APPENDIX A

SCOPING LETTERS

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February 14, 2003

Mr. Richard C. Nelson
U.S. Fish and Wildlife Service
Rock Island Field Office
4469 48th Avenue Court
Rock Island, IL 61201

SUBJECT: NOTICE OF SCOPING – SWITCHGRASS CO-FIRE TESTING AT OTTUMWA GENERATING STATION, CHILLICOTHE, IOWA

Dear Mr. Nelson:

The U. S. Department of Energy (DOE) is proposing to provide partial funding to Chariton Valley Resource Conservation and Development, Inc. (CVRCD), a non-profit organization sponsored by the U. S. Department of Agriculture (USDA), for (1) the construction of a biomass (switchgrass) storage, handling, and conveying system into the boiler at the Ottumwa Generating Station (OGS) at Chillicothe, Iowa, (2) operational testing of switchgrass as a biomass co-fire feedstock at OGS, and (3) corollary activities related to growing, harvesting, and transporting switchgrass grown in Chariton River Valley counties in southern Iowa to the OGS. One of DOE's missions is to advance the development and commercialization of renewable energy technologies such as biomass energy. The proposed action is intended to help demonstrate a renewable source of electricity that is commercially feasible in the United States, that reduces fossil fuel (coal) dependence, and that could potentially reduce emissions of criteria air pollutants, in particular sulfur and nitrogen oxides, and which could reduce greenhouse gases. Previous tests and initial demonstrations at OGS and elsewhere have shown switchgrass to be promising as a co-firing feedstock in coal-burning plants, such as OGS.

The OGS is a 725-megawatt (MW) maximum output, low-sulfur pulverized coal-burning plant owned jointly by several Iowa utilities and operated by Alliant Energy. The plant is located about a mile (1.6 kilometers) northwest of the City of Chillicothe on the Des Moines River, approximately ten miles (16 kilometers) northwest of Ottumwa, Iowa and 80 (129 kilometers) miles southeast of Des Moines, Iowa (map enclosed). A three-phase switchgrass co-fire test campaign has been planned and implemented at OGS. From November 2000 through January 2001, Alliant Energy conducted Phase 1 (Co-fire Test 1) at OGS. Phase 2 testing would comprise two additional co-fire tests.

Co-fire Test 2, which would use some residual equipment and test some new equipment, is currently planned for September/October 2003. It would test and demonstrate the

engineering and environmental feasibility of co-firing up to 12.5 tons of switchgrass per hour and would burn a maximum of 6,000 tons of switchgrass. Co-fire Test 3, which is tentatively scheduled for winter 2004/2005, would test the long-term (approximately 2000 hours) sustainability of processing 12.5 tons/hour. Co-fire Test 3 would be conducted using a proposed new process and new storage building constructed onsite at the current pole storage yard. Phase 3 (commercial operation testing) may be pursued if the results of the next two tests continue to point to technical and environmental feasibility. Continuous, full-scale commercial operations could process up to 25 tons of switchgrass per hour, generate 35 MW per year of OGS's annual output, and replace 5 percent of the coal used at OGS in one year.

DOE's Proposed Action would only support the second and third co-fire tests. DOE has no current plans to provide financial support for commercial operations. The new construction that DOE proposes to fund would include a new switchgrass processing facility and a new switchgrass storage barn that would be used for Phase 2 testing.

DOE has determined that this Proposed Action requires an Environmental Assessment (EA) under the provisions of the National Environmental Policy Act (NEPA) and we have tasked our contractor, Battelle Memorial Institute, with preparing it. Formal scoping meetings on this Proposed Action are not planned. However, we believe it is appropriate to have informal consultations with potentially interested agencies and organizations to afford them an opportunity to comment on our Proposed Action and to identify specific issues or concerns that they believe we should address in the EA.

