Decommissioning and Redevelopment “Playbooks” for Pennsylvania’s Retired Coal-Fired Power Plants

Adam Walters
Senior Energy Advisor
Governor’s Office of Energy
PRESENTATION OVERVIEW

- Pennsylvania’s energy system: snapshot & trends
- DCED’s role in energy
- Playbook project overview
- Next steps
Our abundance of natural resources gives Pennsylvania the opportunity to play an important role in national energy production and positions us for unparalleled growth in the energy and manufacturing sectors.
THE SURPRISE OF NATURAL GAS

- Pennsylvania natural gas production dramatically outpaces in-state consumption
- With profound implications for the state’s energy system...

**Pennsylvania Natural Gas Production versus Consumption (1997-2018)**

Source: EIA Natural Gas Summary Data for Pennsylvania
PENNSYLVANIA’S ELECTRICITY GENERATION

**June 2018**
- Petroleum-Fired: 39.2%
- Natural Gas-Fired: 36.4%
- Coal-Fired: 14.13%
- Nuclear: 3.12%
- Hydroelectric: 1.3%
- Non-Hydroelectric Renewables: 20.4%

**August 2019**
- Petroleum-Fired: 1.30%
- Natural Gas-Fired: 48.52%
- Coal-Fired: 14.13%
- Nuclear: 1.86%
- Hydroelectric: 34.12%
- Non-Hydroelectric Renewables: 0.08%
A BROAD FOCUS ON ENERGY

- Attraction and promotion
- Marketing
- Conference participation
- Technical assistance
- Partnering with local/regional EDOs
- Financial assistance
- Support investment opportunities across the energy space

Scenarios Planning

Grant & Loan Opportunities
Coal-Fired Power Plant Retirements

- 15 coal plant closures since 2010
- Distributed across the state
- Caused (primarily) by low-cost natural gas providing baseload power
- Big win from fewer emissions...
ECONOMIC CONSEQUENCES OF THE ENERGY TRANSITION

- But big questions for local economies and workforces
- Appalachia has been hit particularly hard
- Fewer direct, indirect, and induced jobs
- Reduced population
  - Brain drain
  - Less tax revenue
What can the commonwealth do to help our communities bring these sites back into productive reuse?
WHY PLAYBOOKS?

- Sites are valuable brownfields
- Contain valuable infrastructure assets
- Owners not accustomed to dealing with excess property
- Look holistically at site potential
- Begin addressing environmental liability
- Entice redevelopment
WHAT’S IN A PLAYBOOK?

- Phase 1 environmental assessment
- Existing permits for site
- Cost estimates for demolition & abatement
- Existing utilities & infrastructure assets
- Highest and best use analysis
- Redevelopment “Plays”
Mitchell Power Station and Adjacent Canestrale Properties

- Located in southwest Pennsylvania
  - Burgeoning energy hub
- Mariner East 1 & 2 tangent the property
- Mon River is navigable
- 850 acres of potential contiguous acreage
- The “Plays”
  - Shale gas-related manufacturing
  - Industrial park
  - Repower the +57 acre power plant site
Sunbury Generation Power Plant

- Located along Susquehanna River
- Approx. 220 acres
- Site owner actively exploring development
  - Panda Hummel Station
  - Medical marijuana
- The “Plays”
  - Energy production
  - Manufacturing
  - Energy intensive uses
Cromby Generating Station

- Located within 30 miles of Philadelphia
- Approx. 147 acres
- Market dynamics make heavy industrial less feasible
- The “Plays”
  - Light industrial
  - SEPTA rail station
  - Office park
  - Repowering opportunities
LOOKING AHEAD: SUPPORTING FUTURE DEVELOPMENT

- Stakeholder engagement is key
- Playbooks as a marketing tool
- Potential redevelopment schedule
- Working with partners across the development spectrum
  - Local
  - State
  - Federal
- Priority sites for the commonwealth
THANK YOU!