



7-21-2010 - FOUO

EUL Opportunity  
Naval Support Facility Indian Head  
Alvarez & Marsal  
NAVFAC Washington  
Pace Global

July 21, 2010

# EUL Opportunity

- The EUL properties consist of approximately 39 acres on two parcels located on NSF Indian Head. An additional four acres could also be included in the lease.
- The initial lease term will not exceed 50 years. However, the Navy may enter into a succeeding lease depending on the lessee's satisfactory performance under the initial lease.



# Development Objectives

- Enter into a long-term lease with a responsible party who will provide good stewardship over the property.
- Meet the current and future needs of the Navy for electricity at NSF Indian Head and elsewhere in Naval District Washington at reduced cost and increased reliability.
- Maximize value to the Navy in the form of in-kind services, enhanced quality of life for Navy personnel, and provision of benefit to the surrounding community.
- Ensure compatibility of the proposed EUL site lease with the operational and security requirements of the installation.
- Employ the best commercial practices to the benefit of both the Navy and the Developer.

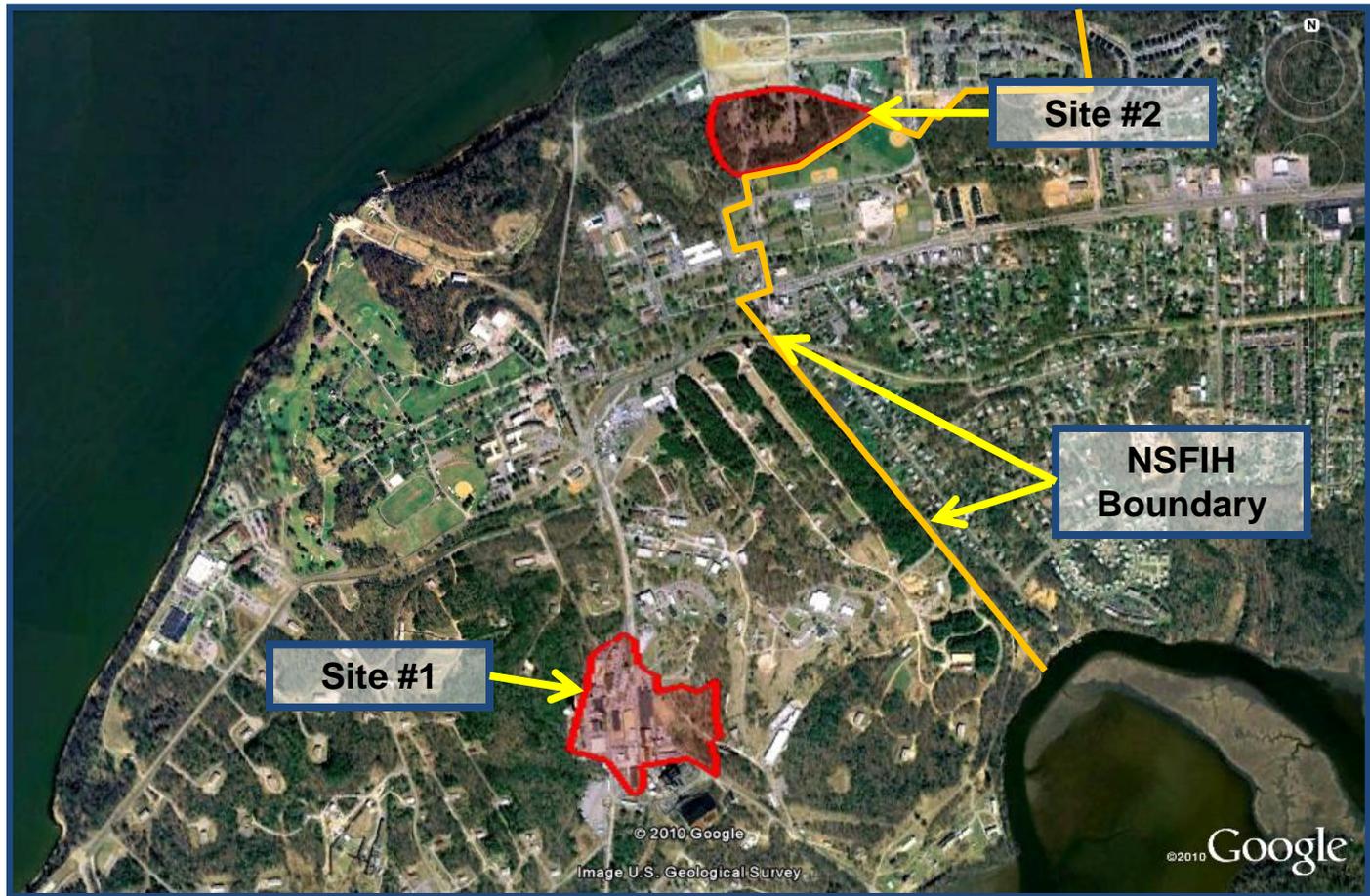


# EUL Sites Overview



Source: Google Earth™

# EUL Sites Overview



Source: Google Earth™



# EUL Sites Overview



| Site | Location                                                                                                          | Land     | Existing Structures                                        | Tenants / Uses                                           |
|------|-------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------|----------------------------------------------------------|
| 1    | North/northeast of the Goddard Power Plant within the Controlled Industrial Area                                  | 24 acres | Approximately 250,000 SF of existing industrial structures | Public Works administrative and operational space; CBIRF |
| 2    | Northeast corner of NSFIH, adjacent to installation perimeter; located well outside of Controlled Industrial Area | 15 acres | No structures, existing paved roads and sidewalks          | Not in use                                               |

# EUL Sites Overview (continued)

| Site | Land     | Utilities                                                                                                       | Environmental Constraints                                                                                  | Relocation Requirements                                                |
|------|----------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 1    | 24 acres | Water / sewage availability restricted; steam not available; no natural gas availability; electricity available | Bound by Installation Remediation Site to the northeast and unsuitable topography to the east and west     | Up to approximately 200,000 SF of administrative and operational space |
| 2    | 15 acres | Utilities available except natural gas and steam                                                                | Bald eagle habitat mitigation will be required; archeological resources located on eastern portion of site | None                                                                   |



