



January 7, 2018

Ms. Sarah J. Keller  
U.S. Army Corps of Engineers  
Indianapolis Regulatory Office  
8902 Otis Avenue  
Suite S106B  
Indianapolis, IN 46216

Re: Project ID LRL-2018-602-SJK  
Riverbank Stabilization, Middle Fork of the Vermilion River  
Vermilion County, Illinois

Dear Ms. Keller:

On behalf of Eco-Justice Collaborative, we are hereby submitting formal comments on the above-referenced Section 404 Application, pursuant to the Public Notice posted November 26, 2018. Based on these comments, we are officially objecting to the issuance of a permit by the DA for this project because it is our opinion that a practicable alternative exists that would have less impact on the aquatic system, and that the provisions of the National Environmental Policy Act (1969) have not been met. These include:

1. An accurate description of the Purpose and Need.
2. A thorough consideration of reasonable alternatives that will meet the Purpose and Need of the project.
3. An analysis and documentation of impacts associated with each alternative and the development of measures to mitigate unavoidable impacts.
4. The implementation of a public participation process, including a public hearing in order to ensure that critical information and public interest are reflected in the permit decision.

Eco-Justice Collaborative is an Illinois-based non-profit corporation that provides education and facilitates public involvement on important environmental and social justice issues. Many of our supporters regularly canoe, kayak and fish in the Middle fork of the Vermilion River and would be adversely affected by the proposed action. Since 2014, we have been actively working with residents of Champaign and Vermilion Counties in Illinois to protect the Middle Fork and Vermilion County residents and businesses from the applicant's unlined and leaking coal ash pits that were built in the floodplain of Illinois' only National Scenic River.

The Middle Fork is a naturally-meandering river that is moving west toward these ash three pits, which collectively hold 3.3 million cubic yards of toxic ash. This volume of ash would fill Chicago's Willis Tower nearly two times. The river is severely eroding abutting riverbanks, raising concerns that the impoundments will be destabilized and send millions of gallons of toxic

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ash into the river, with severe consequences to the ecology of the river system and cost to residents and businesses in Vermillion County.

The Middle Fork was designated as a State Scenic River in 1986 by Governor Jim Thompson, and received its National Scenic River designation by the U.S. Department of the Interior in 1989. The river is protected by state and federal law because of its outstanding scenic, recreational, ecological, and historical characteristics. The Middle Fork is one of the most biologically-diverse in the Midwest, and one which plays an important role in the region's economy.

Eco-Justice Collaborative understands that it is essential to stabilize banks next to the applicant's two oldest coal ash pits for as long as the toxic waste is allowed to remain in the river's floodplain. We have urged agencies to require the applicant to shore up riverbanks in areas where proximity of the channel to coal ash impoundments threatens destabilization. But such stabilization should be temporary and targeted, while a thorough evaluation of this project (including purpose and need; analysis of alternatives; and proposals for mitigation) are conducted per requirements of the National Environmental Protection Act (NEPA).

Following guidelines set forth by NEPA, locally-available background information and technical data not currently at the disposal of the DA should be obtained and incorporated into the evaluation of a full set of alternatives and, where applicable, measures for mitigating unavoidable impacts must be integrated into the proposed project. We believe this process is essential for making a final decision that is in the best interest of the public, and that it is required by federal law, per Title 32, CFR, § 651 - ENVIRONMENTAL ANALYSIS OF ARMY ACTIONS (AR 200-2) Subpart B - National Environmental Policy Act and the Decision Process.

### **NARROWLY AND INACCURATELY DEFINED PURPOSE AND NEED**

The purpose and need for a project is foundational to conducting a legally defensible analysis of alternatives. The purpose of the project cannot be "to construct the project". Instead, it must be based on a clearly articulated need and address the underlying "general goal of the action." *Simmons v. USACE 130 F.3d 664 (7<sup>th</sup> Cir. 1997).*

In its June 28, 2018 Joint Section 404/401 Permit Application, the applicant states that:

*"The purpose of the project is to protect the eroding streambank from the continued lateral migration of the stretch of the MFV River as noted in the project description."*

In the Public Notice issued by the U.S. Army Corps of Engineers on November 26, 2018, the purpose of the project is listed as "*Construction of streambank stabilization.*" Implicit in both of these statements is the concern that if unrestrained, the river channel's continued natural movement westward is likely to result in an eventual breach of the coal ash impoundments due to the impoundments' location in the floodplain and their proximity to the river. The purpose of the project, therefore, is not to "construct streambank stabilization", but rather to prevent the discharge of coal ash pollutants into the river. Except for a no-build alternative, this should be the basis for the development of all alternatives considered.

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We believe that the applicant should prepare and evaluate alternatives that include options ranging from armoring the riverbanks to relocating the ash. Guidelines established under 40 CFR 230 state that a permit cannot be issued if a practicable alternative exists that would have less adverse impact on the aquatic system. Given the potential for the proposed project to result in significant ecological, economic, aesthetic and recreational impacts, the size and scale of the selected alternative should be the minimum necessary to fulfill the purpose and need.

“When the proposed action is an integral part of a coordinated plan to deal with a problem, the range of alternatives that must be evaluated is broadened.” *Natural Resources Defense Council v. Morton*, 458 F.2d 827 (D.C. Cir. 1972). The Illinois EPA is currently evaluating options for permanent closure of the applicant’s coal ash impoundments. Moving the ash away from the river is one of the alternatives under consideration. This alternative could require a smaller scale or interim stabilization project, and result in less adverse impact on the river. These options are within the capacity of the applicant to implement, and should be evaluated.

