections,
5		the placement of interim cover(s), and the ongoing operation and maintenance of
6		the leachate systems.
7		• Costs to maintain various process water ponds, including required inspections and
8		cleanout of solids, with transportation and disposal to the on-site landfill(s).
9	Q.	PLEASE DESCRIBE THE TEST PERIOD CCP POWER PRODUCTION
10		CAPITAL FORECAST.
11	А.	The Company has the following anticipated capital expenditures associated with Coal
12		Combustion Products in the Test Period:
13		• At the Gibson station, costs to complete construction of cells 4 and 5, and
14		associated storm and contact water systems at the South Aggregate Landfill to
15		support disposal of production CCR; costs to complete repurposing a portion of
16		the North Ash Settling Basin.
17		• At Cayuga station, costs to begin construction of cell 3 of the RWS II landfill to
18		support disposal of production CCR.
19	Q.	DID YOU PROVIDE THE TEST PERIOD CCP-RELATED POWER
20		PRODUCTION O&M AND CAPITAL EXPENSES REFLECTED ABOVE, TO
21		COMPANY WITNESS MR. RUTLEDGE FOR INCLUSION IN DUKE
22		ENERGY INDIANA'S ADJUSTED FORECAST TEST PERIOD PROPOSED
23		IN THIS CASE?

#### DUKE ENERGY INDIANA 2024 BASE RATE CASE DIRECT TESTIMONY OF TIMOTHY S. HILL

1	А.	Yes.
2		VII. <u>CONCLUSION</u>
3	Q.	REGARDING THE ACTUAL AND FORECASTED COSTS INCURRED BY
4		THE COMPANY AND SOUGHT TO BE RECOVERED IN THIS CASE,
5		WERE YOU ABLE TO REACH A CONCLUSION ABOUT WHETHER THE
6		COSTS AND ACTIVITIES THAT YOU DESCRIBE IN YOUR TESTIMONY
7		ARE REASONABLE AND PRUDENT?
8	A.	Yes. Based upon my experience and understanding of the Company's current
9		regulatory obligations, I conclude the forecasted costs for future closure and power
10		production O&M and capital described in my testimony, and as listed in the
11		Decommissioning Study and the Test Period for this case, are reasonable and prudent.
12		Likewise, all costs incurred for CCR Units in Cause No. 45253 S1 between
13		January 1, 2019 and November 3, 2021 are reasonable and prudent. <sup>9</sup>
14		I made this determination based on the following criteria: 1) whether the
15		activities performed and to be performed are necessary; 2) whether the costs for the
16		necessary activities are appropriate; and 3) whether the closure and PCM projects are
17		meeting Company and regulatory deadlines.
18	Q.	WERE ATTACHMENTS 19-A (TSH) THROUGH 19-F (TSH) PREPARED BY

**YOU OR AT YOUR DIRECTION?** 

<sup>&</sup>lt;sup>9</sup> The disallowance of "Pre-Order" costs by the Indiana Court of Appeals in *Ind. Office of Util. Consumer Couns. v. Duke Energy Ind., LLC*, 204 N.E.3d 947 (Ind. Ct. App. 2023) was based on a determination that the Commission exceeded its statutory authority by authorizing recovery of certain costs whose recovery was not authorized in advance of being incurred, which violated the prohibition against retroactive ratemaking (a ruling that was superseded by the passage of S.E.A. 9 in April 2023). No argument was made against the necessity and prudency of these costs.

#### DUKE ENERGY INDIANA 2024 BASE RATE CASE DIRECT TESTIMONY OF TIMOTHY S. HILL

1 A. Yes.

#### 2 Q. DOES THIS CONCLUDE YOUR PREFILED TESTIMONY?

3 A. Yes, it does.

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#### VERIFICATION

I hereby verify under the penalties of perjury that the foregoing representations are true to the best of my knowledge, information and belief.

