

Fact Sheet

Duane Arnold Energy Center



Safety Information

Built in a low-risk seismic zone: Duane Arnold is not located on an ocean and is in a very seismically stable area.

Constructed to withstand earthquakes: Despite the low risk from seismic events, the plant is designed to withstand earthquakes and other natural events stronger than ever recorded in the region.

Protected from flooding: The plant is elevated 20 feet above river level to protect against flooding.

- » During 2008's historic 500-year flood, the Cedar River crested 14 feet below the plant's design flood level
- » During this event, DAEC was able to continue safe and reliable operations

Seven-day power supply: Safety and cooling systems can be powered for seven days without requiring any offsite power or additional fuel.

System Information

PRIMARY SYSTEM

Designed with multiple safety systems:

The Nuclear Regulatory Commission has mandated several structural improvements over time, enhancing Duane Arnold's ability to deal with significant events:

- » Four offsite power lines power the site's cooling system
- » Two diesel generators onsite can run for seven days without additional fuel
- Multiple steam-driven cooling pumps are available to power cooling systems (do not require external power)
- » Back-up batteries for all critical cooling and control room systems are stored onsite
- » External cooling options (i.e. injection and fire pumps) are pre-staged onsite; can use river water for cooling

Highly trained plant operators: For one full week out of every six weeks, plant operators must prove their ability to safely operate the plant in a variety of worst-case scenarios that include earthquakes, severe storms, flooding, loss-of-power, and loss of reactor core cooling.

Reactor TypeOne General Electric Boiling Water Reactor with
a net electrical output of 615 MWeReactor Core368 fuel assembliesReactor Vessel67' high; 15' wideReactor DesignGeneral Electric Mark 1SECONDARY SYSTEMTurbine/GeneratorTurbine/GeneratorGeneral ElectricCooling TowersMechanical draft type – 2 towers, 12 cells each,
makeup water from Cedar River

Site Vice President Chris Costanzo Site Communications Manager Renee Nelson 3277 DAEC Road

Palo, IA 52324 Corporate Media Line (305) 552-3888

General Information

The Duane Arnold Energy Center (DAEC) is located in Palo, Iowa, approximately 9 miles northwest of Cedar Rapids. It is bordered by cornfields of neighboring farms and the banks of the Cedar River.

» Workforce

600 during normal operations; nearly 1,500 during outage operations.

- » Salaries Approximately \$85 million annually.
- » Property taxes paid Approximately \$3 million annually.
- » Construction Permit granted June 1970
- » Full power operating license February 1974
- » Commercial operation February 1975

For More Information:

www.nei.org www.nrc.gov www.radiationanswers.org www.epa.gov www.NextEraEnergyResources.com