

BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of)
American Future Fuels Corporation for)
an Amendment to its Certificate of) Case No. 14-1142-EL-BGA
Environmental Compatibility and Public)
Need.)

ORDER ON CERTIFICATE AMENDMENT

The Ohio Power Siting Board, in considering the above-entitled matter, and having determined that a hearing is not necessary, grants the application filed by American Future Fuels Corporation to modify certain parts of the facility previously approved for construction of an electric power generating facility in Lima, Ohio.

OPINION:

I. Procedural History of this Case

All proceedings before the Ohio Power Siting Board (Board) are conducted according to the provisions of R.C. Chapter 4906 and Ohio Adm.Code Chapter 4906.

On May 20, 2002, in Case No. 00-513-EL-BGN, the Board issued its Opinion, Order, and Certificate granting the application of Lima Energy Company (Lima Energy) for a certificate of environmental compatibility and public need (certificate) to construct a 580 Megawatt (MW) capacity, integrated gasification combined-cycle (IGCC) electric power generating facility in Lima, Ohio. The proposed facility would have generated electricity from coal/waste briquettes. *In re Lima Energy Co.*, Case No. 00-513-EL-BGN (*American Lima Certificate Case*), Opinion, Order, and Certificate (Order) (May 20, 2002).

However, on June 23, 2004, in Case No. 04-1011-EL-BGA, Lima Energy filed an application for an amendment to its certificate to modify the proposed facility. The modification included using a slurry-fed, entrained flow, slagging gasification technology. Lima Energy anticipated that this change in gasification technology would double the size of the air separation unit and increase the water consumption of the facility by two million gallons per day (MGD), from 4 MGD to 6 MGD, but otherwise would not significantly affect the arrangement of the facility, plant emissions, noise emissions, sulfur or synthetic aggregate production, or net generator output. On November 22, 2004, the Board granted the application of Lima Energy for an amendment to its certificate to modify certain parts of the facility and its operations.

Thereafter, on June 25, 2014, Lima Energy filed the application in the present case requesting a second amendment to its certificate. In its second amendment application in this case, Lima Energy proposes to reconfigure the facility. The reconfigured facility would utilize waste heat recovery steam generation to produce electric energy, primarily for site-load purposes. The reconfiguration includes the addition of Fischer-Tropsch (Gas-to-Liquids) technology for the production of Ultra Clean Synthetic Crude (UCSC) and is expected to generate as much as 100 MW of waste heat recovery steam turbine power, with the potential to further expand to 250 MW. However, the application notes that there is some uncertainty regarding the final generation capacity of the waste heat recovery steam turbine due to the need to optimize the final operating parameters of the Gas-to-Liquids and associated UCSC production process after construction and initial shake-down of the facility. Additionally, the application notes that only one steam turbine generator is intended for the UCSC power generation component. Finally, in addition to the waste heat recovery steam turbine component, the application includes a proposal to construct a standalone 525 MW natural gas-fired combined cycle gas turbine (CCGT) electric generation facility at some point in the future. (American Application at 6.)

On June 25, 2015, Lima Energy and American Future Fuels Corporation (American) filed a joint motion and memorandum in support with the Board to transfer the Certificate of Environmental Compatibility and Public Need for this facility to American, and to substitute American as the Applicant in this second amendment case. By Entry on August 27, 2015, the Board granted the joint motion and substituted American as the Applicant in this case. Accordingly, since American is now the Applicant and the facility is in Lima, Ohio, from here forward the application will be recognized as American's application for a second amendment to the American Lima facility.

Notice of American's second amendment application was published on July 1, 2014, in *The Lima News*, a newspaper of general circulation in Lima, Allen County, Ohio. The Applicant filed proof of publication with the Board on July 7, 2014. On February 23, 2016, Staff filed a report investigating and evaluating the second amendment application (Staff Report).

