BWXT and a Nuclear Industry Perspective

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BWXT Company Profile

Company Overview
- $1.4 billion in revenues (FY2015)
- $3.7 billion market cap
- Operates six major manufacturing facilities
- ~5,500 employees worldwide
- ~4,000 employees hold security clearances from NRC, DOE and DOD
- Skill sets include scientists, engineers, machinists, technicians and administrators
- Nuclear Regulatory Commission (NRC) licenses for our nuclear fuel facilities in Lynchburg, VA and Erwin, TN
- Two mfg. facilities are ASME N-Stamp certified; 2 NRC Licensed Cat 1 facilities
- Headquarters in Lynchburg, VA
- NYSE: BWXT

Note: All employee figures as of March 31, 2016.

Locations
- Key Operations
  - Lynchburg, VA
  - Barberton, OH
  - Euclid, OH
  - Mt. Vernon, IN
  - Erwin, TN
  - Cambridge, Ontario

- Joint Ventures
  - West Valley, NY
  - Niskayuna, NY
  - Dravosburg, PA
  - Piketon, OH
  - Lexington, KY
  - Paducah, KY
  - Idaho Falls, ID

- BWXT Operations
- BWXT Key Offices
- Joint Ventures
Nuclear Operations Group
2015 Revenue: $1,180M

- Designs / manufactures critical components and nuclear fuel for U.S. Navy
  - VA-Class Submarine
  - OH-Class Replacement
- Owns / operates the only two NRC-licensed commercial facilities in U.S. authorized to handle / process high-enriched uranium (HEU)
- Downblends HEU for govt. / commercial use

Technical Services Group
2015 Revenue: $84M

- Manages / operates govt.-owned facilities supporting defense, nuclear non-proliferation and advanced technology development programs
- Decommissioning, decontamination and clean up of legacy radiological / hazardous waste and commercial facilities
- Environmental management

Attributes
- Long duration contracts
- Well-defined / disciplined approach to capital expenditures
- Stable customer/cash flows

Technical Services Group

Attributes
- Long duration contracts
- Limited working capital
- Stable customer
- Stable cash flows

Nuclear Energy
2015 Revenue: $155M

- Designs / fabricates components and systems for commercial nuclear industry
- Provides related plant inspection and maintenance services
- Delivers advanced commercial nuclear power technologies including nuclear systems and plant design

Attributes
- Positioned for upside to business cycle
- Focused on high, value-add segments of addressable markets
## Nuclear Operations

<table>
<thead>
<tr>
<th>Facility</th>
<th>Location</th>
<th>Employees (Approx)</th>
<th>Manufacturing Capacity (Approx Sq Ft.)</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFS</td>
<td>Erwin, TN</td>
<td>710</td>
<td>271,000</td>
<td>Fuel Material, Control Rod Drive Mechanisms</td>
</tr>
<tr>
<td>NOG-E</td>
<td>Euclid, OH</td>
<td>290</td>
<td>285,000</td>
<td>Naval Reactors</td>
</tr>
<tr>
<td>NOG-L</td>
<td>Lynchburg, VA</td>
<td>2,200</td>
<td>930,000</td>
<td>Heavy Components</td>
</tr>
<tr>
<td>NOG-B</td>
<td>Barberton, OH</td>
<td>660</td>
<td>800,000</td>
<td>Heavy Components</td>
</tr>
<tr>
<td>NOG-MTV</td>
<td>Mount Vernon, IN</td>
<td>200</td>
<td>580,000</td>
<td>Heavy Components</td>
</tr>
</tbody>
</table>
# Technical Services

## National Laboratories
- Idaho National Lab
- Lawrence Livermore
- Los Alamos
- Nevada Nat. Security Site
- Oak Ridge
- TSG Corporate

## Waste Management
- DUF6 Conversion Services
- Advanced Mixed Waste Treatment Plant
- Waste Isolation Pilot Plant
- Savannah River Remediation
- Isotek

## D & D
- BLEU D&D (NFS)
- Naval Reactors D&D
- Portsmouth GDP
- West Valley D&D

## Manufacturing
- SACOM

### Employees & Affiliates (approx)
- **Site Employees**
  - 22,650
  - 3,775
  - 2,530
  - 900

- **Employees & Affiliates**
  - 16 Employees
  - 28 Affiliates
  - 15 Employees
  - 22 Affiliates
  - 260 Employees
  - 35 BU Employees
  - 2 Affiliates
  - 260 Employees
  - 35 BU Employees
  - 2 Affiliates