# Site #1 Description

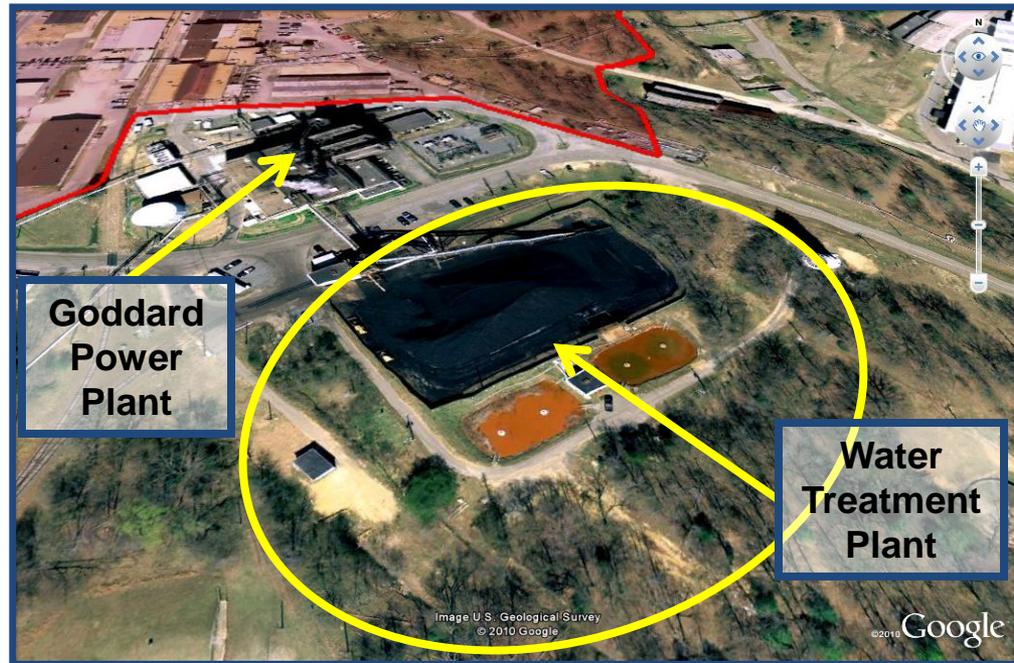


Source: Google Earth™



# Site #1 Description

- Approximately 24 acres within controlled industrial area
- Structures on Site #1 support operations of the Goddard Power Plant
- An additional non-adjacent four acres may be included as part of the lease – currently occupied by the water treatment plant which provides boiler water to Goddard (see photo)



Source: Google Earth™



# Site #1 Photo Building 351



Source: PAO, NSA South Potomac



# Site #1 Photo Building 551



Source: PAO, NSA South Potomac



# Site #1 Photo Building 314



Source: PAO, NSA South Potomac



# Site #1 Photo Building 113



Source: PAO, NSA South Potomac



# Site #1 Photo Building 116



Source: PAO, NSA South Potomac



# Site #1 Photo Building 268



Source: PAO, NSA South Potomac



# Site #1 Photo Eastern Perimeter



Source: PAO, NSA South Potomac



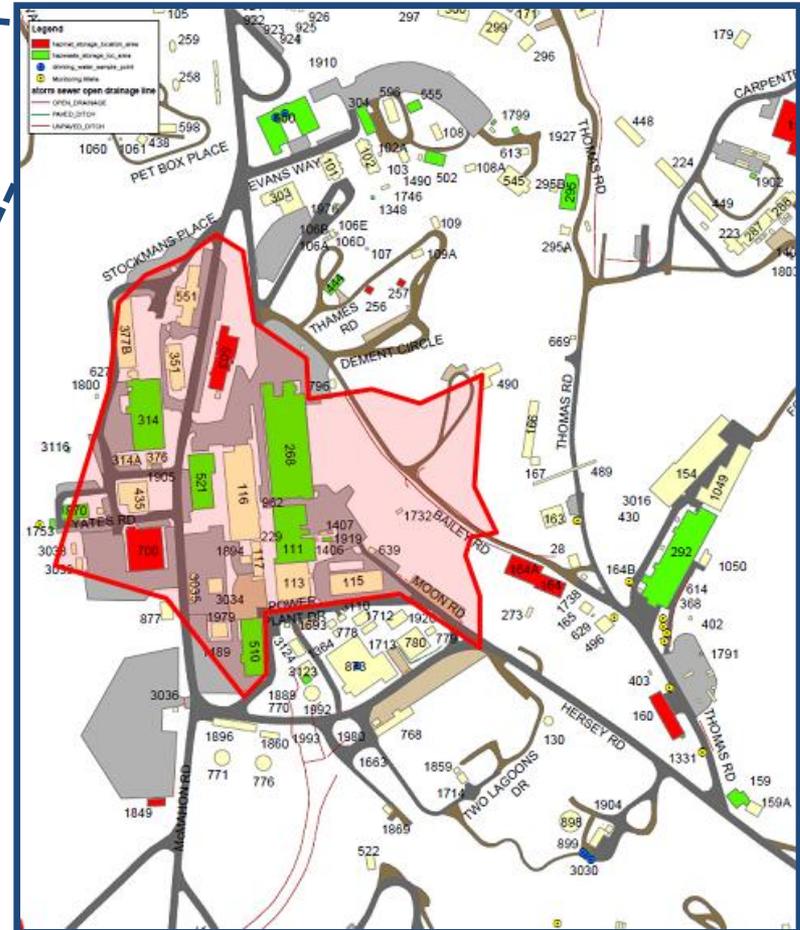


# Site #1 Existing Conditions

## Physical Constraints

### Legend

-  hazmat\_storage\_location\_area
-  hazwaste\_storage\_loc\_area
-  drinking\_water\_sample\_point
-  Monitoring Wells
- storm sewer open drainage line**
  -  OPEN\_DRAINAGE
  -  PAVED\_DITCH
  -  UNPAVED\_DITCH