II. Summary of Ohio Revised Code and Ohio Administrative Code

American is a corporation and a person under R.C. 4906.01(A) and is certificated to construct, operate, and maintain a major utility facility under R.C. 4906.10, in accordance with the Board's Order in the *American Lima Certificate Case*.

Pursuant to R.C. 4906.04, before construction can begin on any major utility facility within the state of Ohio, a certificate of environmental compatibility and public

need must be obtained from the Board. Pursuant to R.C. Chapter 4906, the Board promulgated rules, which are set forth in Ohio Adm.Code Chapter 4906-13, prescribing regulations regarding electric generation facilities.

R.C. 4906.06(E) provides that an application for an amendment of a certificate shall be in such form and contain such information as the Board prescribes. R.C. 4906.07 requires that, when considering an application for amendment of a certificate, the Board shall hold a hearing, "****if the proposed change in the facility would result in any material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of such facility****."

R.C. 4906.06(E) provides that notice of an application for an amendment of a certificate shall be given as required in R.C. 4906.06(C). This section requires an applicant to file, within 15 days after the date of the filing of the application, public notice by publication of a summary of the application in newspapers of general circulation in the area and to file proof of publication.

III. Staff's Investigation

Staff notes that American no longer intends to construct a facility to produce synthetic gas for use as fuel in a combined cycle electric generation facility. Instead, American proposes to use Fischer-Tropsch technology to convert its synthetic gas to a UCSC product for sale. American proposes to construct the facility in three phases. In the first two phases, American would construct the Gas-to-Liquids and waste heat recovery facilities. Thereafter, in the third phase, American would construct a standalone 525 MW natural gas-fired combined cycle electric generating facility, consisting of two natural gas-fired electric generating turbines and a steam turbine electric generator. (Staff Report at 2-3.)

Staff asserts that the second amendment application in this case is more than just an amendment to a certificated facility. Staff asserts that the first two phases proposed in the second amendment application warrant a single amendment to the facility that was originally certified by the Board in the *American Lima Certificate Case*. However, the third phase proposed in the second amendment application to build a standalone combined cycle electric generating facility is an independent project that warrants its own case. Staff notes that the sole purpose of the combined cycle electric generating facility is to generate electricity for export to the electric grid, but the Applicant has not yet initiated the necessary studies with PJM in order to accomplish this. Finally, this combined cycle electric generating plant is not proposed to be built within five years of the June 25, 2014 second amendment application filing date, which means that it does not satisfy the requirements of R.C. 4906.06(A)(6). Accordingly, Staff limits the scope of its review to the first two phases of the second amendment application and

recommends that the Board not certify the independent combined cycle combustion turbine generator. (Staff Report at 3-4.)

a. Socioeconomic Impacts

Staff asserts that land use in proximity to the facility, which was generally industrial to the west and residential to the east, has not changed much since the Board issued the original certificate. Additionally, the one notable change, which is the construction of the Ohio Energy and Advanced Manufacturing (OEAM) facility, actually acts as a buffer to remaining residential customers to the east and minimizes potential impacts to residential land uses. Further, Staff notes that American has agreed to adhere to all conditions of the original certificate. Accordingly, Staff asserts that the conditions of the original certificate are adequate to address any social impacts associated with the amended facility. (Staff Report at 4.)

b. Cultural Resources Impacts

Staff points out that in the *American Lima Certificate Case* the Board found that the project was not expected to adversely impact cultural resources. The amendment application in this case asserts that the borders of the project remain unchanged. Accordingly, Staff asserts that the proposed amended project would similarly have no adverse impacts on cultural resources. (Staff Report at 4.)

c. Ecological and Threatened/Endangered Species Impacts

The American Lima facility is located on a former industrial site on which the pre-existing industrial structures and much of the pre-existing concrete infrastructure has been removed. Staff notes that vegetation on the site is sparse and the proposed changes to the facility would not result in any impacts to vegetation, streams, or wetlands. Additionally, since no new land disturbance is proposed, Staff does not anticipate any impacts to listed wildlife species. (Staff Report at 4-5.)