The proposed new facilities would be built on OGS plant property approximately 1,100 feet (335 meters) west of the main plant. Only very limited demolition would be required to remove an old pole-mounted transformer. The proposed new construction area would occupy an old parking lot currently used for storing power line poles. A small office building located on the proposed site would remain. The new facilities would be separated from OGS's coal-firing operations, and Alliant Energy has indicated that the Proposed Action would not interfere with OGS plant operations or with vehicle traffic at the plant. The proposed new storage barn and process building would have footprints of approximately 27,035 square feet (2,511 square meters) and 6,862 square feet (638 square meters), respectively. The two buildings would be connected by an approximately 2,035 square foot (198 square meter) elevated transfer gallery. Thus, the total footprint of the new construction would be approximately 35,932 square feet (3,338 square meters). The ground elevation differences would require up to five feet (1.5 meters) of cut and/or fill grade-work. If necessary for dust control, new on-site concrete roads leading into the new facilities will be evaluated. New delivery truck parking areas would be built of compacted C-stone®, a proprietary material produced on-site as a byproduct of the fly ash that remains after coal is burned. Full-scale commercial testing (Phase 3) of switchgrass co-fire operations is not part of DOE's Proposed Action. However, if Phase 2 were to be successful and lead to Phase 3, the size of the new storage and processes buildings would be approximately doubled to accommodate the increased volume of switchgrass necessary for Phase 3.

The Proposed Action's corollary activities related to growing and harvesting switchgrass in the Rathbun Lake watershed would support continued production of switchgrass on

approximately 4,000 acres of existing Conservation Reserve Program (CRP) lands approved for the Chariton Valley Biomass Project in 1995 by the USDA, and harvesting, transporting, and storing the switchgrass using existing truck routes. Although it is anticipated that full-scale commercial operations could require up to 50,000 acres to produce the necessary 200,000 tons/year of switchgrass, DOE does not anticipate that it would have any involvement in the decision to operate at commercial levels nor to convert additional CRP lands to switchgrass production. However, DOE is working with USDA to identify USDA's NEPA compliance strategy should CVRCD and Alliant Power determine that commercial scale operations are viable and that the additional acreage for switchgrass production would be needed.

Because the location of the new construction associated with our Proposed Action is on the previously disturbed OGS site, we do not believe there would be any critical habitat in the area. Because the activities associated with our Proposed Action in Chariton Valley are limited to harvesting on approximately 4000 acres currently producing switchgrass, we do not believe our Proposed Action would adversely impact listed species or critical habitat, if there is any critical habitat in the vicinity of the Proposed Action. However, we wish to confirm these opinions with FWS and provide you with an opportunity to comment on our Proposed Action.

More detailed information regarding the Chariton Valley Biomass Project and our Proposed Action is available on line at http://www.cvrcd.org/deliverables.htm. This link includes links to three documents, the Chariton Valley Biomass Project's Engineering Design Package, Environmental Permits Report, and Environmental Strategies Plan. Collectively, they provide comprehensive background and planning information regarding the engineering and environmental issues associated with the overall Chariton Valley Biomass Project and our Proposed Action. (Note: Although these documents provide relevant background regarding the Chariton Valley Biomass Project's history and the results of the already completed co-fire tests, the Proposed Action for which we are preparing the EA is limited to the new construction and operations described above.)

Finally, the following table shows our current understanding of the federally listed species in the project area by county. We would welcome your review to ensure the table is current and accurate.

Federally listed species in Six Iowa Counties Potentially Impacted by the Proposed Action. Threatened (T), Endangered (E)

County	Common Name	Scientific Name	Status	Habitat
Appanoose	Bald eagle	*Haliaeetus leucocephalus*	T	Breeding/wintering
	Indiana bat	*Myotis sodalis*	E	
Clarke	Indiana bat	*Myotis sodalis*	E	
	Prairie bush clover	*Lespedeza leptostachya*	T	Dry-mesic prairies
	Mead's milkweed	*Asclepias medii*	T	Dry-mesic prairies
Decatur	Indiana bat	*Myotis sodalis*	E	
	Mead's milkweed	*Asclepias medii*	T	Dry-mesic prairies
	Eastern prairie fringed orchard	*Platantheria leucophaea*	T	
	Bald eagle	*Haliaeetus leucocephalus*	T	Breeding
Lucas	Indiana bat	*Myotis sodalis*	E	
	Bald eagle	*Haliaeetus leucocephalus*	T	Breeding
	Prairie bush clover	*Lespedeza leptostachya*	T	Dry-mesic prairies
Monroe	Indiana bat	*Myotis sodalis*	E	
Wapello (OGS site)	Indiana bat	*Myotis sodalis*	E	
	Bald eagle	*Haliaeetus leucocephalus*	T	Breeding/wintering
Wayne	Indiana bat	*Myotis sodalis*	E	