## **THE APPLICANT’S PREFERRED ALTERNATIVE**

Dynegy Midwest Generation (subsequently referred to as the “applicant”) proposes to build a 2,000 linear-foot long rock wall along the right descending bank of the Middle Fork of the Vermilion River to stabilize riverbanks immediately next to two unlined coal ash pits, identified as the North Ash Pit (NAP) and Old East Ash Pit (OEAP). The Public Notice issued on November 26, 2018 states that the project includes:

*Fill* - A combination of 11,500 cubic yards of void-filled riprap and stone toe protection, and 2,000 cubic yards of clean soil and live branch layering.

*Excavation* - Approximately 9,000 cubic yards of existing riverbed and bank material (including existing gabion baskets) below the ordinary high water mark would be excavated and removed offsite to an undesignated location.

Over the years, the applicant has allowed the west bank of the river to erode away the bench separating the river channel from the toe of slope of the embankment holding back the coal ash. Today, in many sections of the project area, there is little or no upland bench available from which to stage construction. The applicant and, therefore, the Public Notice, provides no description of the proposed construction process nor precautions that will be undertaken to avoid significant impacts to the river. We understand that most of the proposed work on the project will need to be staged from within the river channel. Heavy equipment will be placed in the channel and contaminated material will be excavated and exposed to open water.

Excavation would extend over 30 feet into the river channel, and over seven feet below the bed of the river. In some sections, the construction zone would reach approximately 70 feet into the river. This proposal is the applicant’s preferred alternative. No other alternatives or analysis of alternatives has been provided. The Notice includes the following statement:

*“The applicant has considered multiple alternatives to further minimize proposed impacts to waters of the United States, some of which would result in an increase in erosion and sediment loading and a greater impact to aesthetic appearance of the banks in comparison to the preferred alternative.”*

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No documentation to support this statement has been provided.

32 CFR § 651.9 (c) states:

*“The proponent of an action or project must identify and describe the range of reasonable alternatives to accomplish the purpose and need for the proposed action or project, taking a “hard look” at the magnitude of potential impacts of implementing the reasonable alternatives, and evaluating their significance.”*

In order to permit the proposed activities, the DA must find that the activity complies with Section 404 of the CWA, which states:

*...“dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.”* 40 CFR. § 230.1 (c).

Furthermore, the Corps of Engineers’ Guidelines impose limitations on when a Section 404 permit may be issued. In general, no discharge of dredged or fill material shall be permitted. 40 CFR. § 230.10:

1. If there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.
2. If the discharge will cause or contribute to significant degradation of the environment.
3. Unless all appropriate steps have been taken to minimize potential adverse impacts.

The applicant has not provided sufficient discussion of practicable alternatives. The fill will, for reasons provided below, potentially cause or contribute to significant degradation of the Middle Fork and the values for which this river received its designation as a National Scenic River. Also, the applicant has not sufficiently identified measures that would minimize potential adverse impacts (see INSUFFICIENT IMPACT MITIGATION, below).

Given the recreational, economic and biological significance of the Middle Fork of the Vermilion River, and its status as a State and National Scenic River, we believe that the DA has not fulfilled its requirements for conducting a thorough evaluation of the applicant’s project, and cannot issue a Section 404 permit unless or until an adequate assessment of alternatives and their associated impacts has been completed. Eco-Justice Collaborative believes this assessment is best served through the preparation of an Environmental Impact Statement.

### **32 CFR § 651.41 - CONDITIONS REQUIRING AN EIS**

The National Environmental Policy Act of 1969 requires all federal agencies to assess the environmental effects of their proposed actions prior to making decisions. This applies to the issuance of Section 404 permits by the U.S. Army Corps of Engineers.

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32 CFR § 65.41 calls for the preparation of an Environmental Impact Statement when a proponent, preparer, or approving authority determines that the proposed action has the potential to:

- (a) Significantly affect environmental quality, or public health or safety.
- (b) Significantly affect historic (listed or eligible for listing in the National Register of Historic Places, maintained by the National Park Service, Department of Interior), or cultural, archaeological, or scientific resources, public parks and recreation areas, wildlife refuge or wilderness areas, wild and scenic rivers, or aquifers.
- (c) Significantly impact prime and unique farmlands located off-post, wetlands, floodplains, coastal zones, or ecologically important areas, or other areas of unique or critical environmental sensitivity.
- (d) Result in significant or uncertain environmental effects, or unique or unknown environmental risks.
- (e) Significantly affect a federally listed threatened or endangered plant or animal species, a federal candidate species, a species proposed for federal listing, or critical habitat.
- (f) Either establish a precedent for future action or represent a decision in principle about a future consideration with significant environmental effects.
- (g) Adversely interact with other actions with individually insignificant effects so that cumulatively significant environmental effects result.
- (h) Involve the production, storage, transportation, use, treatment, and disposal of hazardous or toxic materials that may have significant environmental impact.
- (i) Be highly controversial from an environmental standpoint.
- (j) Cause loss or destruction of significant scientific, cultural, or historical resources.

**32 CFR § 651.41 (a)**

**Significantly affect environmental quality, or public health or safety**

The applicant's preferred alternative has the potential to result in significant adverse effects on environmental quality, as well as the health and safety of the public using the river during or after construction. These impacts should be fully evaluated and compared with impacts from other, less harmful alternatives. 32 CFR § 651.9 (c).