d. Electric Grid Impacts

Staff asserts that the facility would have the potential to generate excess electricity that American would intend to export to the electric grid. However, PJM has not yet reviewed the grid export plans and any potential impacts associated with such exports are unknown at this time. Staff recommends that the Board prohibit the export of any power from the facility to the electric grid, until such time as all necessary PJM procedures have been complied with and approvals been obtained. Staff recommends that American file an amendment request for the Board to review American's grid

interconnection proposals once it has obtained the necessary PJM approvals. (Staff Report at 5.)

e. Air, Water, and Solid Waste Impacts

Staff reviewed the Applicant's proposed water balance and water consumption for the project. Staff notes that the Applicant estimates water usage for the project at four to six MGD. This level of water consumption is comparable to the water consumption anticipated for the originally certificated facility. Water would be obtained through the City of Lima water treatment facility, so requirements under R.C. 1501.33 and 1501.34 are not applicable. The proposed facility would use a zero liquid discharge unit in order to recycle and reuse most of the facility's wastewater, which will minimize the amount of water discharged and ensure compliance with requirements to maximize water conservation. Additionally, solid waste associated with construction and operation of the first proposed project would be similar in nature to that of the originally certificated facility. Elemental sulfur produced by the synthetic crude production process would be marketable. Synthetic aggregate is a byproduct that may also have useful applications. However, some solid waste, such as solid byproduct from the zero liquid discharge unit would be generated. Such waste products would need to be disposed of by the facility in conformance with state and federal law. (Staff Report at 5-6.)

f. Aviation

The nearest airport to the proposed facility is Lima Allen County Airport, located approximately 3.8 miles east of the proposed project site. The closest heliport is St. Rita's Medical Center at approximately 1.4 miles to the north of the proposed project site. Staff recommends that the Board require the Applicant to submit requests for review by the Federal Aviation Administration (FAA) and the Ohio Department of Transportation (ODOT) Office of Aviation and submit a copy of any determination letters to Staff prior to commencement of construction. Further, Staff contacted the ODOT Office of Aviation during review of the amendment application in order to coordinate review of potential impacts of the facility on local imports. As of the date of the Staff Report, Staff had not identified any concerns regarding potential impacts. (Staff Report at 6.)

g. Public Interest, Convenience, and Necessity

According to the application, American would design, construct, operate, and maintain the facility in accordance with applicable safety regulations, including National Fire Protection Association requirements, and industry standards. American would secure pertinent federal and state environmental permits, and construct and

operate the facility in accordance with all applicable environmental and safety regulations. Additionally, American has committed to consult with local public safety and emergency response agencies during construction of the facility. (Staff Report at 6.)

h. Gas Pipeline Safety and Fire Protection Systems

Staff asserts that conditions in the *American Lima Certificate Case* adequately address gas pipeline safety and fire protections system considerations. The relevant conditions (conditions 21-24) in the *American Lima Certificate Case* provide as follows:

- (21) The Applicant shall design and install a fire protection system for the generating station and associated equipment in accordance with the National Fire Protection Association Standards.
- (22) The Applicant shall coordinate with fire, safety and emergency personnel during all stages of the project to promote efficient and timely emergency preparedness and response. The Applicant shall also coordinate with local building officials with regard to the construction of structures not directly related to the operation of the generating facility. The Applicant shall informally discuss with Staff on a timely basis the activities undertaken in compliance with this condition.
- (23) That the construction and ongoing maintenance of the natural gas handling system and associated facilities shall comply in all respects with state and federal laws and regulations pertaining to gas pipeline safety (GPS).
- (24) The Applicant shall make arrangements to assure that necessary backup pressure is provided to the local natural gas system prior to connecting the facility to the system. The Applicant shall inform Staff of such arrangements when they are made.

