Dynegy's Comments in Response to Environmental Law and Policy Center, Prairie Rivers Network and Sierra Club's Requested Changes to Illinois Coal Ash Rules (PCB R2020-19)

In response to Mr. Eastvold's March 2, 2021 request, Dynegy Midwest Generation, LLC; Electric Energy Inc.; Illinois Power Generating Company; Illinois Power Resources Generating LLC; and Kincaid Generation, LLC (collectively, "Dynegy") respectfully submit these comments to JCAR regarding the proposed second notice 35 Ill. Adm. Code Part 845 rules currently pending before the Illinois Pollution Control Board ("Board"). To the extent JCAR considers the comments submitted by the Environmental Law and Policy Center, Prairie Rivers Network and Sierra Club (collectively "ELPC-PRN-SC"), Dynegy requests that JCAR also consider the comments below. These comments respond to two points raised in ELPC-PRN-SC's comments and raise two new points for JCAR's consideration.

I. Response to ELPC-PRN-SC Comments

a. The Second Notice Part 845 Rules Already Incorporate the Statutory Requirements in 415 ILCS 5/22.59(g)(6) and No Revision to Proposed Section 845.260(d)(1) is Necessary

The second notice Part 845 rules proposed by the Board incorporate the statutory requirements in 415 ILCS 5/22.59(g)(6) as written. Accordingly, ELPC-PRN-SC's proposed revision to Section 845.260(d)(1) is unnecessary.

415 ILCS 5/22.59(g)(6) more completely provides that the Part 845 rules must "specify meaningful public participation <u>procedures</u> for issuance of CCR surface impoundment construction and operating permits, including but not limited to . . . an opportunity for a public hearing prior to permit issuance." (emphasis added) The Board's second notice rules do just that. As IEPA noted in its Statement of Reasons, 845.260 "provides the opportunity for the public to . . . request a public hearing on the tentative permit. It specifies the process and requirements the Illinois EPA must follow to provide public notice of the hearing, allow for public commenting, hold a public hearing" As written, 845.260 sets forth procedures for requesting and conducting a public hearing, held by the IEPA, after the submittal of any permit application. It also allows any member of the public to "request a public hearing under Section 845.260(d)." R20-19 Second Notice Opinion and Order, Addendum A ("Add. A"), 35 Ill. Adm. Code Section 845.260(b)(2)(H).

Along with the public hearing procedures set forth in 845.260, proposed Part 845 provides additional avenues for pre-permit public hearings. The rule requires <u>mandatory</u> prepermit application public hearings under section 845.240. Add. A 35 Ill. Adm. Code Section 845.240(a) ("At least 30 days before the submission of a construction permit application, the owner or operator of the CCR surface impoundment <u>must hold at least two public meetings</u> to discuss the proposed construction.") (emphasis added). Owners and operators are also required to discuss the results of any corrective measures assessment "in a public meeting with interested and affected parties, as required by Section 845.240" prior to finalizing any corrective action and must similarly "discuss the results of the closure alternatives analysis in a public meeting" prior to submitting an application for a construction permit for closure. *See* Add. A, 35 Ill. Adm. Code Sections 845.660(d) & 845.710(e). As such, no changes to Section 845.260(d)(1) are necessary to ensure compliance with the Act.

b. Proposed Section 845.750(d) is Consistent with the Federal CCR Rule and Should Not Be Removed

Contrary to ELPC-PRN-SC's comments, 35 Ill. Adm. Code 845.750(d) as drafted, which allows the limited use of on-site CCR for the purposes of grading and contouring in the design and construction of final cover systems, is as protective as or more protective than the federal CCR Rule and the provision should not be deleted.

As the Board noted in its second notice Opinion and Order, the proposed Part 845 rules "will meet and, where warranted, exceed federal CCR regulations." Second Notice Opinion and Order at p. 105. Proposed Section 845.750(d) is not less protective than the federal CCR Rule, nor is it modeled off of "a never-finalized Trump proposal." First, Section 845.750(d) is modeled after 35 ILCS §840.124(d), which governs the closure of Ash Pond D at the former Hutsonville power station and similarly allows the use of coal ash generated on-site to be used in establishing final grade and slope of a CCR surface impoundment cover system. *See* R20-19 IEPA Post-Hearing Comments at p. 36 (October 30, 2020) (noting 845.750(d) "is consistent with the Board regulations found in Section 840.124 Final Slope and Stabilization").