# Site #1 Existing Conditions

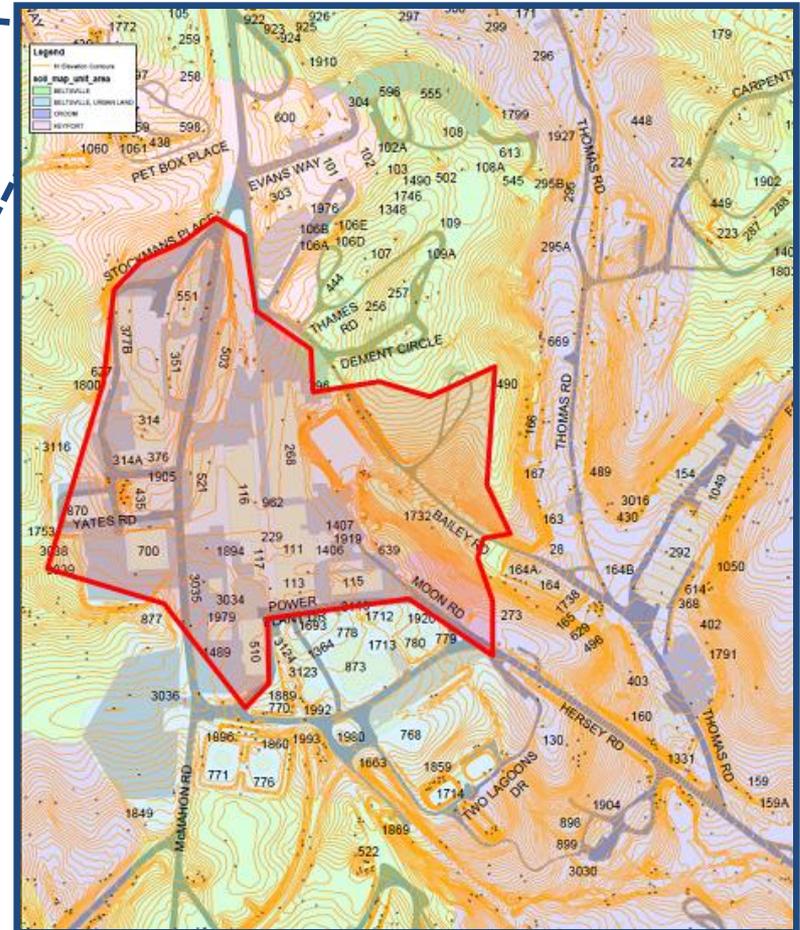
## Topography

### Legend

— IH Elevation Contours

### soil\_map\_unit\_area

- BELTSVILLE
- BELTSVILLE, URBAN LAND
- CROOM
- KEYPORT



# Site #1 Relocation Requirements Facilities Relocation Area

- The selected Developer will be responsible, at its own expense, for providing suitable replacement facilities for the use of tenants that currently occupy Site #1. The Navy's estimate for this relocation requirement is up to 203,155 SF of industrial and office space. (See Appendix E of the RFQ.)
- The Navy will make available a Facilities Relocation Area to accommodate this construction. (See Appendix F of the RFQ.)