Accordingly, Staff does not recommend any additional gas pipeline safety or fire protections systems. (Staff Report at 6-7; *American Lima Certificate Case*, Order at 21-22.)

i. Natural Gas Supply

Staff avers that the facility would require approximately four million cubic feet per day (MMCFD) for operation of the project. Staff asserts that it inquired with local

natural gas suppliers about the capacity of their existing pipelines to serve the facility and the suppliers indicated that it would be feasible to supply natural gas through mainline extensions and other incremental pipeline upgrades. However, a specific route for a natural gas interconnection pipeline has not yet been determined. Staff notes that it would review the environmental impacts of any gas pipelines through a separate filing with the Board, so long as such pipeline would be of jurisdictional size and pressure. Additionally, Staff avers that the original conditions of the certificate, specifically, conditions 13 and 24 adequately address gas pipeline interconnection and upgrades to local natural gas systems. (Staff Report at 6-7.) According to conditions 13 and 24 of the original certificate case, American must submit required filings to the Board for approval of the necessary gas transmission pipeline interconnections before commencing construction, and must make arrangements to assure that necessary backup pressure is provided to the local natural gas system prior to connection the facility to the system. *American Lima Certificate Case*, Order (May 20, 2002) at 20, 22.

j. Agricultural Land

Pursuant to Staff's initial investigation in the *American Lima Certificate Case*, construction and operation of the facility would have no direct or indirect impacts on agricultural land or agricultural district land. (Staff Report at 7.)

k. Staff's Conclusion and Recommendations

Initially, Staff notes that the second amendment application in this case actually proposes two separate projects. The first project would amend the facility to allow American to produce UCSC and the concomitant utilization of waste heat associated with the production process to generate electricity. The second project would be to construct a standard standalone combined cycle combustion turbine generating facility. Staff recommends that the Board deny the proposed second project and require the Applicant to file a separate amendment application within five years of the anticipated construction start date for the project, in accordance with R.C. 4906.06(A)(6). Therefore, the scope of Staff's recommendations related to the first project to amend the facility so that the Applicant may produce UCSC and utilize the waste heat associated with the production process to generate electricity.

Staff recommends that American conform to the conditions and commitments of the original certificate. Staff recommends the following conditions:

- (1) The Applicant shall construct and operate the proposed project in conformation with the application, as modified, and/or clarified by the Applicant's supplemental filings and by the recommendations in the Staff Report of Investigation,

and in such a manner as to assure that it will not export power to the electric grid.

- (2) The Applicant shall not construct any structures or facilities that would solely be necessary as part of the second proposed project, the natural gas-fired combined cycle electric generating facility.
- (3) The Applicant shall submit requests for review by the Federal Aviation Administration and the Ohio Department of Transportation Office of Aviation and submit a copy of any determination letters to Staff prior to commencement of construction.
- (4) The conditions required by the Board in the *American Lima Certificate Case*, as modified by the Board's requirements in the first amendment case, continue to apply to the project, except as modified by the additional conditions resulting from this second amendment application.

Accordingly, Staff recommends that the Board find that the proposed amendment to the certificate poses minimal social and environmental impact and would not create new significant land use, recreational, cultural, aesthetic, wildlife, or ecological impacts. (Staff Report at 2-3, 7-8.)

IV. Conclusion

Upon review, the Board finds, pursuant to R.C. 4906.07, that the proposed second amendment to the certificate issued in the *American Lima Certificate Case*, with the requirement that American conform to the conditions and commitments of the original certificate, does not result in any material increase in any social or environmental impact, or a substantial change in the location of all or a portion of the certificated facility. Therefore, the Board finds that a hearing is not necessary under the circumstances presented in this case.