Second, as set forth in the rulemaking record, moving CCR from one location at a site to combine with CCR at another location at the site for the purposes of closure in place, *i.e.*, consolidating CCR, is not less protective than 40 C.F.R. Part 257. In fact for the reasons set forth in the rulemaking record, it is more protective. As set forth in the rulemaking record, consolidating CCR will have several benefits, including a reduced footprint where CCR is located at a site, and the elimination of long-term threats to groundwater and surface water from CCR surface impoundments serving as the source of the consolidated CCR. See R20-19 Bittner Prefiled Testimony at pp. 27 - 31 (Aug. 27, 2020), Hrg. Ex. 37. For example, if CCR surface impoundments at a site are closed by removal or their lateral footprint is reduced because CCR excavated from that unit is consolidated into a single surface impoundment, which would then subsequently be closed in-place, the overall footprint of the CCR disposal area at the site would be reduced. Id. at 28. The benefit of consolidating CCR in this way is that potential environmental exposure is significantly reduced. Id. Furthermore, the land areas at the site where the CCR was excavated would become available for future development and reuse. Id. In order to allow for the benefits of consolidating CCR to be realized, 845.750(d) should remain in place.

In contrast, there is no evidence in the record supporting a conclusion that consolidation of CCR in accordance with proposed Section 845.750(d) is less protective than 40 C.F.R. Part 257. That a provision similar to 845.750(d) is not included in the federal CCR Rule is beside the point. 415 ILCS 5/22.59(g)(1) does not require Part 845 be identical in substance to the federal CCR Rule or that both have the exact same requirements, but rather that it be "at least as protective and comprehensive" as 40 C.F.R. Part 257 Subpart D. When specifically asked about the environmental impact of the consolidation of on-site CCR into an impoundment as part of closure IEPA noted that "as long as the modeling indicates the use of CCR will not preclude achievement of the GWPS, the Agency does not consider its use to be a greater environmental risk, if the CCR is used pursuant to the requirements of Section 845.750(d)." R20-19 IEPA Answers to Pre-Filed Questions at p. 65-66 (Aug. 3, 2020).

Accordingly, Section 845.750(d) should not be removed.

II. Dynegy's Additional Comments to JCAR

a. Groundwater Elevation Monitoring Should Be Required Quarterly Rather Than Monthly

In its second notice Opinion and Order the Board retained a requirement for monthly groundwater elevation monitoring (Section 845.650(b)(2)) and a related requirement to produce potentiometric surface maps in connection with each groundwater elevation sampling event (845.610(e)(3)(C)). As the Board noted in its Opinion and Order, IEPA supported creating potentiometric maps using "either monthly <u>or quarterly</u> groundwater elevation data." R20-19, Second Notice Opinion and Order at 64 (Feb. 4, 2021) (emphasis added); R20-19 IEPA's Response to Final Post Hearing Comments at pp. 19-20 (Nov. 6, 2020). In contrast, IEPA specifically objected to a suggested requirement that potentiometric surface maps be based on daily elevation measurements, acknowledging that such a requirement would be "impossible." Id.

While no support was provided in the R20-19 record for why monthly groundwater elevation monitoring is more appropriate than quarterly elevation monitoring, there is evidence suggesting that quarterly elevation monitoring is more appropriate. Monthly elevation monitoring will be costly, onerous, and include more health and safety risks than quarterly monitoring, while providing no realized environmental benefit. See Declaration of Cynthia Vodopivec, Attached as Ex. A. For Dynegy, the individual(s) conducting the monitoring will have to drive over 2000 miles on a monthly basis, including to several vacant and remote facilities. Id. Requiring mobilization on a monthly basis creates additional, and unnecessary, health and safety risks associated with travel and being on-site, including risks like hazardous driving conditions and extreme weather. Id. Ultimately, monthly elevation monitoring will cost Dynegy over \$5 million more than quarterly elevation monitoring. Id. By changing elevation monitoring frequency to a quarterly basis, Part 845 will remain more protective and comprehensive than the federal CCR Rule, which currently requires groundwater quality and elevation monitoring only semi-annually. 40 C.F.R. §§ 257.93(c), 257.94(b). It would also make the frequency of elevation measurements consistent with the frequency of groundwater quality monitoring required in 845.650(a), allowing for the consolidation of monitoring because both require individuals to go on-site to collect samples. See Vodopivec Prefiled Testimony at pp. 14-15 (Aug. 27, 2020), Hrg. Ex. 21.