Source: Google Earth™



# Site #2 Description



Source: Google Earth™



# Site #2 Description



- Approximately 15 acres located near the perimeter fence in the northeast corner of the installation
- Former housing site / RV campground with existing utilities – no structures currently occupy the site



# Site #2 Photo Holden Drive



Source: PAO, NSA South Potomac



# Site #2 Photo Northern Perimeter



Source: PAO, NSA South Potomac



# Site #2 Photo Couden Road



Source: PAO, NSA South Potomac



# Site #2 Photo Couden Road



Source: PAO, NSA South Potomac



# Site #2 Photo

## Earle Road (L) and Perkins Street (R)



Source: PAO, NSA South Potomac



# Site #2 Photo Perkins Street



Source: PAO, NSA South Potomac



# Site #2 Photo Earle Road



Source: PAO, NSA South Potomac



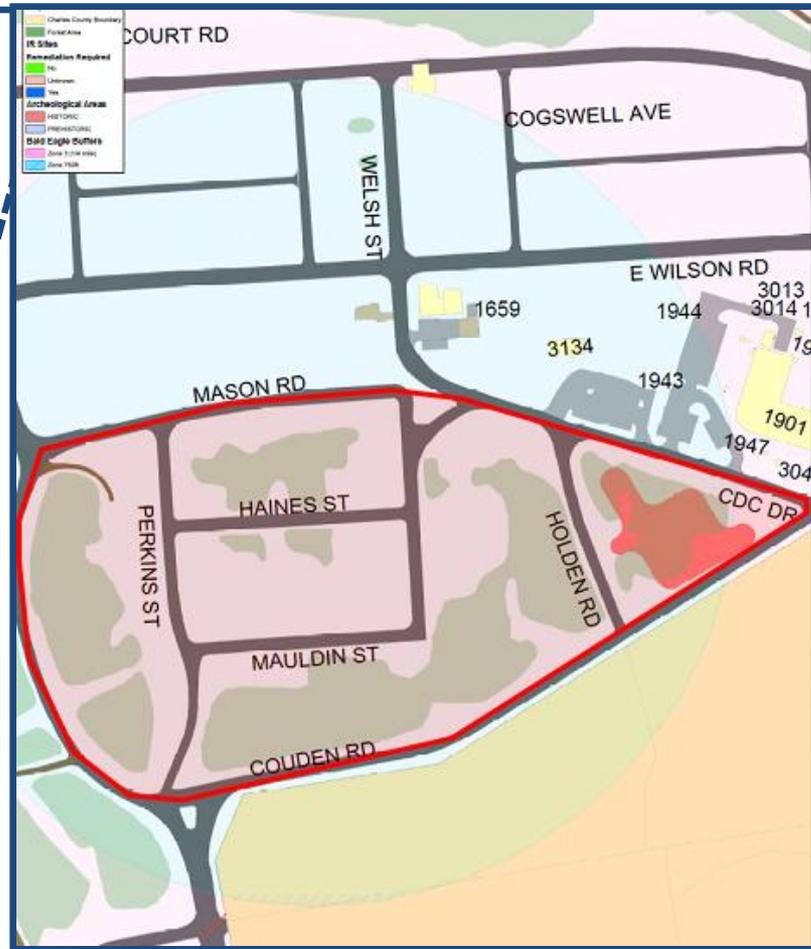
# Site #2 Existing Conditions

## Operational and Environmental Constraints



### Legend

- Charles County Boundary
- Forest Area
- IR Sites**
- Remediation Required**
- No.
- Unknown.
- Yes.
- Archeological Areas**
- HISTORIC
- PREHISTORIC
- Bald Eagle Buffers**
- Zone 3 (1/4 mile)
- Zone 750ft

