

PPRP Fact Sheet – PSEG Keys Energy Center, Prince George’s County

PSC Case Number 9297

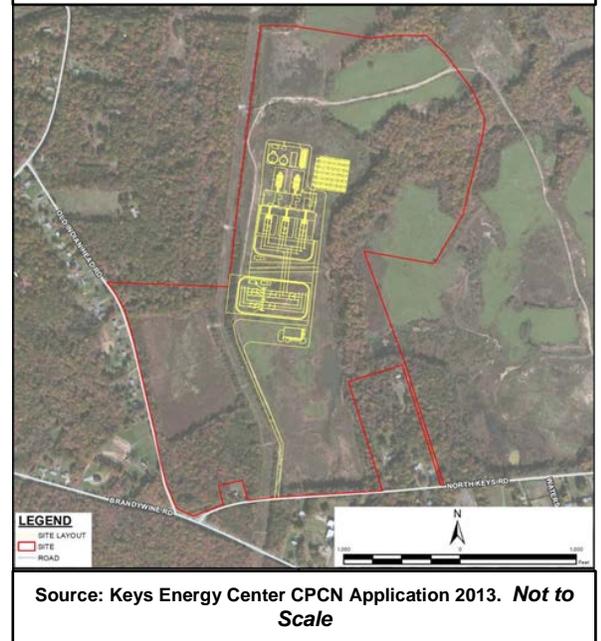
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 Last updated 30 August 2017

Project Overview:

Keys Energy Center, LLC filed for a CPCN to construct and operate a new 735 MW combined-cycle, natural gas-fired electrical generating station using an air cooled condenser for steam turbine generator cooling technology. The CPCN was issued on 10/31/14. Significant project components include:

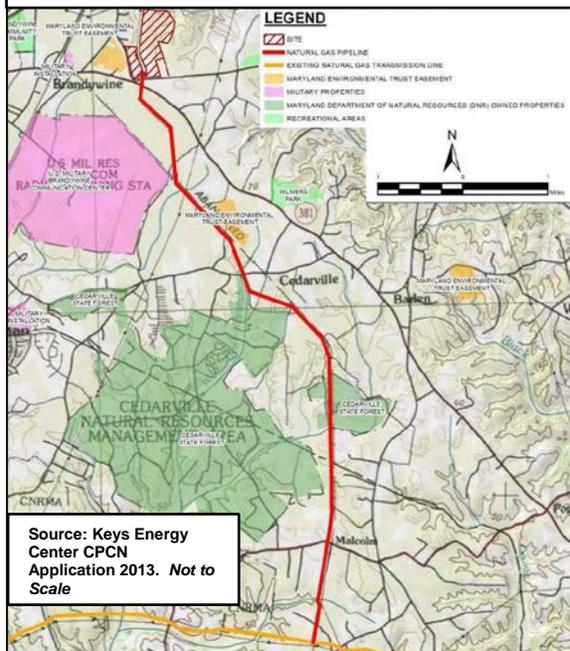
- 2 combustion turbine generators, 2 heat recovery steam generators, a condensing steam turbine generator, and an auxiliary boiler;
- Multi-cell air cooled surface;
- Water to air fin-fan cooler;
- Water treatment plant building and storage facilities;
- 500 KV onsite substation;
- Aqueous ammonia unloading and storage areas;
- Administrative building and maintenance shop; and
- Linear facilities including an 8-mile natural gas pipeline and potable water and sewer pipelines.

Figure 1: Project Location



Source: Keys Energy Center CPCN Application 2013. **Not to Scale**

Figure 2: Natural Gas Pipelines



Source: Keys Energy Center CPCN Application 2013. **Not to Scale**

Site Description

Generating Station

The Project will be located about 1.25 miles north of Brandywine on a 180-acre parcel that was formerly used as a sand and gravel mine. The generating station will occupy approximately 30-acres in the center of the parcel. Surrounding land uses include the community of Brandywine, a demolition waste site, a military communications center, sand and gravel mining, other industrial properties, and residences.