By revising the requirement for groundwater elevation monitoring to a quarterly basis, Part 845 would continue to require the collection of such data more frequently than the federal CCR Rule. 40 C.F.R. §§ 257.94(b). Also, consistent with the federal CCR Rule, it would correlate the measurement of groundwater elevations with when groundwater quality is sampled. 40 C.F.R. §§ 257.93(c). At the same time, the revision will allow consolidated crews to go out and collect groundwater quality and elevation data on a quarterly basis, reducing health and safety concerns. Given IEPA's agreement that quarterly groundwater elevation monitoring is appropriate, the lack of support that monthly groundwater elevation monitoring is better than quarterly monitoring, and the health and safety concerns associated with monthly groundwater elevation monitoring, JCAR should recommend the following revision:

Section 845.650(b)(2):

Groundwater elevation monitoring frequency must be monthly quarterly.

b. The Default Final Cover System Standards Should Be Reduced

The rulemaking record does not support the default final cover system standards, requiring a minimum of three feet of soil for the low permeability layer and for the final protective layer, in proposed Sections 845.750(c)(1)(A) and (c)(2)(B). Neither IEPA nor the Board offered evidence to support the proposed default final cover system standards. Requiring a minimum covering of 18 inches is more appropriate and just as protective.

IEPA stated that the proposed final cover system standards were based on regulations for municipal solid waste ("MSW") landfills, not CCR surface impoundments. R20-19, IEPA First Supplement to Prefiled Answers, Dynegy Q. 76-77, at p. 54 (Aug. 5, 2020), Hrg. Ex. 3. But IEPA agreed that there are key distinctions between CCR surface impoundments and landfills—specifically, that landfills experience substantially more post-closure settling than CCR surface impoundments. R20-19, Hearing Transcript at 106:21-107:7 (Aug. 25, 2020); IEPA Prefiled Answers, CWLP Q. 18, p. 133 (Aug. 3, 2020), Hrg. Ex. 2; *see also*, Bonaparte Prefiled Testimony at pp. 8-9 (Aug. 27, 2020), Hrg. Ex. 31. IEPA has admitted that it did not perform its own independent assessment—nor did it rely on any scientific or technical materials—to determine whether the final cover standards from the landfill program are appropriate for CCR surface impoundments. R20-19, Hearing Transcript 107:8-108:1 (Aug. 25, 2020). The Board, therefore, should not have merely accepted proposed Part 845's default final cover standards set forth in Sections 845.750(c)(1)(A) and (c)(2)(B).

As set forth in the record, IEPA's proposed requirements greatly (and needlessly) exceed those of the federal CCR Rule and cover systems IEPA has previously approved. They would also impose substantial financial costs on owners and operators, with no evidenced environmental benefit. Vodopivec Prefiled Testimony at p. 19, Hrg. Ex. 21; Bonaparte Prefiled Testimony at pp. 9-13, Hrg. Ex. 31. Further, the excavation, transport, and placement of additional cover materials could create additional worker safety hazards and environmental harms. *See* Bittner Prefiled Testimony at p. 22 (Aug. 27, 2020), Hrg. Ex. 37 (noting that increased construction activity results in increased safety and emissions concerns). Therefore, the unrebutted record overwhelmingly demonstrates that adopting the Board's proposed default final cover system standards would be arbitrary and capricious. Perhaps recognizing the lack of support, the Board suggests that the use of landfill final cover system standards on CCR surface impoundments is appropriate "because most existing CCR surface impoundments that will be closed in place have no low permeability liners." Second Notice Opinion and Order at p. 97. However, the Board has not cited any support or evidence for this statement.

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Finally, IEPA and the Board's stated concern with Dynegy's proposal for a final cover system is based on a mistaken interpretation of the impact of that proposal. IEPA and the Board suggest that Dynegy's proposal would allow owners and operators to install caps that do not meet performance standards, but then supplement those caps with other engineering measures in order to achieve the groundwater protection standards. See IEPA Response to Final Post-Hearing Comments at 35; Second Notice Opinion and Order at p. 97. That is not what Dynegy proposed at all. Instead, Dynegy's proposed revisions would reduce the *minimum* final cover requirements to levels that are consistent with IEPA's past practice and far more stringent than those required by the federal CCR Rule. R20-19, Dynegy's First Post-Hearing Comment at pp. 5-6 (Oct. 30, 2019). As Dr. Bonaparte notes, if the closure alternatives analysis conducted under Section 845.710 demonstrates that a thicker cover than Dynegy's proposed minimum standards are required at a specific site to achieve groundwater performance standards, then a thicker cover will be required. Bonaparte Prefiled Testimony at pp. 9-13, Hrg. Ex. 31. IEPA's argument and the Board's Opinion and Order also ignore the unrebutted modeling performed by Dynegy's expert David Hagen, which showed that reducing the final cover system requirements-without installing any additional engineering measures--would have no meaningful impacts on the amount of precipitation entering an impoundment after closure or the time required to achieve the groundwater protection standards. R20-19, Dynegy's First Post-Hearing Comment at p. 5 (Oct. 30, 2019).

