

**FINDING OF NO SIGNIFICANT IMPACT
FOR
DOE'S PROPOSED FINANCIAL ASSISTANCE TO ENERDEL, INC.
FOR ITS EXPANSION OF BATTERY MANUFACTURING CAPABILITIES
AT INDIANAPOLIS, NOBLESVILLE AND GREENFIELD, INDIANA**

AGENCY: U.S. Department of Energy (DOE or Department)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: DOE completed the *Final Environmental Assessment: DOE's Proposed Financial Assistance to EnerDel, Inc for its Expansion of Battery Manufacturing Capabilities at Indianapolis, Noblesville and Greenfield, Indiana* (DOE/EA-1710) to analyze the potential environmental impacts of providing as many as three types of financial assistance to EnerDel Inc. (EnerDel), an Indiana-based company, for expansion of its domestic advanced battery manufacturing activities for the transportation industry. The proposed financial assistance would facilitate EnerDel's expansion of its manufacturing and testing capabilities at two existing facilities, in Indianapolis and Noblesville, Indiana, and start-up of a third facility in a newly acquired building in Greenfield, Indiana. The lithium-ion battery manufacturing capacity at the Indianapolis facility would increase through the addition of equipment; and the Noblesville location would transition into full use as a prototype development and battery testing facility through the addition and change-out of equipment. The exteriors of these existing facilities would be unchanged. The third facility would be developed in a vacant warehouse near Greenfield, just east of Indianapolis. This building would require minor construction and equipment installation on the exterior of the building. However, most of the work necessary to transform it into a manufacturing plant would include installation of new equipment inside the building.

Based on the analyses in the environmental assessment (EA), DOE determined that its Proposed Action, providing as many as three types of financial assistance to EnerDel to facilitate expansion of its manufacturing process for advanced battery systems would have no significant adverse impacts. DOE further determined that there could be beneficial impacts to the nation's air quality and the transportation industry from implementation of Exide's proposed project. In addition, beneficial local socioeconomic impacts would occur from increased employment opportunities and spending in the affected communities.

BACKGROUND: EnerDel's proposed project would expand its domestic manufacturing of lithium-ion batteries at three Indiana locations. To facilitate this expansion, the Department is considering providing EnerDel with one or more of the following types of financial assistance: (1) a grant under Funding Opportunity Announcement DE-FOA 0000026, *Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative*, (2) a loan under Funding Opportunity Announcement DE-FOA 0000052, *State Energy Program Formula Grants – American Recovery and Reinvestment Act* (Recovery Act); and (3) a loan pursuant to Section 136 of the *Energy Independence and Security Act of 2007* (Energy Act; Public Law 110-140, 121

Stat. 1492) as an automotive component supplier promoting improved fuel economy in light-duty vehicles. The loan under the State Energy Program opportunity would be provided by the State of Indiana from the formula grant it received from DOE under that funding opportunity. DOE will make separate decisions as to each type of financial assistance after evaluating the potential environmental impacts and other aspects of EnerDel's proposed project.

As part of the Recovery Act, DOE's National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Program, will provide up to \$2 billion in federal funding to competitively selected recipients for the construction (including production capacity increase of current plants) of U.S. manufacturing plants that produce batteries and electric drive components. The proposed project is one of the applications selected under this competitive solicitation. DOE's Golden Field Office, also on behalf of the Office of Energy Efficiency and Renewable Energy, provided the State of Indiana a \$68.6 million formula grant for its State Energy Program pursuant to another appropriation under the Recovery Act. Indiana informed DOE that it intends to provide EnerDel with a \$5 million loan from the State's formula grant to help finance EnerDel's expansion. In addition to these two potential forms of assistance, DOE's Advanced Technology Vehicle Manufacturing Incentive Program provides loans to eligible automotive manufacturers and component suppliers for projects that promote improved fuel economy in light-duty vehicles pursuant to Section 136 of the Energy Act. DOE's Advanced Technology Vehicle Manufacturing Incentive Program is considering EnerDel for a loan under this program for the same expansion of its lithium-ion battery manufacturing capability. The amount of the potential loan has not been determined and is a function of the federal government's assessment of many factors, including EnerDel's ability to repay the loan. The loan would be used for capital and engineering integration expenses associated with the proposed project.