*Effects on Water Quality and Public Health* - According to information provided in the applicant's permit application, the proposed project would require in-stream construction and excavation. In some locations:

- (1) Construction would extend thirty feet or more into the river channel.
- (2) Excavation below the riverbed would extend over seven feet, and bottom sediments would be removed and replaced with stone.

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Approximately 9,000 cubic yards of existing bank and bed material below the ordinary high water mark would be excavated and removed off-site.

Orange sediments regularly pool and settle in the river channel next to the Old East Ash Pit. Samples of leachate taken from groundwater seeps from riverbanks in this section by Illinois EPA personnel in 2008 were determined to contain coal ash chemicals. While these seeps have continued to flow, over the last ten years neither the Illinois EPA nor the applicant has tested the seeps and made any data available to the public. In 2016 and again in 2017, water quality testing of these seeps by a certified, independent laboratory showed the presence of arsenic, barium, boron, chromium, manganese, molybdenum and sulfate, all of which exceeded background levels. Multiple pollutants exceeded health-based standards set by the U.S. EPA.

In June of 2018, the Illinois EPA issued a Notice of Violation pursuant to Section 31(a)(1) of the Environmental Protection Act. Alleged violations included the unlawful discharge and deposition of contaminants into the river so as to cause or tend to cause water pollution and a water pollution hazard. The alleged contaminants remain present in the bank and bed of the river in the area of proposed construction. To our knowledge, neither the extent nor depth of this contamination is known to either the applicant or the Illinois EPA. It is essential that this information be made public and be part of the decision-making process for this permit application.

Chemicals found within the leachate are characteristic of coal ash and are known to be harmful to public health. They can cause cancer, reproductive problems and neurological disorders in humans and wildlife.

The applicant's preferred alternative also has a high probability of disturbing and re-suspending contaminated soils and sediments into the river. This could degrade water quality and redistribute coal ash chemicals downstream where they may be ingested by fish and other aquatic biota or become in contact with recreational users of the river.

According to the applicant's Surface Water Pollution Prevention Plan (SWPP), the applicant proposes to install a temporary turbidity curtain to limit the downstream transport of sediments. The proposed turbidity curtain would consist of a 22-ounce pervious curtain fabric, secured between galvanized steel ballast chain (along the channel bottom) and a one-foot-wide flotation element. The curtain would be field-fitted and located based on construction activities and sequencing.

Silt or turbidity curtains have been used with success in situations where waters are relatively calm or quiescent. However, they are highly susceptible to changing water levels and turbulent currents; exactly the conditions that will be encountered in the Middle Fork. The loading applied to a silt curtain structure during exposure to a current typically causes the structure to deform due to the opposing anchoring, buoyancy and current forces (USACE, 1978). Also, there are seams in the curtain that can allow suspended sediments to escape. Typically, a turbidity curtain will not contain 100% of suspended solids, and with changing water conditions, sediment containment could be much less.

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Industry specifications typically note that even their most robust silt curtains are limited to conditions with currents not exceeding 5 ft/sec. While this is a brisk current, water velocities in the Middle Fork often attain or exceed this speed. Adding in the turbulence of river flow scouring the right descending bank during construction, there is a high probability that the curtain will fail. Flow data are not available for the construction site. Based on the width of the channel and bankfull depth, a 5 ft/sec current speed approximates a flow of 3,000 cfs. The gauge at Kickapoo State Park recorded flows in excess of 3,000 cfs at least six times in 2018. It is likely that the proposed silt curtain will not contain all disturbed materials, and its effectiveness is likely to be compromised multiple times during the lengthy construction period.

Given the episodic nature of rising water levels in the Middle Fork and the frequent high velocity currents, how will the applicant ensure that the silt curtains will prevent the discharge of heavy silt loads to downstream areas during construction? What are the plans for rapid removal of the silt curtain in the event of impending high flows? Will excavation move soils from the bank toward the river channel? Who will monitor the construction process and verify the appropriate handling of materials? How and when will sediments deposited behind the silt curtain be removed and to where will they be relocated? A more detailed evaluation should be made that assesses the potential for releasing harmful chemicals into the river during construction, and the public health and ecological risks associated with that action.

*Effects on River Ecology* - The Middle Fork of the Vermilion River is one of the most biologically diverse in Illinois. The river's clear-flowing water, sand and gravel substrates, and complex flow through riffles, pools, and eddies, offer high quality habitats for fish and invertebrates, aquatic plants and micro-flora and -fauna. The scale (nearly 5 acres of stream bank and stream bed disturbance) and duration (i.e., 9- to 12-month construction period) anticipated by the proposed project have the potential to adversely impact the river and its biological systems.

The river receives pollutant loads from soil erosion and chemicals associated with agricultural runoff, as well as nutrient loads and fecal coliforms from small waste treatment facilities upstream. Coal ash pollutants enter the river from the unlined coal ash pits owned by the applicant. Water quality analyses conducted on samples collected in 2013 by the Illinois Natural History Survey showed concentrations of ten elements appreciably greater in water samples taken downstream from the proposed project area versus those collected upstream of the plant site. This was most notable for cadmium, chromium, mercury, lead, zinc and dissolved cobalt (*Levengood and Soucek, 2014*). Coal ash contaminants also were found in significantly greater concentrations in snails collected downstream from the Vermilion coal ash pits. These included arsenic, cadmium, chromium, cobalt, mercury and thallium among others.

Contaminants become available to fish and other aquatic organisms via ingestion or through active or passive uptake of dissolved metals. The cumulative effects of existing pollution and additional stress generated by in-stream construction and the dispersal of contaminated soils from the bank and bottom of the river could negatively affect aquatic biota in the river.