### Square Miles (approx)
- 2,310
- 328
- 11
- 217
  - (195 is buffer)

### Primary Function
- **Site Employees**
  - Nuclear Operations
  - Security
  - Emergency Response
  - Safety Analysis/Quality

- **Employees & Affiliates**
  - Prime Contractor
  - Operations and Maint
  - Waste Management
  - ES&H

- **Square Miles**
  - Prime Contractor
  - D&D
  - Operations and Maint
  - Waste Management

### Notes:
1) Data as of April 1, 2015.
2) BU = Bargaining Unit
Nuclear Energy

Locations
- Lynchburg, VA: NE Corporate and New Plants
- Lynchburg, VA: Nuclear Services
- Chattanooga, TN: Intech and Nuclear Services Tooling
- Cambridge, Ontario CN: BWXT Canada

Facility Employees (approximate)
- Lynchburg, VA: 73
  - 63 Full time
  - 1 Part time
  - 9 Staff Aug
- Lynchburg, VA: 63
  - 40 Full time
  - 23 Part time
- Chattanooga, TN: 72
  - 21 Full time
  - 51 Part time
- Cambridge, Ontario CN: 603
  - 314 Full time
  - 289 BU Employees

Products/Services
- Lynchburg, VA: Engineering Design Center, Commercial Nuclear Fuel, mPower, Gen IV Reactor Design, Ops Support, Corporate Management (Charlotte)
- Lynchburg, VA: Steam Generator Services, Field Inspection Services, Outage Support, Tube Inspections, Plugging
- Chattanooga, TN: Tooling Design and Fabrication, BOP Services
- Cambridge, Ontario CN: Component Design, Manufacturing, Engineering Services, Steam Generator Services, Heat Exchanger Services, Reactor Services, Component Replacement Services

Notes:
1) Data as of April 1, 2015.
2) BU = Bargaining Unit
BWXT Nuclear Energy Portfolio

Overview

- Approximately 800 employees
- Designs, engineers and manufactures complex components, fuel and systems including SMR and advanced reactors
  - Supplied more steam generators than any competitor worldwide
  - In North America, single largest commercial nuclear manufacturer and largest clean room
- Provides specialty nuclear plant maintenance services
  - Steam generator inspection / repair – lowest dose and schedule in industry
  - Balance of plant heat exchanger inspection / repair
  - Premier Canadian nuclear services
BWXT’s Rich History in Designing / Manufacturing Nuclear Components

BWXT began manufacturing commercial nuclear reactors in the 1960s
  • Once-through design

Today / 50+ years later:
  • Full range of products and services
  • CANDU
  • Replacement nuclear pressure vessel components
  • Ancillary / related nuclear products
  • mPower / SMR technology
  • Gen IV – advanced reactor technology
Gen IV and Emerging Reactor Technology

- mPower technology developer
  - Simplified, passive, modular light-water PWR
  - 195MWe, built in twin packs
  - Descendant of the BWXT maritime program: nuclear powered merchant ship, Otto Hahn
  - Continuing to be developed

- Supporting many of the other Gen IV technology developers
  - Fuel design and manufacturing
  - Systems engineering and program management
  - Licensing
  - Component design and manufacturing

- Market realism
Nuclear Energy’s Intangible Benefits

- Grid stability
- Price certainty and stability
- Runs when needed with fuel on-site
- Clean, carbon-free
- National security
- Energy security
- Fuel and technology diversity (portfolio value)
- Anchors local community
- Creates jobs
- Large and reliable base

Adapted from NEI Briefing to Wall Street, Jan. 2015; original provided by courtesy of NEI.

The opportunity cost that goes unmeasured: Safe, secure, reliable electricity 24/7 plus...
Energy Policy and Outlook

- Energy Policy Act 2005
- Currently no credit given for commercial nuclear power’s intangible benefits
- Renewables substantially subsidized by state and federal governments
- Regulatory / Legislative
- Short-term economics driving decisions
Challenges for New Nuclear Deployment

- Safety culture
- Bridging the gap between licensing and FOAK deployment
  - Covering the non-recurring DDE
- Economics of operations in non-regulated environments
- Availability and quality of supply chain
- Standardization
- Regulation
- Workforce
- Safety and performance
- Competing with sovereign and international governments