## ANNUAL CCR SURFACE IMPOUNDMENT INSPECTION REPORT (per 40 CFR 257.83(b)(2))

Power Station:

Coffeen Power Station

Owner:

Illinois Power Generating Company

CCR Impoundment: Ash Pond No. 1

Date of Inspection:

8/25/2015

Name of Qualified Professional Engineer:

Kipkoech K. Chepkoit, Ph. D., P.E. and Jason Campbell, P.E.

In accordance with 40 CFR § 257.83(b)(1), an existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment that is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d) must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include: (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

## Inspection Report 40 CFR § 257.83(b)(2)

i) Have there been any changes in geometry of the impounding structure since the previous annual inspection? If yes, please explain.

No changes.

#### ii) Instrumentation

Instrument ID #	Туре	Maximum recorded reading since previous annual inspection (ft)
P000	Piezometer	619.1'
P001	Piezometer	614.7'
P002	Piezometer	625.8'
P003	Piezometer	621.1'
P005	Piezometer	622.6'
P006	Piezometer	612.8'
P007	Piezometer	612.2'
P008	Piezometer	623.3'

	Approximate Depth / Elevation						
iii)	Since previous Elevation (ft		evation (ft)	Depth (ft)			
	annual inspection:	Minimum	Present	Maximum	Minimum	Present	Maximum
	Impounded Water		630			5	
	CCR	625		652	25		52

- iv) Storage capacity of the impounding structure at the time of the inspection (acre-ft): 900
- v) Approximate volume of the impounded water and CCR at the time of the inspection (acre-ft):

water volume: 100

CCR volume: 650

vi) Are there any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures?

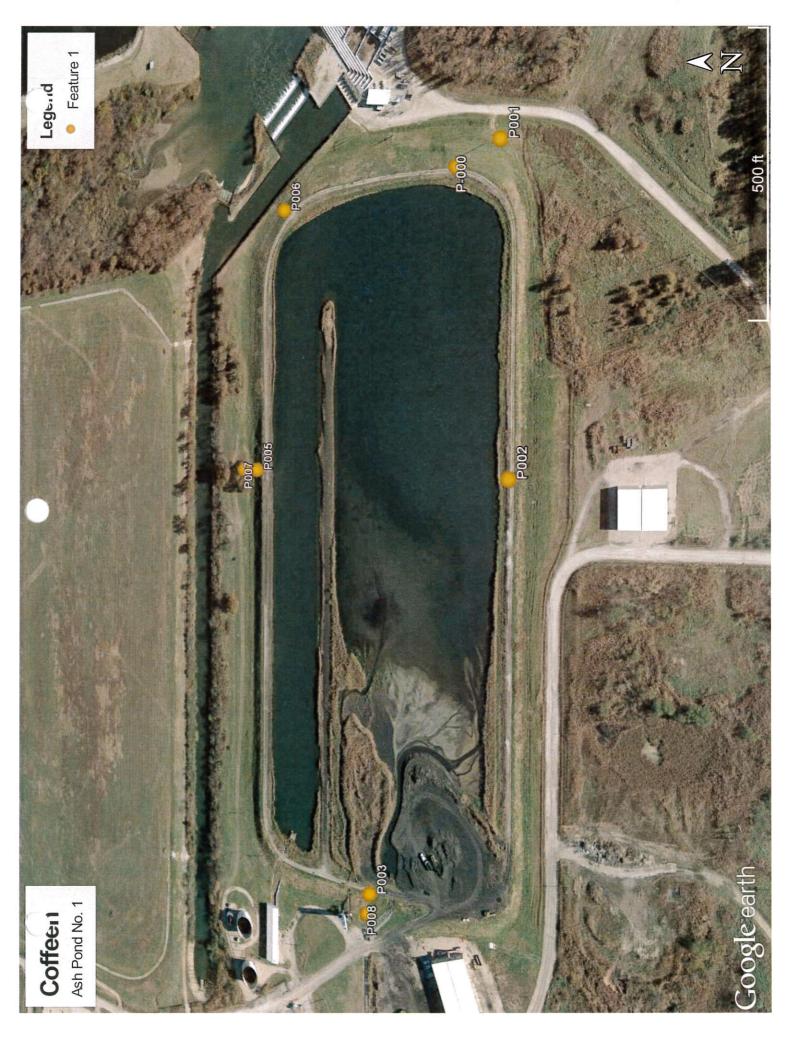
None

vii) Are there any other changes which may have affected the stability or operation of the impounding structure since the previous annual inspection?

None

I, Jason Campbell, P.E., certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Illinois. The information herein is to the best of my knowledge and belief, true, accurate and complete.