In addition to the impact of increased pollutant loads, alterations to the stream channel and resulting changes to hydraulics could have cumulative negative effects on areas immediately downstream. What impact will over 1/3 mile of hardscape have on downstream flow dynamics,

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bedload and sediment transport? Will these changes adversely affect important fish and invertebrate communities immediately downstream?

Given the biological importance of the river, the impacts of the preferred alternative on aquatic flora and fauna should be determined through an EIS process and consultation with experts. Less harmful bank stabilization measures could be constructed if the coal ash impoundments were closed via removal and relocation of the ash away from the Middle Fork and its floodplain. This is an alternative within the ability of the applicant to implement, and meets the purpose and need for the project, which is to protect the applicant's coal ash impoundments from the erosive forces of the meandering Middle Fork River.

*Effects on Recreation and Public Safety* - The Middle Fork is the centerpiece of a major recreation area in east-central Illinois. Each year thousands of people come from across the state to take part in river-oriented activities such as kayaking, canoeing, tubing, wading, fishing, birding and hiking. The Middle Fork runs through Kickapoo State Recreation Area, just south of the applicant's preferred alternative. The Danville Area Convention and Visitors Bureau estimates that Kickapoo State Park alone generates an annual revenue stream for Vermilion County that ranges from \$11 million to \$15 million. Kickapoo Adventures is the only canoe and kayak livery on the Middle Fork, and puts thousands of paddlers on the river every season. Its economic viability is dependent on recreational use of the river.

The value of the river and the reason it draws so many to the area is its beauty, solitude, clear running water, and undisturbed natural habitats. With the exception of the applicant's property, there is no development along the 17.1 miles of river designated as the National Scenic River corridor.

The proposed project would require in-stream construction on over a 1/3 mile of the river, and take place, over nine months or more. Recent plans prepared by the applicant for bidding purposes show heavy equipment in operation and the construction zone would extend up to 70 feet into the channel. This would inhibit or prevent recreational use of the river for significant periods of time, particularly since construction would need to take place when water levels are low, which generally coincides with prime recreational months.

We understand that the applicant is working with IDNR to develop a plan to maintain use of the river while construction is in process. Yet, key stakeholders, such as the owner and operator of Kickapoo Adventures, have not been included in the conversation. Kickapoo Adventures took over the canoe livery and concession in 2017, after the closure of the previous rental operation. The new owner has worked hard to promote its business and raise regional awareness of the positive recreational experience that the Middle Fork of the Vermilion offers.

According to the owner and operator of the livery, media coverage of the applicant's leaching coal ash pits has created concern for some who might otherwise use the river. The prospect of large-scale construction and the dispersal of additional pollution into the river may dissuade future users from coming to the Middle Fork. Kayakers and canoeists encountering a lengthy, unpleasant and perhaps intimidating experience of 2,000 feet of in-stream construction may choose never to return to the Middle Fork. The majority of people patronizing Kickapoo

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Adventures are inexperienced paddlers. Expecting families and amateur paddlers to portage more than 2,000 feet around a construction zone is unrealistic, and will severely limit the number of people willing to use the river. This could result in significant economic impacts to Kickapoo Adventures.

Those who do continue to use the river for canoeing and kayaking would encounter navigational challenges and potential safety issues as they pass the 2,000-foot construction zone. Given the configuration of the river, currents may move boaters toward the outer bend of the stream, placing them dangerously close to the construction zone. Silt curtains installed in mid-channel to contain sediments re-suspended by construction would constitute an additional safety hazard for boaters swept toward the outer bank.

The applicant has not fully addressed the potential impact that its proposal would have on the river, including its recreational value; regional economic importance; and public safety. What has the applicant done to fully assess the economic impact that its proposal will have on the area? Why has Dynegy not conferred with stakeholders? What will the applicant propose to do to mitigate short and long-term economic impacts, and ensure the safety of all who paddle this river past the construction area?

### **32 CFR § 651.41 (b)**

**Significantly affect historic (listed or eligible for listing in the National Register of Historic Places, maintained by the National Park Service, Department of Interior), or cultural, archaeological, or scientific resources, public parks and recreation areas, wildlife refuge or wilderness areas, wild and scenic rivers, or aquifers.**

The proposed project lies within the 17.1-mile section of the Middle Fork of the Vermilion River, which was designated a state-administered component of the National Wild and Scenic Rivers System in 1989 under Section 2(a)(ii) of the Wild and Scenic Rivers Act. The Department of the Interior, National Parks Service (NPS) along with the the Illinois Department of Natural Resources (IDNR) as the state administrator, are mandated to protect and enhance the river's free-flowing condition, water quality, and outstanding remarkable values (ORV) for which the river gained its designation. These values include scenic, recreational, ecological, geologic and historic resources. Section 7(a) of the Wild and Scenic Rivers Act states:

*“... no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration.”*

The following summarizes the adverse effects the applicant's preferred alternative would have on Illinois' only National Scenic River.

*Obstructs the river's free-flowing characteristics* - Section 16(b) of the Act defines “free-flowing” as “existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping or other modifications of the waterway.” The applicant's preferred alternative would significantly modify the channel morphology along 2,000 feet of riverbank. Approximately 11,500 cubic yards of rip-rap and stone toe protection, and an additional 2,000 cubic yards of

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soil, would be deposited below the ordinary high water mark. The expressed intent of the project is to limit the natural migration of the river channel and constrain flow in this section of the river. By any definition, armoring the channel of a natural stream limits its free-flowing character. The applicant's preferred alternative, therefore, would not "protect and enhance" this value, and would violate this provision.