Please provide us with a FWS opinion regarding the presence or absence of critical habitat on the OGS plant site or advise us of any additional information your office would need in order to provide an opinion.

Please direct any comments or questions you may have to:

Joyce Beck, NEPA Documents Manager
U.S. Department of Energy
Golden Field Office
1617 Cole Blvd.
Golden CO 80401
1-800-644-6735 x 4774

joyce_beck@nrel.gov

DOE plans to distribute the Draft EA for public review and comment by April 2003. Doe will post the draft EA on the Golden Field Office electronic reading room at http://ww.golden.doe.gov. **Please provide your input by March 19, 2003.** Thank you for your interest and participation in our process.

Sincerely,

John H. Kersten
Manager

Enclosure

cc:
S. Blazek
D. Pasarrelli
T. Anderson, Battelle Memorial Institute

Concur _____SPB _____DGP _____CAP

Response Date:

File #

M/NEPA/Chariton Valley/FWS Letter-Rev

February 14, 2003

Mr. Jeffrey Vonk, Director
Iowa Department of Natural Resource
Wallace State Office Building
502 East 9th Street
Des Moines, IA 50319

SUBJECT: NOTICE OF SCOPING – SWITCHGRASS CO-FIRE TESTING AT OTTUMWA GENERATING STATION, CHILLICOTHE, IOWA

Dear Mr. Vonk:

The U. S. Department of Energy (DOE) is proposing to provide partial funding to Chariton Valley Resource Conservation and Development, Inc. (CVRCD), a non-profit organization sponsored by the U. S. Department of Agriculture (USDA), for (1) the construction of a biomass (switchgrass) storage, handling, and conveying system into the boiler at the Ottumwa Generating Station (OGS) at Chillicothe, Iowa, (2) operational testing of switchgrass as a biomass co-fire feedstock at OGS, and (3) corollary activities related to growing, harvesting, and transporting switchgrass grown in Chariton River Valley counties in southern Iowa to the OGS. One of DOE's missions is to advance the development and commercialization of renewable energy technologies such as biomass energy. The proposed action is intended to help demonstrate a renewable source of electricity that is commercially feasible in the United States, that reduces fossil fuel (coal) dependence, and that could potentially reduce emissions of criteria air pollutants, in particular sulfur and nitrogen oxides, and which could reduce greenhouse gases. Previous tests and initial demonstrations at OGS and elsewhere have shown switchgrass to be promising as a co-firing feedstock in coal-burning plants, such as OGS.

The OGS is a 725-megawatt (MW) maximum output, low-sulfur pulverized coal-burning plant owned jointly by several Iowa utilities and operated by Alliant Energy. The plant is located about a mile (1.6 kilometers) northwest of the City of Chillicothe on the Des Moines River, approximately ten miles (16 kilometers) northwest of Ottumwa, Iowa and 80 (129 kilometers) miles southeast of Des Moines, Iowa (map enclosed). A three-phase switchgrass co-fire test campaign has been planned and implemented at OGS. From November 2000 through January 2001, Alliant Energy conducted Phase 1 (Co-fire Test 1) at OGS. Phase 2 testing would comprise two additional co-fire tests.

Co-fire Test 2, which would use some residual equipment and test some new equipment, is currently planned for September/October 2003. It would test and demonstrate the engineering and environmental feasibility of co-firing up to 12.5 tons of switchgrass per hour

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DOE's Proposed Action would only support the second and third co-fire tests. DOE has no current plans to provide financial support for commercial operations. The new construction that DOE proposes to fund would include a new switchgrass processing facility and a new switchgrass storage barn that would be used for Phase 2 testing.

