

A BODY OF SYSTEMS - WORKSHOP #3 - FC 1130

Washington, DC – 04-28-2016



PARTNERS FOR WHAT'S POSSIBLE

www.pennoni.com

Firm Profile

- ◆ **Established in 1966 by chairman Chuck Pennoni, PE**
 - ◆ **Multidiscipline engineering & design firm**
 - ◆ **More than 1,000 professionals & support staff**
 - ◆ **Offices throughout the eastern United States**
 - ◆ **Clients are local, state, and federal governments, private, commercial, industrial, and construction clients, as well as other professional firms**
- ◆ Civil/Site
 - ◆ Construction Services
 - ◆ Energy & Sustainability
 - ◆ Environmental
 - ◆ Geotechnical
 - ◆ Landscape Architecture & Planning
 - ◆ MEP
 - ◆ Structural
 - ◆ Survey & Geomatics
 - ◆ Transportation
 - ◆ Water Resources
 - ◆ Water/Wastewater

As an ESOP-owned firm, every Pennoni employee has a vested interest in the success of each project.



Office Locations



- Milton, DE
- Newark, DE
- Pensacola, FL
- Winter Haven, FL
- Chicago, IL
- Baltimore, MD
- Columbia, MD
- Camden, NJ
- Edison, NJ
- Haddon Heights, NJ
- Vineland, NJ
- Chapel Hill, NC
- New York, NY
- Akron, OH
- Columbus, OH

- King of Prussia, PA
- Bethlehem, PA
- Mechanicsburg, PA
- Pittsburgh, PA
- State College, PA
- Uniontown, PA
- Warrington, PA
- West Chester, PA
- Wilkes-Barre, PA
- Arlington, VA
- Herndon, VA
- Virginia Beach, VA
- Leesburg, VA
- Richmond, VA
- Winchester, VA

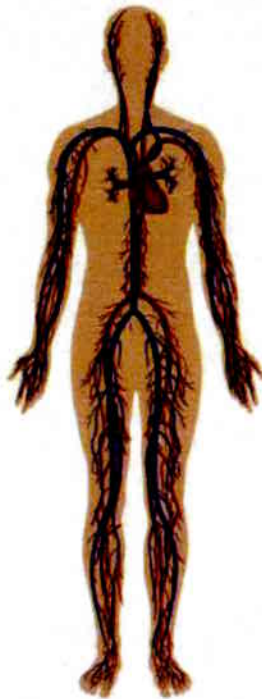
Corporate Headquarters
Philadelphia, PA



Body of Systems in the City

IT/OT

Nervous System



Circulatory System

UTILITIES

ENERGY

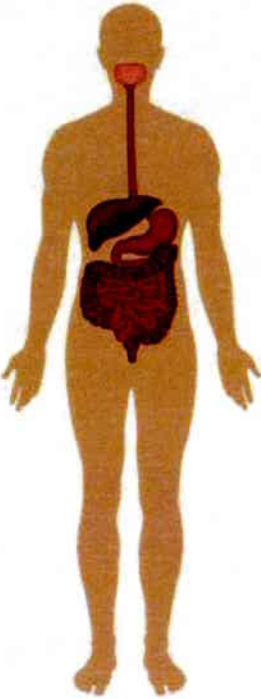
Digestive System



Respiratory System

CIVIC ORG.

Digestive System



Skeletal System

INSTITUTIONS

TRANSPORTATION

Muscular System



wiseGEEK

Ensuring Safety

Overcoming obstacles

1. Utilities own the wires and are on the hook for reliability.
2. Serious fines if they do not perform
3. Technical concerns, particularly over Solar and Wind fluctuations
4. CHP is, however, a long-standing non-concern.
5. Can dual CHP's and small distributed generation cause similar fluctuations.

Competition Drives Innovation and Lowers Cost

The common theme we are proposing is fair and open competition and light touch regulations

We believe qualified participants in the ecosystem can review and ensure safe interconnections

The direct competition in all aspects of the market, including transportation is the surest way to ensure investments are made and costs are lowered



Regulatory Specifics

1. Many jurisdictions have both utility and non-utility microgrids and are crafting regulations and policies accordingly.
2. The interests of the District's citizens are likely best met through a flexible regulatory environment.
3. Commission likely has authority to craft a flexible regulatory environment.

QUESTIONS
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