# ANNUAL CCR SURFACE IMPOUNDMENT INSPECTION REPORT (per 40 CFR 257.83(b)(2))

Power Station: Coffeen Power Station

Owner: Illinois Power Generating Company

CCR Impoundment: Ash Pond No. 2

Date of Inspection: 8/25/2015

Name of Qualified Professional Engineer: Kipkoech K. Chepkoit, Ph. D., P.E. and Jason Campbell, P.E.

In accordance with 40 CFR § 257.83(b)(1), an existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment that is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d) must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include: (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

## Inspection Report 40 CFR § 257.83(b)(2)

i) Have there been any changes in geometry of the impounding structure since the previous annual inspection? If yes, please explain.

No changes.

#### ii) Instrumentation

Instrument ID #	Туре	Maximum recorded reading since previous annual inspection (ft)
P009	Piezometer	623.0'
P010	Piezometer	609.0'
P012	Piezometer	625.4'
P014	Piezometer	613.6'

			Approximate Depth / Elevation				
iii)	Since previous	El	evation (ft)			Depth (ft)	
	annual inspection:	Minimum	Present	Maximum	Minimum	Present	Maximum
	Impounded Water						

CCR	636	652	42	58

- iv) Storage capacity of the impounding structure at the time of the inspection (acre-ft): 1650
- v) Approximate volume of the impounded water and CCR at the time of the inspection (acre-ft):

water volume: 0

CCR volume: 1300

vi) Are there any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures?

The majority of the impoundments embankments are steeper than 2:1. While this is not always a structural issue, it will require periodic monitoring.

vii) Are there any other changes which may have affected the stability or operation of the impounding structure since the previous annual inspection?

None

I, Jason Campbell, P.E., certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Illinois. The information herein is to the best of my knowledge and belief, true, accurate and complete.





## ANNUAL CCR SURFACE IMPOUNDMENT INSPECTION REPORT (per 40 CFR 257.83(b)(2))

Power Station: Coffeen Power Station

Owner: Illinois Power Generating Company

CCR Impoundment: Gypsum Stack pond

Date of Inspection: 8/25/2015

Name of Qualified Professional Engineer: Kipkoech K. Chepkoit, Ph. D., P.E. and Jason Campbell, P.E.

In accordance with 40 CFR § 257.83(b)(1), an existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment that is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d) must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include: (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

### Inspection Report 40 CFR § 257.83(b)(2)

i) Have there been any changes in geometry of the impounding structure since the previous annual inspection? If yes, please explain.

No changes.

ii) Instrumentation

Instrument ID #	Type	Maximum recorded reading since previous annual inspection (ft)
None		

Approximate Depth / Elevation							
iii)	Since previous	Ele	vation (ft)			Depth (ft)	
	annual inspection:	Minimum	Present	Maximum	Minimum	Present	Maximum
	Impounded Water		621			19	
	CCR	609		627	7.4		25.4

- iv) Storage capacity of the impounding structure at the time of the inspection (acre-ft): 1150
  v) Approximate volume of the impounded water and CCR at the time of the inspection (acre-ft): water volume: 300
  CCR volume: 392
- vi) Are there any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures?

None

vii) Are there any other changes which may have affected the stability or operation of the impounding structure since the previous annual inspection?

None

I, Jason Campbell, P.E., certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Illinois. The information herein is to the best of my knowledge and belief, true, accurate and complete.



# ANNUAL CCR SURFACE IMPOUNDMENT INSPECTION REPORT (per 40 CFR 257.83(b)(2))

Power Station: Coffeen Power Station

Owner: Illinois Power Generating Company

CCR Impoundment: Recycle pond

Date of Inspection: 8/25/2015

Name of Qualified Professional Engineer: Kipkoech K. Chepkoit, Ph. D., P.E. and Jason Campbell, P.E.

In accordance with 40 CFR § 257.83(b)(1), an existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment that is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d) must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include: (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

### Inspection Report 40 CFR § 257.83(b)(2)

i) Have there been any changes in geometry of the impounding structure since the previous annual inspection? If yes, please explain.

No changes.			

ii) Instrumentation

Instrument ID#	Туре	Maximum recorded reading since previous annual inspection (ft)
None		

		Approximate Depth / Elevation					
iii)	Since previous	Ele	evation (ft)			Depth (ft)	
	annual inspection:	Minimum	Present	Maximum	Minimum	Present	Maximum
	Impounded Water					5	
	CCR						

iv) Storage capacity of the impounding structure at the time of the inspection (acre-ft):	470
---	-----

v) Approximate volume of the impounded water and CCR at the time of the inspection (acre-ft):

water volume: 75

CCR volume: 37

vi) Are there any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures?

None

vii) Are there any other changes which may have affected the stability or operation of the impounding structure since the previous annual inspection?

None

I, Jason Campbell, P.E., certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Illinois. The information herein is to the best of my knowledge and belief, true, accurate and complete.