Based on the record in this proceeding, the Board finds that, pursuant to R.C. Chapter 4906, American's second amendment application should be approved subject to the conditions and commitments set forth in the Order in the *American Lima Certificate Case* and Staff's recommendations. The Board notes that American's second amendment application should be approved, but American must file additional amendment applications with the Board if it intends to construct the standalone 525 MW natural gas-fired combined cycle electric generating facility or if it intends to interconnect to the grid to export power. This will provide Staff with the opportunity to

properly evaluate grid impacts of the facility and will satisfy the requirements of R.C. 4906.06(A)(6) to file not more than five years prior to the planned date of commencement of construction. Accordingly, American's certificate should be amended to incorporate the proposed modifications, as described in the second amendment application filed on June 25, 2014, and consistent with Staff's recommendations as adopted in this Order on Certificate Amendment.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) American is a corporation and a person under R.C. 4906.01(A).
- (2) American's electric generation facility is a major utility facility under R.C. 4906.01(B)(1).
- (3) On June 25, 2014, American filed an application in this proceeding to amend the certificate issued in the *American Lima Certificate Case*.
- (4) Public notice of the amendment application was published in Allen County and filed with the Board on July 7, 2014.
- (5) The Staff Report was filed on February 23, 2016.
- (6) The proposed changes to the certificated facility do not result in any material increase in any social or environmental impact or any substantial change in the location of the facility; therefore, in accordance with R.C. 4906.07, a hearing is not necessary.
- (7) Based on the record, in accordance with R.C. Chapter 4906, the certificate for American's electric generation facility, issued in the *American Lima Certificate Case*, should be amended, as described in the second amendment application, and subject to the conditions and commitments set forth in the *American Lima Certificate Case* and this Order on Certificate Amendment.

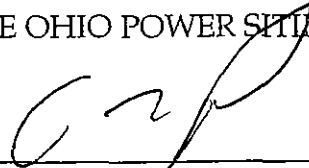
ORDER:

It is, therefore,

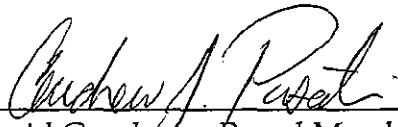
ORDERED, That American's second amendment application be approved, subject to the conditions and commitments set forth in the Order in the American Lima Certificate Case and this Order on Certificate Amendment. It is, further,

ORDERED, That a copy of this Order on Certificate Amendment be served upon all parties and interested persons of record.

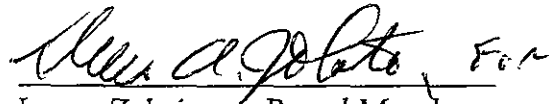
THE OHIO POWER SITING BOARD



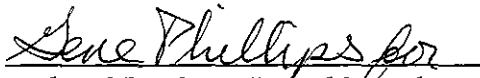
Andre T. Porter, Chairman
Public Utilities Commission of Ohio



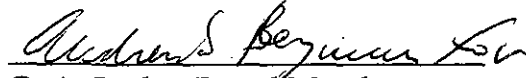
David Goodman, Board Member
and Director of the Ohio
Development Services Agency



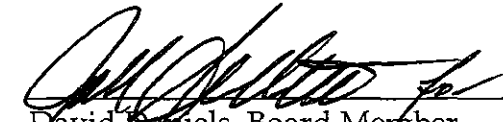
James Zehringer, Board Member
and Director of the Ohio
Department of Natural Resources



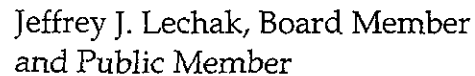
Richard Hodges, Board Member
and Director of the Ohio
Department of Health



Craig Butler, Board Member
and Director of the Ohio
Environmental Protection Agency



David Daniels, Board Member
and Director of the Ohio
Department of Agriculture

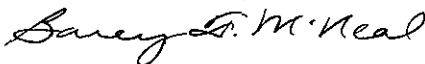


Jeffrey J. Lechak, Board Member
and Public Member

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Barcy F. McNeal
Secretary