The federal action of providing funding for projects under these programs requires compliance with the *National Environmental Policy Act of 1969*, as amended (NEPA; 42 U.S.C. 4321 et seq.), the Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508), and DOE's NEPA implementing procedures (10 CFR Part 1021). DOE prepared an EA to evaluate the potential environmental consequences of providing up to three types of financial assistance for this proposed project under the initiatives described above.

PURPOSE AND NEED: The overall purpose and need for DOE action pursuant to the Vehicle Technologies Program is to accelerate the development and production of electric-drive vehicle systems in order to reduce the United States' consumption of petroleum. The appropriations to the Program under the Recovery Act, and the resulting funding opportunity, were intended to further the purpose of the Vehicle Technologies Program as well as that of the Recovery Act, which is to stimulate the nation's economy and reduce unemployment.

DOE's State Energy Program provides grants to states and directs funding to state energy offices. Eligible entities can use these funds for a wide variety of activities that improve energy efficiency, reduce the overall need for energy or rate of energy consumption, or promote

efficiency, reduce the overall need for energy or rate of energy consumption, or promote renewable energy. Funding from the Recovery Act was directed to the State Energy Program in order to further the existing objectives of the program as well as those identified for the Recovery Act.

The purpose and need for the Advanced Technology Vehicle Manufacturing Incentive Program is to provide loans to projects that will help achieve the goals of Section 136 of the Energy Act. These goals are to re-equip, expand, and establish manufacturing facilities in the United States that produce light-duty vehicles and components that meaningfully improve fuel economy

DESCRIPTION OF THE PROPOSED ACTION: The Department is considering providing EnerDel with as many as three types of financial assistance for its proposed project. DOE's Proposed Action under the Vehicle Technologies Program is to accelerate the development and production of electric-drive vehicle systems by providing EnerDel with \$118.5 million in financial assistance in a cost-sharing arrangement to facilitate EnerDel's expansion of its battery manufacturing capabilities. DOE's Proposed Action under the State Energy Program is to permit Indiana to use \$5 million of its available funds appropriated under the Recovery Act for a loan to EnerDel to purchase equipment for this same expansion. Finally, DOE's Proposed Action under its Advanced Technology Vehicle Manufacturing Incentive Program is to provide EnerDel with a loan for this expansion of its lithium-ion battery manufacturing capability. The final amount of this potential loan has not yet been determined.

EnerDel's proposed project would expand its capabilities at two existing facilities in Indianapolis and Noblesville, Indiana; and start up operations at a newly acquired facility near Greenfield, Indiana. EnerDel's manufacturing process and battery systems are scalable for applications from light electric vehicles to heavy-duty transportation and include cell designs appropriate for hybrid electric vehicles, plug-in hybrid electric vehicles, and other electric vehicle applications. EnerDel's objective, with these new and expanded capacities, is to develop a six-fold increase in its current cell manufacturing capability.

EnerDel's existing Indianapolis facility is a 92,000-square-foot building in a commercial-industrial area in the northeast section of the city. This facility contains electrode manufacturing and battery cell assembly lines and associated equipment. In the proposed expansion, the cell manufacturing capacity would increase primarily by installation of a second electrode coating line within the footprint of the existing building. The workforce at this facility would increase from the present level of 120 workers to about 330 workers at the completion of the expansion.

EnerDel's existing facility in Noblesville is a 32,000-square-foot building in an industrial-commercial area in the southern portion of the city, about 7 miles north-northeast of the Indianapolis facility. This facility currently assembles, or integrates, end-product battery packs using the battery modules produced at the Indianapolis facility and tests battery packs. Under the proposed expansion, system integration activities would be moved from Noblesville to a new facility near Greenfield and the Noblesville facility would change to a fully utilized battery

testing facility. This would be accomplished by equipment changes within the facility. The workforce at this facility would increase from a present level of 40 workers to about 160 at completion of the expansion.