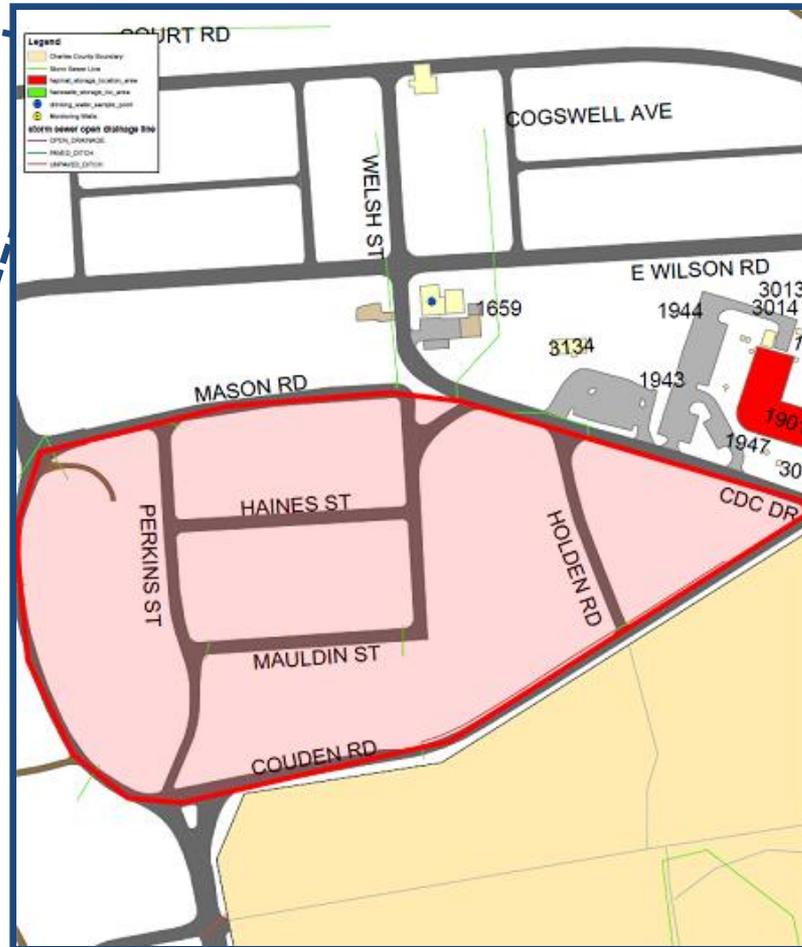


# Site #2 Existing Conditions

## Physical Constraints

### Legend

- Charles County Boundary
- Storm Sewer Line
- hazmat\_storage\_location\_area
- hazwaste\_storage\_loc\_area
- drinking\_water\_sample\_point
- Monitoring Wells
- storm sewer open drainage line**
  - OPEN\_DRAINAGE
  - PAVED\_DITCH
  - UNPAVED\_DITCH