DOE has determined that this Proposed Action requires an Environmental Assessment (EA) under the provisions of the National Environmental Policy Act (NEPA) and we have tasked our contractor, Battelle Memorial Institute, with preparing it. Formal scoping meetings on this Proposed Action are not planned. However, we understand that you serve as the Iowa point-of-contact for NEPA matters and we would like to advise you of this Proposed Action and EA and also to request that you forward this information to the appropriate Iowa state agencies. Under separate cover, we have already advised and requested comment from Ms. Anita Walker, the Acting Iowa State Historic Preservation Officer regarding cultural or historic resources and from the U. S. Fish and Wildlife Service regarding listed species and critical habitat. We will also be advising other potentially interested Federal agencies. We would welcome your assistance in advising other appropriate Iowa State agencies.

The proposed new facilities would be built on OGS plant property approximately 1,100 feet (335 meters) west of the main plant. Only very limited demolition would be required to remove an old pole-mounted transformer. The proposed new construction area would occupy an old parking lot currently used for storing power line poles. A small office building located on the proposed site would remain. The new facilities would be separated from OGS's coal-firing operations, and Alliant Energy has indicated that the Proposed Action would not interfere with OGS plant operations or with vehicle traffic at the plant. The proposed new storage barn and process building would have footprints of approximately 27,035 square feet (2,511 square meters) and 6,862 square feet (638 square meters), respectively. The two buildings would be connected by an approximately 2,035 square foot (198 square meter) elevated transfer gallery. Thus, the total footprint of the new construction would be approximately 35,932 square feet (3,338 square meters). The ground elevation differences would require up to five feet (1.5 meters) of cut and/or fill grade-work. If necessary for dust control, new on-site concrete roads leading into the new facilities will be

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Please direct any comments or questions you may have to:

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Golden Field Office
1617 Cole Blvd.
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your interest and participation in our process. Thank you for your interest and participation in our process.

Sincerely,

John H. Kersten
Manager

Enclosure

cc:
S. Blazek
D. Pasarrelli
T. Anderson, Battelle Memorial Institute

Concur _____SPB _____DGP _____CAP

Response Date:

File #

M/NEPA/Chariton Valley/Iowa NEPA POC letter-Rev

February 14, 2003

Ms. Anita Walker
Acting State Historic Preservation Officer
Iowa Department of Cultural Affairs
State of Iowa Historical Building
600 East Locust
Des Moines, IA 50319-0290

SUBJECT: NOTICE OF SCOPING – SWITCHGRASS CO-FIRE TESTING AT OTTUMWA GENERATING STATION, CHILLICOTHE, IOWA

Dear Ms. Walker:

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Because the location of the proposed new construction is on the previously disturbed OGS site, we do not believe our Proposed Action would disturb or discover any cultural or historical resources. However, we wish to confirm this with your office and provide you with an opportunity to comment on our Proposed Action. Would you please provide us with a SHPO opinion regarding the presence or absence of cultural or historic sites that could be impacted by our Proposed Action, or advise us of any additional information your office would need in order to provide an opinion.

Please direct any comments or questions you may have to:

Joyce Beck, NEPA Documents Manager
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Sincerely,

John H. Kersten
Manager

Enclosure

cc:
S. Blazek
D. Pasarrelli
T. Anderson, Battelle Memorial Institute
D. Jones, Archeologist

Concur _____SPB _____DGP _____CAP

Response Date:

File #

M/NEPA/Chariton Valley/SHPO Letter-Rev

Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

February 14, 2003

TO: Distribution List

SUBJECT: NOTICE OF SCOPING – SWITCHGRASS CO-FIRE TESTING AT OTTUMWA GENERATING STATION, CHILLICOTHE, IOWA

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DOE is requesting public input on the NEPA process, proposed action and alternatives, and the environmental issues to be addressed in the EA. Please direct any comments or questions you may have to:

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U.S. Department of Energy
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Golden CO 80401
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Enclosure

cc/w address list
S. Blazek
D. Pasarrelli
T. Anderson, Battelle Memorial Institute