The proposed new EnerDel facility would be developed within a recently constructed 423,000-square-foot warehouse located about 7.5 miles northwest of Greenfield, and about 9 miles southeast of the Indianapolis facility. The facility, adjacent to Interstate-70, is in a rural-agricultural area with a scattering of recent industrial-commercial developments. The building was constructed and marketed as part of a larger industrial park development. This building would be developed into a full battery manufacturing facility, with cell manufacturing and system integration capabilities, and enough room to provide warehouse space for materials and products. Installation of air emissions control equipment (baghouses and wet scrubbers) and limited storage capacity for process materials is expected to be the only construction or construction-like activities performed outside of the Greenfield facility. Other activities are expected to take place within the existing building and would consist primarily of installing equipment and setting up the process lines. The workforce at the new Greenfield facility would ultimately reach about 1,140 employees.

ALTERNATIVES CONSIDERED: In addition to the Proposed Action, DOE considered the No-Action Alternative as required under NEPA. Under the No-Action Alternative, DOE would not provide funds for the proposed project. For the purposes of the EA, DOE assumed that the project would not proceed without DOE funding. This assumption establishes a baseline against which the potential environmental impacts of the proposed project are compared.

ENVIRONMENTAL CONSEQUENCES: DOE evaluated the potential environmental consequences of the proposed project and the No-Action Alternative; and considered fourteen environmental resource areas in the preparation of the EA. However, not all areas were evaluated at the same level of detail. DOE focused more detailed analysis on areas that would require new or revised permits, have the potential for significant adverse environmental impacts, or have the potential for controversy. DOE performed a screening evaluation of fourteen resource areas, and concluded that potential environmental impacts would be limited to several resource areas which varied by facility location, as the table below shows.

Resource areas analyzed in detail for each location.

Environmental Resource Area	EnerDel Facility		
	Indianapolis	Noblesville	Greenfield
Socioeconomics	X	X	X
Utilities, Energy, and Materials	X	X	X
Waste	X	X	X
Transportation	X	X	X
Air Quality	X		X
Water Resources – Surface Water			X
Aesthetics			X

DOE determined that there would be no measureable impacts on the resource areas not listed in the table above. Therefore, DOE did not continue with detailed analyses for these resource areas in the EA, but provided a basis for the screening action. With respect to the resource areas analyzed in detail, no significant adverse impacts or environmental concerns were identified to result from DOE's Proposed Actions or EnerDel's resulting proposed project. DOE reached the following conclusions based on the analyses in the EA:

Indianapolis Facility: The proposed expansion of operations at the Indianapolis location would produce small incremental impacts to wastewater discharges, solid and hazardous waste generation, and water and energy (electricity and natural gas) use. However, these increments would be small in comparison with existing available capacities. Increased traffic at this facility would be minor and would not significantly worsen congestion or other traffic conditions in the area. The Indianapolis facility would also see incremental impacts to air quality. These increases would not result in violations of ambient air quality standards and the additional emissions are already addressed in the existing air permit for this facility. Expanded operations at the facility would result in minor, long-term beneficial socioeconomic impacts from increased employment opportunities and spending in the local economies.

Noblesville Facility: The proposed expansion of operations at the Noblesville location would result in small incremental impacts to wastewater discharges, solid waste generation, and water and energy (electricity and natural gas) use. However, these increments are small in comparison with existing available capacities. Increased traffic at the Noblesville facility would be minor and would not significantly worsen congestion or other traffic conditions in the area. Expanded operations at the facility would result in minor, long-term beneficial socioeconomic impacts from increased employment opportunities and spending in the local economies.