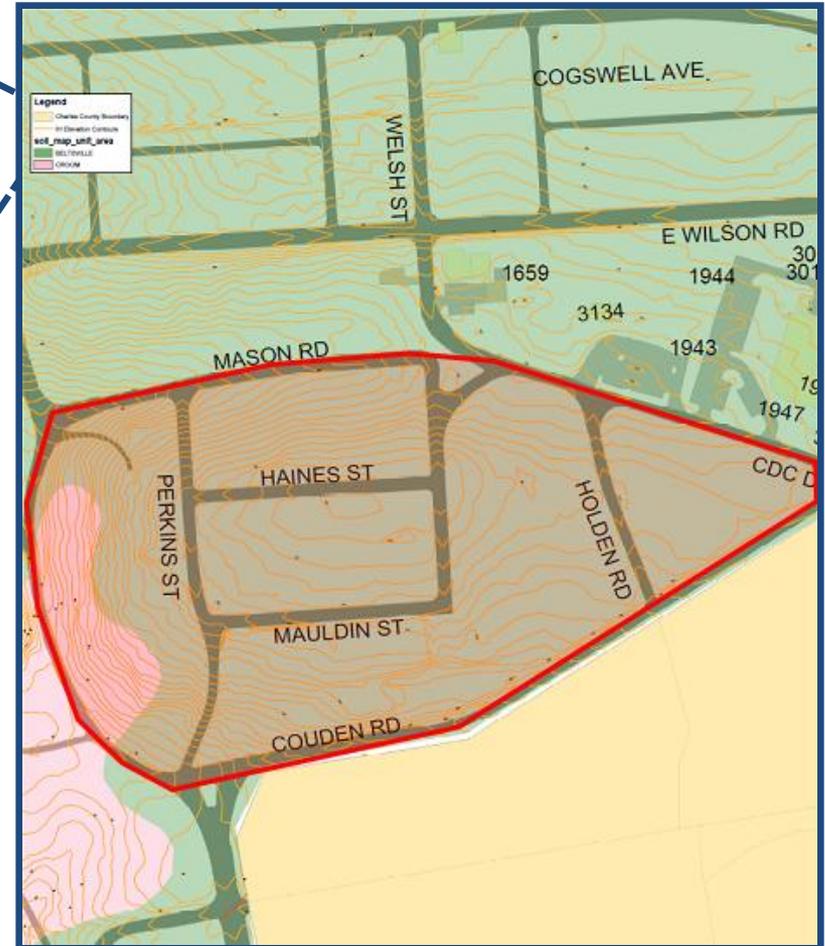


# Site #2 Existing Conditions

## Topography

### Legend

-  Charles County Boundary
-  IH Elevation Contours
- soil\_map\_unit\_area**
-  BELTSVILLE
-  CROOM



# Possible Development

## Site #1

- Commercial-scale, natural gas-fired electrical power generation facility.
- Expected to be supported by non-Navy purchasers of the electricity generated.

## Site #2

- Compatible commercial/light industrial facility such as:
  - Data center
  - Laboratory
  - R&D / Flex



# Prohibited Uses

- Prohibited uses include but are not limited to:
  - Any use requiring unrestricted access to the site.
  - Any use by non-US citizens.
  - Casinos, gaming facilities, or any other type of establishment which facilitates gambling; public entertainment venues.
  - Commercial retail or agricultural uses.
  - Coal-fired, wind-driven, or nuclear-power electrical generation plant.
  - Use, storage, or production of hazardous waste or petroleum products.



# Physical Security Requirements

- Selected Developer(s) must submit to the procedures for construction screening and background verification as outlined in Appendix K of the Draft RFQ.



# Jurisdiction

- Exclusive Federal jurisdiction applies to NSF Indian Head, including the EUL property.



# Utilities and First Responder Services

- The Navy intends to provide electric power, steam, water for personnel use, and sanitary sewage and disposal.
- The Navy will not provide water in sufficient volumes for industrial use and will not accept industrial sewage.
- The Navy intends to provide first responded services to both EUL sites.



# Data Center Site Selection

## NSF Indian Head Attributes

- Strong physical security profile / force protection
- Sizeable buffer from surrounding structures
- Proximity to potential end-users (DoD contractors, USN, planned Indian Head Science and Technology Park)
- Proximity (<30 miles) to Washington, DC, and associated government / business centers