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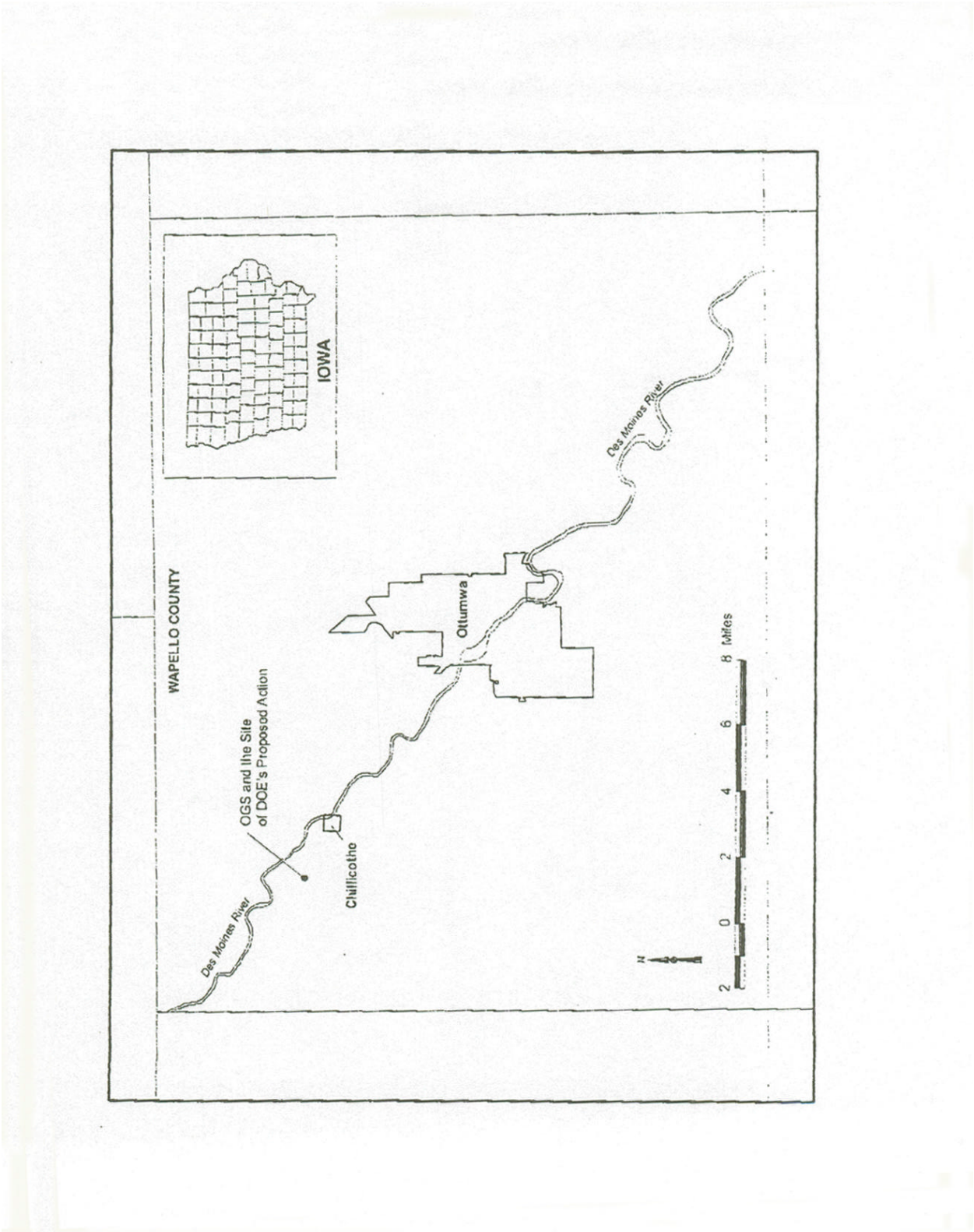
IOWA
WAPELLO COUNTY
Des Moines River
OGS and the Site
of DOE's Proposed Action
Chillicothe
Ottumwa
Des Moines River
N
2 0 2 4 6 8 Miles