Judi Signed: Tim S. Hill

Dated: April 4, 2024

								Recovery Sought This Case <sup>2</sup>		
Station	CCR Unit	Footprint (Acres)	Volume (Cubic Yards)	Closure Method	Closure Required By <sup>1</sup>	Closure & PCM Recovery via ECR? (Cause #)	Status	Future Closure	45253 S1 Pre-Order Costs	
Cayuga	Lined Ash Disposal Area	37	310,000	Closure in Place	Federal CCR Rule	45253 S1	Complete			
Cayuga	Primary Ash Settling Pond	22	18,000	Closure in Place	Federal CCR Rule	45253 S1	Complete		¢10.000 101	
Cayuga	Ash Disposal Area #1	157	10,230,000	Closure in Place	329 IAC 10	45253 S1	Complete		\$19,366,121	
Cayuga	Secondary Ash Settling Pond	3	3,375	Closure by Removal	Federal CCR Rule	N/A	Complete			
Cayuga	West Ash Fill IArea	64	N/A	Closure in Place	329 IAC 10	N/A	Future	\$47,758,570		
Cayuga	RWS I Landfill	34	N/A	Cap per Federal CCR Rule	Federal CCR Rule	N/A	Future	\$10,189,000		
	-		4	L L			Cayuga Totals	\$57,947,570	\$19,366,121	\$77,313,691 Cayuga Total
Gallagher	Landfill	59.5	N/A	Cap per Federal CCR Rule	Federal CCR Rule	45253 S1	In Work			
Gallagher	Primary Pond Ash Fill Area	8	470,000	Closure in Place	329 IAC 10	45253 S1	In Work		\$31,046,505	
Gallagher	North Ash Pond	40	2,050,000	Closure in Place	329 IAC 10	45253 S1	In Work		Ş31,0 <del>4</del> 0,505	
Gallagher	Ash Pond A	36	1,250,000	Closure by Removal	CCR Rule	45253 S1	In Work			
Gallagher	Primary Pond	10	420,000	Closure in Place	CCR Rule	45940	In Work			
Gallagher	Coal Pile Ash Fill Area	11	380,000	Closure by Removal	329 IAC 10	N/A	Complete			
Gallagher	Secondary Settling Pond	4	24,000	Closure in Place	Federal CCR Rule	N/A	Complete			
							Gallagher Totals		\$31,046,505	\$31,046,505 Gallagher Total
Gibson	East Ash Pond	341	17,500,000	Cap in Place	329 IAC 10	45253 S1	Complete		\$15,132,920	
Gibson	East Ash Pond Settling Basin	42	69,000	Closure by Removal	Federal CCR Rule	45253 S1	Complete		\$15,152,520	
Gibson	North Settling Basin	17	120,000	Closure by Removal	Federal CCR Rule	45940	In Work			
Gibson	North Ash Pond	132	7,080,000	Closure in Place	Federal CCR Rule	45940	In Work			
Gibson	South Ash Fill Area Phase 1	189	6,860,000	Closure in Place	329 IAC 10	45940	Complete			
Gibson	South Settling Basin	47	250,000	Closure by Removal	Federal CCR Rule	N/A	Complete			
Gibson	South Ash Fill Area Phase 2	56	2,400,000	Closure in Place	329 IAC 10	N/A	Future	\$17,500,000		
Gibson	South Aggregeate Landfill - Cells 1-5	190	N/A	Cap per Federal CCR Rule	Federal CCR Rule	N/A	Future	\$34,845,875		
Gibson	North & South Settling Basin Service Roads	8	17,000	Closure in Place	329 IAC 10	N/A	Future	\$2,703,125		
							Gibson Totals	\$55,049,000	\$15,132,920	\$70,181,920 Gibson Total
Wabash River	Secondary Settling Pond	8	35,000	Closure by Removal	Federal CCR Rule	45253 S1	In Work			
Wabash River	Ash Pond A	80	3,510,000	Closure by Removal	Federal CCR Rule	45253 S1	In Work		\$12,177,841	
Wabash River	South Ash Pond	73	1,500,000	Closure in Place	Federal CCR Rule	45253 S1	In Work		<i><i><i><i>ϕiiiiiiiiiiii</i></i></i></i>	
Wabash River	Ash Pond B	21	740,000	Closure by Removal	Federal CCR Rule	45940	In Work			
Wabash River	North Ash Pond	3	1,590,000	Closure in Place	329 IAC 10	45940	2025 Start			
Wabash River	North Ash Pond - Future - Pet Coke Area	10	100,000 est	Closure in Place	329 IAC 10	N/A	Future	\$11,250,000		
							Wabash River Totals	\$11,250,000	\$12,177,841	\$23,427,841 Wabash Total
Noblesville	Ash Stack	16	580,000	Consolidate and Cap in Place	329IAC 10	45253 S1	Complete		\$12,817,629	
Noblesville	Legacy CCR at Transmission and Gas ROW	4	19,000	Consolidate and Cap in Place	329 IAC 10	N/A	Future	\$5,911,741		
							Noblesville Totals	\$5,911,741	\$12,817,629	\$18,729,370 Noblesville Total
Dresser	Coal Ash Management Area	37	920,000	Consolidate and Cap in Place	329 IAC 10	45253 S1	Complete		\$1,534,386	\$1,534,386 Dresser Total
Edwardsport	Phase 1 - Ash Stack	15	770,000	Consolidate and Cap in Place	329 IAC 10	45940	2024 Start			
Edwardsport	Phase 2 - Railroad track closure area	4	23,100	Closure by Removal	329 IAC 10	N/A	Future	\$1,250,000		\$1,250,000 EDW Total
								\$131,408,311	\$92,075,402	\$223,483,713 Grand Total