Degrades Water Quality - The Wild and Scenic Rivers Act specifically calls for the protection of water quality within designated streams. The applicant's preferred alternative would require extensive excavation of soils and sediments within the bed and bank of the river. These materials are known to be contaminated with heavy metals. Construction would take place over a 9 to 12 month period, re-suspending contaminated soils in the river channel and creating the likelihood that a portion of them will be conveyed downstream. This could have a direct and adverse impact on water quality within the river, as previously described under 32 CFR § 651.41 (a).

Degrades Scenic Values - The Middle Fork is known for its scenic beauty, with majestic bluffs, and upland and lowland forest that line its channel. The 17.1-mile corridor is natural and undeveloped, with the exception of the property owned by the applicant. The long-term management goals for the river as stated in the Corridor Management Plan adopted in 1992 by the Illinois Department of Natural Resources, the state agency responsible for administering this National Scenic River, are summarized as follows:

1. To preserve and enhance the overall natural character of the river area.
2. To preserve the largely undeveloped shoreline by minimizing and controlling development within the protected river corridor.
3. To minimize the evidence of man's activity within the protected corridor.

The applicant's preferred alternative would result in the installation of 24-inch diameter boulders as stone toe protection along 2,000 feet of riverbank. The proposed 2:1 slope will result in extensive exposure of white rock, visible under normal water levels during much of the year. The applicant proposes to install live branch layering by planting whips of alder and willow species in the rip-rap, with the intention of creating a more natural appearance. Even under the best management regime, the establishment of a vegetative cover able to fully obscure the rip-rap is unlikely, due to seasonal flooding; ice scour; and generally harsh growing conditions.

A similar planting technique was used in a 485-foot section of riverbank adjacent to the New East Pit in 2016. This section remains an eyesore to individuals using the river. The cumulative visual impact of installing an additional 2,000 feet of rip-rap (ultimately 0.47 mile) in this otherwise unspoiled corridor clearly violates the stipulations of the National Scenic River designation and the Corridor Management Plan adopted for this river. Therefore, the proposed project would have a direct and adverse effect on the scenic value of the Middle Fork.

Impacts Recreational Values - The applicant's preferred alternative would have a direct and adverse effect on the recreational values of the river. The scenic beauty, clean running water, and undeveloped river corridor make the Middle Fork an important recreational destination for

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tens of thousands of people each year. The river is heavily used for fishing, canoeing, tubing, wildlife viewing and even wading and swimming. Similar recreational opportunities are rare in east-central Illinois, and form the basis for a robust recreational economy. The applicant's preferred alternative would disrupt the use of the river for kayaking and canoeing during the prime recreational season. Heavy equipment operating in the river channel, is likely to close the river next to the project, affecting the livery who puts approximately 10,000 people on the river in canoes, kayaks or tubes each year. This equipment also would disturb polluted sediments and create noise and visual intrusions, significantly diminishing one of the river's outstanding remarkable values.

Degrades Values for which the River was Designated a National Scenic River - Section 10(a) of the Wild and Scenic Rivers Act directs state and federal administering agencies to protect and enhance the values for which the river is designated. Guidelines established by the Department of Interior, National Parks Service interpret this language as "a non-degradation and enhancement policy" for all designated rivers. The applicant's project adversely affects and degrades the scenic, ecological, and recreational characteristics for which the river received its National Scenic River designation. Based on this interpretation, the applicant's preferred alternative is not consistent with Section 10(a) of the Act.

**32 CFR § 651.41 (c)**

**Significantly impact prime and unique farmlands located off-post, wetlands, floodplains, coastal zones, or ecologically important areas, or other areas of unique or critical environmental sensitivity.**

The applicant's preferred alternative includes substantial fill in the river that is expected to alter the river's flow dynamics. No impact analysis has been provided that would identify impacts, if any, on floodplain or wetlands downstream; habitat for aquatic organisms, including state and federal protected species. See 32 CFR § 651.41 (d) and 32 CFR § 651.41 (e), below.

**32 CFR § 651.41 (d)**

**Result in significant or uncertain environmental effects, or unique or unknown environmental risks.**

Unknown Downstream Impacts - The placement of fill could restrict the river channel and increase turbulence and flow velocities downstream. This could be particularly significant during storm events. A near-record storm event in February 2018 removed nearly 150 feet of levee on the east banks of the river. The 20-foot tall levee was built to separate the river from an abandoned strip mining lake located on Illinois Department of Natural Resources (IDNR) land. This breach sent material from the levee downstream (with unknown consequences to aquatic life) and allowed the intermixing of water from the two water bodies until the Middle Fork receded and the IDNR could rebuild the levee.

Potential Coal Ash Spill - The natural function of a meandering river like the Middle Fork of the Vermilion River is to migrate across its floodplain over time. The meandering Middle Fork is migrating west toward the applicant's coal ash pits that both occupy and obstruct the river's floodplain. Aerial photography shows that the river channel has, in the past, occupied portions of the floodplain now covered by the ash pits.

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The applicant and prior owners of the coal ash impoundments considered moving the river in 1981 due to concerns over riverbank erosion and potential destabilization of the ash pits. Instead, Illinois Power (then owner of the plant and coal ash pits) armored eroding riverbanks with gabions. Since that time, the natural forces of the Middle Fork have ripped these gabions off the banks, sending them downstream - or depositing remnants of rock and wire in the channel, creating hazards for those who paddle the river. The preferred alternative may temporarily keep the river away from the coal ash impoundments. But long term, it is inevitable that the Middle Fork will reoccupy its floodplain. Eventually, the applicant's preferred alternative will fail, as prior armoring failed, potentially sending toxic coal ash into this National Scenic River.

