# DEP NORTH-CENTRAL REGIONAL CITIZENS' ROUNDTABLE Field Trip Meeting of July 20, 2015 Summary of Meeting Minutes

The roundtable members met at Haywood's restaurant in Muncy at 4:30 p.m. for their annual dinner followed by a field trip to tour the nearby Panda Patriot natural gas fired power plant under construction in Clinton Township, Lycoming County.

Following a delicious meal, the group departed Haywood's and arrived at the Panda plant at about 6:20 p.m.

The members were greeted by Construction Manager Shannon Poulter and General Manager Joe Lloyd. Safety equipment was distributed, and instructions provided by Panda's safety manager.

The Panda Patriot Power Project is a clean natural gas-fueled, 829-megawatt combined-cycle generating station. Once built, the plant is expected to supply the power needs of up to one million homes and is expected to make a significant contribution to the area's economy.

During the tour, the following information was provided.

### **Patriot Power Plant Facility Facts**

Location: Clinton Township (Near Williamsport); Lycoming County, Pa.

Site Size: 85 Acres

Size: 829 Megawatts; Will supply the power needs of up to 1 million homes in Northern

Pa.

Technology: Combined cycle

Fuel: Clean, natural gas

Air Permit Received: August 13, 2013 Construction Start: December 2013

Construction Time: Approximately 30 months

Anticipated Date of Substantial Completion: Mid-2016

### **Patriot Power Plant Facility Highlights**

The Panda Patriot Generating Station Will:

- Plant expected to make a significant contribution to Central Pennsylvania
- Create approximately 500 construction jobs; 27 direct jobs to operate the plant and 45 indirect jobs to support the plant
- Utilize the latest, most advanced emissions-control technology, making it one of the cleanest natural gas-fueled power plants in the United States
- Use Siemens H-class gas turbines the world's first generation technology to achieve operating efficiencies of 60 percent.

- Be cooled with air rather than water not drawing water from, or discharging water into, the Susquehanna River — eliminating potential impacts to sensitive species in the watershed
- Minimize sound using special blade designs, low-output motors and building enclosures

#### Market Need

- More than 20 gigawatts of coal-fired power plant retirements have been announced to take place in the PJM (Pennsylvania, New Jersey and Maryland) market in the next few years, setting the stage for tightening reserve requirements
- More than 70 gigawatts of power plants in PJM average 56 years of age
- Total peak demand growth of over 1.4 percent per year, or approximately 2,200 MW per year

### **Construction and Technology Providers**

Equity: Panda Power Funds and institutional co-investors

Debt: Lead arrangers – Goldman Sachs, Credit Suisse, Ares Capital and Union Bank

## **Construction and Technology Providers**

Siemens Energy Inc — one of the world's largest suppliers of turbine technology – will provide the power island package including the natural gas turbines, steam turbine and waste heat recovery boilers

Gemma Power Systems and Lane Construction — Gemma Power Systems, an "ENR Top 100" Design-Build Firm and Lane Construction, one of America's leading construction companies, will be responsible for the engineering and procurement for the balance of the plant and the installation, construction and commissioning of the facility.

Roundtable members asked numerous questions throughout the visit, all of which were answered very clearly by the Panda representatives.

The tour concluded with a visit to the plant's master control room, and the group departed the facility at about 8:20 p.m.