

PMC-EF2a

(2.0402)

**U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION**



RECIPIENT:Frito-Lay, Inc.

STATE: WI

**PROJECT
TITLE :** Beloit Energy Efficiency Upgrades

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA0000052	EE0000163	GFO-0000163-033	EE163

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

DOE is proposing to provide \$3,265,000 in SEP ARRA funding to the Wisconsin Economic Development Corporation, sub-recipient Frito-Lay North America, Inc., to perform eight energy efficiency activities at the existing Frito-Lay manufacturing facility.

Of the eight activities, six fall within the bounds of the signed NEPA template. This NEPA determination applies to the remaining activities, which include 1) purchase of ten compressed natural gas (CNG) tractors (semis) and 2) installation of an adsorption chiller.

The Frito-Lay facility (2810 Kennedy Drive, Beloit, Wisconsin 53511) is located in an industrial zone one mile east of Beloit.

The proposed ten CNG tractors would include the following components:

- Tandem or Single Axle
- 9-liter, 320 hp, 1000 lb-ft engine
- Allison 3000 automatic transmission
- 375 – 500 mile range

The proposed 150-ton adsorption chiller would be installed outside and on the south side of campus. The proposed chiller would replace the existing nitrogen membrane system. After removal of the nitrogen membrane system and existing concrete pad, a new concrete pad would be installed. The chiller would be located adjacent to the building and west of two existing cornmeal silos. Per the recipient, the unit would not exceed 67 dBA at fifty feet.

The adsorption chiller system would use heat from the existing potato chip fryer's heat recovery hydronic system during the summer months to produce chilled water. The chilled water would cool the building via a piping loop connected to seven rooftop HVAC units. All piping and electrical wiring to support the adsorption chiller would be located above ground. No new underground conduits or trenching would be required for electrical services.

In addition to the adsorption chiller, the following equipment would be installed to complete the system (the cooling tower and coils would be installed on the roofs):

- One, 150-ton cooling tower
- Seven chilled water coils
- Several supply and return circulation pumps