### **32 CFR § 651.41 (e)**

#### **Significantly affect a federally listed threatened or endangered plant or animal species, a federal candidate species, a species proposed for federal listing, or critical habitat.**

The Middle Fork provides important habitat for a variety of state and federally protected mussel species, including the federally endangered Clubshell mussel (*Pleurobema clava*) and Northern riffleshell (*Epioblasma rangiana*). Seven species are classified as state endangered or threatened. Stodola et. al. (2103) found 30 species of mussels in the Middle Fork. Seven sites in the Middle Fork (including sections above and below the proposed project area) were classified as Highly Valued, with high species richness and/or abundance and intolerant species likely present. Stantec (2018) surveyed the immediate project area and found 33 live mussels representing eight species.

The highly-diverse fishery in the Middle Fork also includes species that serve as essential hosts for glochidia, the larval stage of selected mussel species. Stantec (2018) noted host species such as the rainbow darter (*Etheostoma camurum*), fantail darter (*E. flabellare*), dusky darter (*E. sciera*), smallmouth bass (*Microterus dolemieu*), hornyhead chub (*Nocomis biguttatus*) and longear sunfish (*Lepomis megalotis*) within the project area.

The state-endangered bluebreast darter (*Etheostoma camurum*) is one of five state-listed fishes inhabiting the Middle Fork. It is only known to exist in Illinois in the Middle Fork and Salt Fork branches of the Vermilion River system. This species is found in areas of moderate to swift currents among cobble and boulder substrates and spawns in these areas during early summer, the period of construction.

To ensure compliance with NEPA guidelines, the potential impact of the applicant's preferred alternative on these species should be more fully evaluated, and the opinion of local experts considered, especially as they relate to increased sediment and pollution loads anticipated from construction. The preparation of an environmental impact statement would ensure the opinions and knowledge of relevant experts help guide the selection of an alternative with the least impact on both state- and federally-protected species.

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### **32 CFR § 651.41 (f)**

#### **Either establish a precedent for future action or represent a decision in principle about a future consideration with significant environmental effects.**

Based on an appropriately defined statement of purpose and need (versus the one provided in the Public Notice), the applicant's preferred alternative is part of a broader plan under consideration for protecting the Middle Fork from contamination by toxic coal ash stored in unlined pits adjacent to the river channel. The extent and nature of the construction needed to stabilize the riverbank is directly dependent upon the solution approved by the Illinois EPA for closing the existing coal ash pits. A bank stabilization project of the scale proposed is only necessary if a significant amount of coal ash is permanently left in place on the applicant's site. If the applicant agrees to, or the Illinois EPA requires, the removal of all or a significant portion of the ash, interim and less destructive bank reinforcement can, and should be considered. Conversely, by approving the proposed project, the significant investment of time, money and materials into bank stabilization will, in principle, represent a de-facto decision in principle to leave the coal ash in place.

Any bank stabilization should be compatible with the Illinois EPA's approved closure option. Closure and stabilization are two components of the same purpose and need, and should not arbitrarily be separated for the convenience and benefit of the applicant. These are major decisions with potentially significant impacts and should be documented via an environmental impact process and public involvement program.

### **32 CFR § 651.41 (g)**

#### **Adversely interact with other actions with individually insignificant effects so that cumulatively significant environmental effects result.**

To comply with the Clean Water Act and NEPA, the DA must fully and adequately evaluate and consider the long-term impact on all environmental resources *Simmons v. U.S. Army Corps*, 120 F.3d 664.

Clean Water Act - The Corps' Guidelines require the DA to consider the "nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms" 40 CFR § 230.11(e). This evaluation must be supported by "cumulative impact analyses" on the aquatic ecosystem. 40 CFR § 230.11(g).

National Environmental Protection Act - Under NEPA, the cumulative impact analysis is broader. This duty encompasses "the impact on the environment [that] results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 CFR § 1508.7.

These analyses have not been carried out by the applicant, as required.

Because of its high-quality, diverse biota; aesthetic beauty; and recreational value; the Middle Fork is especially vulnerable to development and activities within its watershed that would degrade its natural integrity. The river already is challenged by agriculturally-generated erosion

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and chemical runoff from upstream areas. Feedlots and waste treatment also contribute nutrient and coliform pollution loads to the Middle Fork. A prior bank stabilization project by the applicant added to the cumulative negative effects imposed on the river.

In 2016 the applicant was granted a Section 404 permit for bank stabilization immediately downstream from the proposed action in order to address an emergency situation adjacent to its New East Ash Pit (NEAP). Between 2009 and 2015, erosion next to the NEAP had been allowed to progress to such an extent that a Dynegey engineer reported that in one section only ten feet remained between the river bank and the toe of slope of the embankment holding back the coal ash, jeopardizing the stability of the ash pit. Dynegey applied for and received a Section 404 Permit to armor 485 feet of the riverbank.

Approving the applicant's permit application without a full evaluation of alternatives and impact analysis could result in an additional unnecessary assault on the river. The proposed action has the potential to bring about both short-term and long-term negative effects to the river and would add to the cumulative degradation of the Middle Fork. Permitting this project also sets a precedent that would legitimize the need for bank stabilization along other sections of the river, where the Middle Fork's meandering channel is eroding away private property. Rationalizing a series of such projects along a protected river is clearly not in the best interest of the public, nor consistent with the intent of the National Scenic Rivers Act.