Linear Features

The electrical interconnection to the adjacent 500 KV transmission line will require minimal additional construction. The approximately 8-mile long natural gas pipeline will be installed within the western edge of PEPCO’s existing 200-foot wide 500 KV transmission right-of-way (ROW), with a portion running adjacent to a CSX railroad ROW. The water and sewer pipelines will be installed under existing roads and undeveloped land.

Impact Assessment Highlights

Air impacts

- Anticipated emissions from the Project trigger major Prevention of Significant Deterioration (PSD) requirements for NO_x, CO, particulate matter, PM₁₀, and greenhouse gases.
- If designed and operated in accordance with licensing conditions, PPRP concludes that the facility will meet all relevant State and Federal emissions regulations.

Biological Impacts

Generating Station Facility

- Project area currently consists of previously disturbed grasslands and meadows and does not contain unique ecological habitats.

- No impacts to rare, threatened or endangered species are anticipated, however, wildlife that use the open meadow habitat will be affected by the permanent loss of habitat

Linear Facilities

- Local streams could be impacted by trenching during construction and herbicide application during maintenance.
- Portions of the gas pipeline lie within Biodiversity Conservation Network areas and areas that have been identified as potential wildlife habitat. This pipeline will have direct impacts to 11.25 acres of wetland and stream habitat, as it crosses five particularly sensitive wetland areas including two Wetlands of Special State Concern.
- Construction of the gas pipeline will require approximately 40 acres of forest to be cleared, including 4.5 acres in Cedarville State Forest.
- Construction of the water and sewer pipelines will require 1.01 acres of hedgerow forest to be cleared. DNR requires mitigation for the clearing and cutting of forests. The Applicant intends to minimize disturbance of vegetation by using horizontal direct drilling, where feasible.

Socioeconomic Impacts

Fiscal and financial

- During construction, a maximum work force of 400 employees is anticipated. Post-construction, approximately 25 employees would operate the facility.
- Depending upon the amount of goods and services procured from Maryland industries, state sales tax revenues could increase by \$200 thousand annually.
- Real and personal property taxes could exceed \$4 million in the first full year of operation.

Transportation

- Traffic will increase on the roads used to access the Project will increase during construction with significant impact possible to two local intersections. No long-term traffic impacts are anticipated.
- The natural gas pipeline will cross two Prince George's County roads and two Charles County roads.

Visual

- A 40-foot buffer around most of the perimeter of the property provides vegetative screening from public vantage points and mitigates potential light trespass onto nearby properties.
- Previously mined lands to the north and east are partially forested as are most residential lots that face the south and west boundaries of the Project.
- Two 140 feet high combustion turbine stacks will be the tallest structures of the power plant. Other facilities will be less than 130 feet high.

Cultural & Aesthetic

- One parking/laydown area west of the PEPCO transmission line is located in an area with moderate archeological potential. The Applicant must consult with the Maryland Historical Trust (MHT) to determine if additional archeological investigations prior to construction are warranted.

Public Services

- Only small quantities of hazardous waste (<100 kilograms per month) will be generated by the Project. Examples include: spent solvents and condensation collected from the gas supply system. These wastes will be disposed off-site by a licensed hazardous waste contractor. No hazardous waste will be stored on site for more than 90 days before removal.
- The Applicant has entered into a Memorandum of Understanding with the Washington Suburban Sanitary Commission stating that the use of the potable water and sewer lines will be strictly controlled.

CPCN Status

- CPCN Application filed on 07/03/2012 and issued on 10/17/14.
- Ownership of the Project changed to PSEG Keys Energy Center in 2015.
- Applicant filed to amend portions of the CPCN associated with design and equipment on 7/24/17.
- For more current information, see: <http://www.psc.state.md.us/>