Therefore, for the reasons stated here and in Dynegy's First Post-Hearing Comment, Dynegy's proposed revisions to the final cover standards are supported by the record, protective of human health and the environment, and will reduce the financial and other costs associated with final cover systems installed under Part 845.

Dynegy requests that JCAR recommend the following revisions:

Section 845.750(c)(1)(A)(i):

The minimum allowable thickness must be 0.91 meter (3 feet) 18 inches; and . . .

Section 845.750(c)(2)(B):

Be at least three feet thick, when used in combination with a low permeability layer meeting the requirements of Section 845.750(c)(1)(A); or 18 inches thick, when used in combination with a low permeability layer meeting the requirements of Section 845.750(c)(1)(B), and must be sufficient to protect the low permeability layer from freezing and minimize root penetration of the low permeability layer.

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Declaration of Cynthia Vodopivec in Support of Dynegy's¹ Comments to the Joint Committee on Administrative Rules

I, Cynthia Vodopivec declare as follows:

I am Senior Vice President, Environmental Health and Safety at Dynegy Midwest Generation, LLC and IPH, LLC (the indirect corporate parent of Illinois Power Generating Company and Illinois Power Resources Generating, LLC). As part of my duties I oversee permitting and regulatory development and compliance for air, water, and waste issues as well as overseeing the health and safety program at Dynegy's Illinois generating stations.

Under the Illinois Pollution Control Board's proposed Part 845 rules, groundwater elevation monitoring will be required on a monthly basis, while groundwater quality monitoring will be required on a quarterly basis. Dynegy currently conducts groundwater elevation monitoring under the federal CCR rule, which requires groundwater elevation monitoring and groundwater quality monitoring to occur concurrently on a semi-annual basis.

There are several health and safety concerns that arise from requiring groundwater elevation monitoring on a monthly basis rather than a quarterly basis. The Dynegy units where groundwater elevation monitoring will be required are spread across the State of Illinois, most at a large distance from each other and a large distance from the nearest labs that will be used to conduct the monitoring. As a result, monthly monitoring will require the individual(s) conducting the monitoring to be on the road on a year-round basis, covering over 2000 miles per month. There are health and safety risks associated with such a large amount of travel, including the inherent, every day risks of driving, plus the possibility of dangerous road conditions and severe weather.

There are also health and safety risks associated with being on-site to conduct the elevation monitoring itself. Many of the facilities where monitoring will take place are closed, and the properties are vacant and remote. Accordingly, there are health and safety risks associated with potential on-site hazards, as well as a likelihood of weather-related hazards, especially during the winter months.

Additionally, the costs associated with monthly groundwater elevation monitoring will be much greater than those associated with quarterly groundwater elevation monitoring. Specifically, for Dynegy, monthly monitoring will result in additional costs of over \$5,000,000 when compared to the costs of quarterly groundwater elevation monitoring.

Finally, there is little to no additional benefit or information to be gained by requiring groundwater elevation monitoring on a monthly basis as opposed to a quarterly basis. Conducting the groundwater elevation monitoring required in Section 845.650(b)(2) on a quarterly basis will allow Dynegy and other owners/operators to conduct groundwater elevation monitoring at the same time as the quarterly groundwater quality monitoring required under

¹ "Dynegy" is used as shorthand herein to refer to Dynegy Midwest Generation, LLC; Electric Energy Inc.; Illinois Power Generating Company; Illinois Power Resources Generating, LLC; and Kincaid Generation, LLC

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proposed part 845, significantly reducing the health and safety risks, as well as costs, associated with such monitoring.

I declare that the above statements are true and correct to the best of my knowledge, information and belief:

Dated: <u>March 10, 2021</u> Signature: <u>Cynthia & Ubdy</u> Cynthia Vodopivec