#### **32 CFR § 651.41 (h)**

##### **Involve the production, storage, transportation, use, treatment, and disposal of hazardous or toxic materials that may have significant environmental impact.**

The applicant proposes to excavate, remove and transport thousands of cubic yards of earth from the bank and bed of the river. Much of this material may be contaminated with heavy metals. The likelihood that some of these materials will be released into the aquatic system is increased by the fact that construction equipment will be operating from the riverbed and drawing excavated materials toward the open water. This could have a significant adverse effect on the river system, as well as those who use it, and should be evaluated as part of a more detailed environmental impact assessment process.

#### **32 CFR § 651.41 (i)**

##### **Be highly controversial from an environmental standpoint.**

The DA issued its Public Notice to adjacent property owners and reviewing and permitting agencies associated with the applicant's preferred alternative, and posted the Notice on its website. To our knowledge, the only way the DA has solicited broader public input on a project that would allow 3.3 million cubic yards of toxic coal ash to remain permanently in the floodplain of this National Scenic River was via the website posting. Yet this action is highly controversial and is part of a much larger public interest in preventing the future discharge of toxic coal ash chemicals into the river.

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Vermilion County residents, county board officials, and environmental organizations have been calling on the applicant to clean up its toxic waste since 2014. Resolutions have been passed, urging the applicant to move the coal ash out of the floodplain and away from the Middle Fork. Over the past two years, more than 2,000 letters and petitions have been gathered, urging the Illinois EPA and the Governor of Illinois to require the applicant to move its waste. In April 2018 American Rivers, a National Advocacy Group, placed the Middle Fork of the Vermilion River on its America's Most Endangered Rivers because of the coal ash threat to the river.

Since July 2018, when the applicant applied for a Joint Section 404/401 permit to build its riverbank stabilization project, hundreds more people have expressed concerns over the applicant's proposal. Resolutions and letters have been prepared and sent to the DA asking for a public hearing and describing how the applicant's preferred alternative will harm the river, while also allowing the toxic waste to remain permanently in place.

Concerns raised focus on the:

- Amount of fill that would be placed below the ordinary high water mark, and how the change in fluvial dynamics might increase erosion downstream.
- Disturbance of contaminated soils from excavation of riverbanks and the riverbed that would degrade water quality and potentially affect the biological diversity of this river.
- Sedimentation that would be released from construction activities (especially during storm events) that could affect aquatic organisms, including federal and state-protected mussels.
- Recreation economy, which would be disrupted during project construction, causing economic hardship to the operator of the canoe livery.
- Degraded scenic value of the river due to the planned installation of 2,000 linear feet of white rock that will be visible during prime recreation months.
- Long-term stability of the project, since prior amoring has been ripped off riverbanks and the river is moving west toward the coal ash pits.
- Lack of guarantees that the applicant will be responsible for monitoring, maintaining, and repairing riverbanks as long as the coal ash remains in the floodplain, and that the taxpayer won't be on the hook for paying for these costs.
- Leaving the coal ash permanently in the floodplain and Vermilion County residents and businesses must forever live with pollution leaking from the coal ash pits and the threat of a coal ash spill if the wall is breached by the river.
- Approving a major bank stabilization project will represent a decision by the DA, in principle, to leave the coal ash in place.

Resolutions and letters have been submitted to the DA by over 250 residents in east-central Illinois. They also were prepared by State Senator Scott Bennet; State Representatives Mike Marron and Carol Ammons; Vermilion Advantage, who represents the business community in

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Vermilion County; Kickapoo Adventures, who operates the livery in Kickapoo State Park; AMBUCS a Danville-area service group; the Champaign County and Vermilion County Boards; the City of Danville; environmental organizations, including the Vermilion County Conservation District, the Vermilion County Soil and Water District, the Vermilion County Conservation Foundation, and the Prairie Group of the Illinois Chapter of the Sierra Club; Kevin Cummings, Malacologist, Illinois Natural History Survey; Dr. Bruce Rhodes, Fluvial Geomorphologist, University of Illinois; the Protect the Middle Fork Citizens Advocacy Group; Prairie Rivers Network; as well as Eco-Justice Collaborative. We are not aware that any of the organizations or individuals listed above received the Public Notice without a self-initiated request.

The public process afforded by the DA's Public Notice and public interest review is insufficient to obtain thorough and timely information from the public, experts, businesses, governmental bodies and local officials, or other organizations that have a vested interest in the outcome of the applicant's process. This is particularly true since a public hearing will be held solely at the discretion of the DA. The applicant's project clearly requires the public scrutiny afforded by an Environmental Impact Statement, with an appropriately defined purpose and need; thorough analysis of alternatives; proposed mitigation to minimize harm; and a public hearing to obtain input from the general public and experts.

### **INSUFFICIENT IMPACT MITIGATION**

33 CFR § 332.4(b)(1) requires the Public Notice to "contain a statement explaining how impacts associated with the proposed activity are to be avoided, minimized, and compensated for." The Public Notice contains only a short, vague statement indicating that "(T)he applicant has considered multiple alternatives to further minimize proposed impacts." (none are described). With the exception of a reference to a stormwater pollution prevention plan, no other mitigation is proposed. Nothing is said about mitigating impacts to water quality, aquatic biota, recreational users and the recreation economy. Nothing is said about meeting the challenges of managing and maintaining native vegetation on a rip-rap structure, nor performance standards required in order to comply with aesthetic requirements of this National Scenic River. No emergency or contingency plans are provided for demobilization in the event of heavy storm events. No reference is made to construction staging, operations, or precautions to be employed as contaminated soils are excavated along and into the open river channel.