Greenfield Facility: Development of the Greenfield facility into a battery manufacturing plant would result in new air emissions, wastewater discharges, solid and hazardous waste generation, and water and energy (electricity and natural gas) use. Air emissions would require regulatory approval in the form of a new air permit. The additional waste management, water and energy demands could be readily accommodated by existing services. The potential for adverse impacts to aesthetic values of the location would be low due to the minor amount of changes that would be made to the existing building. Runoff from the location would be to a nearby stream, but runoff volume would be controlled, and structures and procedures would be included to minimize the potential for the runoff to be contaminated. The Greenfield facility would also result in increased traffic in an area already congested by current traffic levels. However, the existing transportation infrastructure would accommodate this increase without major impacts. Development of the Greenfield facility into a new battery manufacturing plant would result in minor, long-term beneficial socioeconomic impacts associated with the new employment base for that location along with the creation of indirect jobs.

Under the No-Action Alternative, the project would either be delayed, as EnerDel sought other funding sources, or abandoned altogether. The potential environmental consequences, if the

project was delayed, could be different if the project was modified. If abandoned, the potential environmental consequences would not occur. Furthermore, the potential beneficial impacts would change or not occur.

PUBLIC AVAILABILITY: DOE issued the Draft EA on January 9, 2010, and advertised its release in *The Indianapolis Star* on January 9, 12 and 13. In addition, the Department sent copies for public review to three libraries: the Hancock County Public Library in Greenfield; the Hamilton East Public Library in Noblesville; and the Indianapolis-Marion County Public Library, Lawrence Branch in Indianapolis. The Draft EA was also posted on the NETL web site. The Department established a 30-day public comment period that began on January 9, 2010 and ended February 8, 2010.

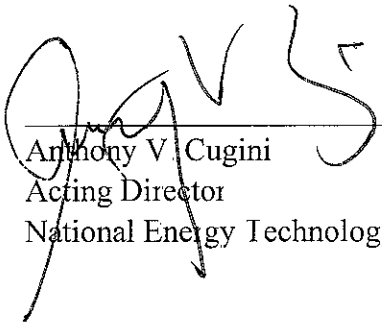
The Draft EA was distributed to various federal, state, and local agencies. DOE conducted formal consultations by mail with the responsible U.S. Fish and Wildlife Service (USFWS) field office and the State Historic Preservation Office. The USFWS agreed with DOE's conclusions that there would be no significant impacts to wildlife habitat, and that adverse impacts to federally listed threatened or endangered species would also be unlikely. The Indiana Division of Historic Preservation and Archaeology first requested additional information on the specific location of the EnerDel building at the Greenfield location, and later provided information on archaeological and historic sites in the area of the Greenfield location. The State agreed that no archaeological investigations appeared necessary, provided all proposed project activities remained within areas disturbed by previous construction. The State also identified a nearby property that might qualify for the National Register of Historic Places, but concurred that the proposed project would not affect the qualifying characteristics of that property. Based on its review of the proposed project and information provided by the State Division of Historic Preservation and Archaeology, DOE determined that no historic properties would be affected.

Copies of the Final EA and this FONSI have been sent to stakeholders that provided comments or consultation, and will be available at DOE's National Energy Technology Laboratory web site at <http://www.netl.doe.gov/publications/others/nepa/ea.html>.

DETERMINATION: On the basis of the evaluations in the Final EA, DOE determined that its Proposed Action, to provide as many as three types of financial assistance to EnerDel, Inc., and EnerDel's proposed project, to expand its domestic manufacturing of lithium-ion batteries at three Indiana locations, would have no significant impact on the human environment. Although the proposed project would increase air emissions, requiring amendments to existing air permits at two locations and a new air permit for the Greenfield facility, these changes would be minor and the project proponent would be required to adhere to permit requirements during operations. Traffic would also increase at all three locations but these changes would also be minor when compared to existing conditions and capacities. Beneficial local socioeconomic impacts are expected to occur from increased employment opportunities and spending in the affected communities. All other potential environmental impacts identified and analyzed in the EA

would be negligible. Therefore, preparation of an environmental impact statement is not required and DOE is issuing this Finding of No Significant Impact.

Issued in Pittsburgh, PA, this 18th day of March 2010.



Anthony V. Cugini
Acting Director
National Energy Technology Laboratory