Notes: 1. Federal CCR Rule = 40 CFR § 257.50- 257.107. or 329 IAC 10 = Rules 3, 24-38, as applicable.

2. Excludes 20% approved federally mandated costs incurred for Cause Nos. 45253 S1 and 45940 as described in witness Lilly's testimony.

Attachment 19-B (TSH) 1 of 1

#### Cayuga – Future Closure



- Red Outlined area Landfill Cells 1 and 2
- Blue Outlined area West Ash Fill Area (WAFA)

Attachment 19-C (TSH) 1 of 1

#### Edwardsport–Future Closure



• Yellow Outlined area - Railroad track area

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Attachment 19-D (TSH) 1 of 2

#### Gibson – Future Closure



- Yellow Outlined area South Ash Fill Area (SAFA) Phase II
- Red Outlined area South Aggregate Landfill cells 1-3
- Blue Outlined area- South Aggregate Landfill future cells 4 & 5

#### Gibson – Future Closure



• Red Outlined area - North and South Settling Basin access road

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Attachment 19-E (TSH) 1 of 1

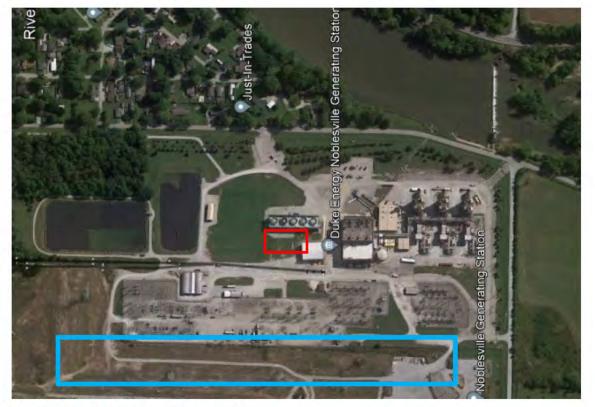
#### Wabash River-Future Closure



- Red Outlined area Pet Coke Pile Area
- Blue Outlined area Remnant below conveyor

Attachment 19-F (TSH) 1 of 1

#### Noblesville – Future Closure



- Blue Outlined area CCR consolidation
- Red Outlined area Distribution towers / poles, natural gas line and cooling tower