The applicant has failed to adequately address these and other important concerns. In order to comply with the statutory provisions of NEPA, the potential impacts of the proposed action must be fully evaluated and documented, and measures outlined that will mitigate unavoidable negative effects. We believe that the biological, recreational and economic significance of the Middle Fork as a National Scenic River requires the preparation of an EIS and the benefits of a transparent public involvement process. The public interest will not be served unless the need for the project is met with a well thought out and environmentally responsible plan. As proposed, this project primarily serves the interest of the applicant.

### **INADEQUATE INFORMATION AVAILABLE**

In addition to the lack of sufficient impact analysis and attention to impact mitigation, the applicant has failed to provide important information necessary for the public and independent

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experts to provide meaningful comments on whether the applicant's preferred alternative is the least damaging practicable alternative. 33 CFR § 332.4(b)(1) states that the level of detail in the Public Notice must be commensurate with the scope and scale of the impacts. The Public Notice fails to meet this threshold, in part, because at the time of its issuance, reports and information critical to the meaningful consideration of this application had not been provided or were otherwise not available. These include, but are not limited to:

1. A more accurate and fully articulated Purpose and Need for the Project. The purpose and need can not be to implement the proposed alternative.
2. The identification and evaluation of feasible and practicable alternatives that could minimize or eliminate adverse environmental impacts to the river.
3. A full discussion of potential social, economic and environmental impacts, and an accompanying plan for mitigating unavoidable adverse effects.
4. Threatened and endangered species reports.
5. A floodway / floodplain analysis that demonstrates that the proposed changes in channel morphology will not result in water elevations that exceed state regulations, nor create changes in flow that would result in unacceptable scouring or erosion in sections of the stream outside of the zone of construction.
6. A stream protection and sediment control plan addressing in-stream work, as well as construction demobilization prior to high flow events.
7. A plan for the testing and identification of potentially toxic pollutants in the river bank and river bed and a specific plan for the containment, handling and disposal of contaminated soils.
8. A cumulative impact analysis, identifying long-term effects of the project on aquatic species, including habitat for threatened and endangered species, and the preferred, as the river continues its westward path towards the coal ash pits.
9. Input from key stakeholders regarding the development of alternatives and impact mitigation plans, especially as they relate to anticipated recreational and economic impacts.

## **CONCLUSION**

In conclusion, Eco-Justice Collaborative wishes to go on record as opposing the issuance of a Section 404 Permit for the applicant's preferred alternative. We believe that the information and review process to-date have not met the statutory requirements set by NEPA, nor have they fully complied with guidelines established by the Department of the Army. The application lacks a legitimate statement of purpose and need. It fails to address reasonable alternatives that would have less impact on the aquatic system. No analysis has been conducted in subject areas where there is the potential for significant adverse impact. Measures for impact avoidance, minimization and mitigation have not been sufficiently evaluated or documented for commitment by the applicant. Finally, the Public Notice lacks the detail necessary for the public

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and outside experts to provide meaningful comments on the proposal. This is, in part, due to the lack of availability of critical reports and information needed to evaluate the project.

We believe that to meet the requirements of NEPA, the DA should prepare an environmental impact statement that fully evaluates the impacts of the project and its reasonable alternatives and, in the process, rectifies the omissions referenced above. The DA also should hold a public hearing to ensure that all relevant information and public interests are considered in the decision. We know that this process can take time, and urge the DA to work with the applicant to obtain approval for targeted, interim, and temporary riverbank stabilization in those areas required to protect the coal ash potential destabilization by riverbank erosion until a final closure plan is approved by the Illinois EPA. Dynegy's preferred alternative is not temporary, interim, or targeted, and is intended to allow the applicant to permanently leave its waste in the floodplain of Illinois' National Scenic River.

Thank you for the opportunity to provide our formal comments on this proposal. Please inform us at your earliest convenience of the DA's response to our comments and formal requests. Because numerous reports and documents essential to preparing informed comments on the proposal were not available at the time of the issuance of the Public Notice, we also request the opportunity to provide additional comments for the record once missing documents become available. You can contact us by email: [lrichart@ecojusticecollaborative.org](mailto:lrichart@ecojusticecollaborative.org) and [prichart@ecojusticecollaborative.org](mailto:prichart@ecojusticecollaborative.org).

Sincerely,



Lan R. Richart, Co-Director  
Eco-Justice Collaborative



Pamela J. Richart, Co-Director  
Eco-Justice Collaborative

cc: Alec Messina, Director, Illinois EPA  
Thaddeus Faught, Bureau of Water, Illinois EPA  
Sanjay Sofat, Chief, Bureau of Water, Illinois EPA  
Richard P. Cobb, Deputy Division Manager, Division of Public Water Supplies, Illinois EPA  
Hector Santiago, U.S. Department of the Interior, National Park Service  
Wayne Rosenthal, Director, Illinois Department of Natural Resources  
Louis Yockey, Region 3 Landscape Architect, Illinois Department of Natural Resources  
U.S. Senator Richard J. Durbin  
U.S. Senator Tammy Duckworth  
U.S. Representative Rodney Davis  
State Senator Scott Bennett  
State Representative Michael Marron  
State Representative Carol Ammons  
Vermilion County Board Chair  
Champaign County Board Chair  
Rickey Williams, Mayor, City of Danville

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