

Duane Arnold Energy Center



SITE ADDRESS

3277 DAEC Road
Palo, IA 52324

CORPORATE MEDIA LINE

(561) 694-4442

Safety Information

Built in a low-risk seismic zone: Duane Arnold is in a very seismically stable area of the country.

Constructed to withstand earthquakes and tornados: Despite the low risk from seismic events, the plant is designed to withstand earthquakes, tornados and other 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.

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 on-site diesel generators are available to provide back-up emergency power to plant safety equipment
- » 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 on-site
- » External cooling options (i.e. injection and fire pumps) are pre-staged on-site; 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.

General Information

The Duane Arnold Energy Center (DAEC) is located in Palo, Iowa, approximately nine 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

» **Economic impact**

Stimulates \$255 million in economic activity in Iowa, \$514 million nationally

» **Property taxes paid**

Approximately \$3 million annually

» **Construction permit granted**

June 1970

» **Full power operating license**

February 1974

» **Commercial operation**

February 1975

System Information

PRIMARY SYSTEM	
Reactor Type	One General Electric Boiling Water Reactor with a net electrical output of 615 MWe
Reactor Core	368 fuel assemblies
Reactor Vessel	67' high; 15' wide
Reactor Design	General Electric Mark 1
SECONDARY SYSTEM	
Turbine/Generator	General Electric
Cooling Towers	Mechanical draft type — two towers, 12 cells each, makeup water from Cedar River

For More Information:

nexteraenergyresources.com

duanearnold.com

nrc.gov