## 10-, 30-, and 50-mile Radii from NSFIH

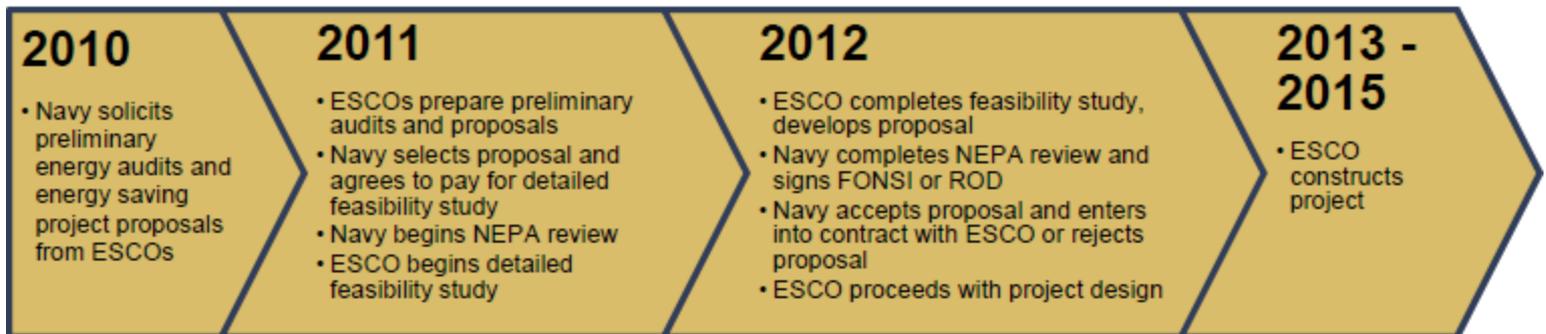


Source: ESRI



# Energy Savings Performance Contract

- Partnership between the Navy and an energy service company (ESCO) to fulfill the Navy's energy requirements at NSF Indian Head in a more efficient and cost-effective manner.
- The current concept envisions decentralizing the existing plant with a combination of decentralized natural gas fired nodal plants and direct boilers. The final scope will be determined through the ESPC solicitation process.
- Current concept is expected to produce approximately 3.5MW of electricity, which would partially offset NSF Indian Head's base load of ~12MW.



# Existing Energy Infrastructure

- The Navy currently purchases power from the commercial grid to fulfill electricity needs at NSF Indian Head not met by Goddard Power Plant.
- The main transmission line onto NSF Indian Head is owned by PEPCO. The Navy has expressed support for a proposed conveyance of this transmission line to SMECO.
- Main concern associated with Navy purchase of commercial power is assurance of reliability.



# Potential for Offtake

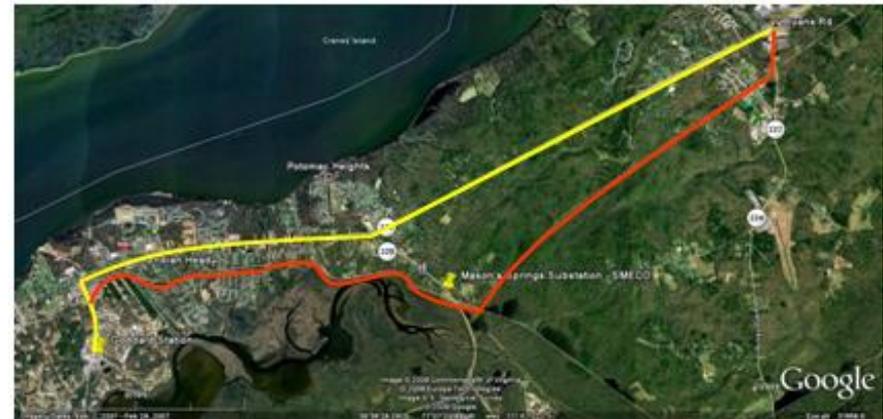
- Key consideration: Navy must select the most cost-effective source for electricity needs not filled through ESPC. Potential sources include an EUL power plant or the commercial grid.
- If economical for the Navy, other installations in the PEPCO service territory could also be potential offtakers. Navy offtakers outside the PEPCO region unlikely due to transmission and jurisdictional obstacles.
- The Navy makes no guarantees of a power purchase, and any such arrangement would be subject to exclusive negotiations with the EUL developer.



# Local Natural Gas Transmission Infrastructure

The closest natural gas pipeline is about 6 miles north of NSF Indian Head along S.R. 210

- Indian Head has no natural gas service; the closest Washington Gas Light (WGL) infrastructure is a 12" ~ 250 psig transmission line at the intersection of Hwy 210 (Indian Head Hwy) and South Hampton Dr. in Bryans Road. This line is ~50% subscribed meaning upgrades further upstream may not be necessary.
- Two routes are probable for gas extension to Indian Head. The most direct route is directly down the Indian Head Hwy (~6 miles). The second somewhat longer route uses the existing Rails for Trails right of way.



— Hwy 210 (Indian Head) Path

— Rail Easement Path

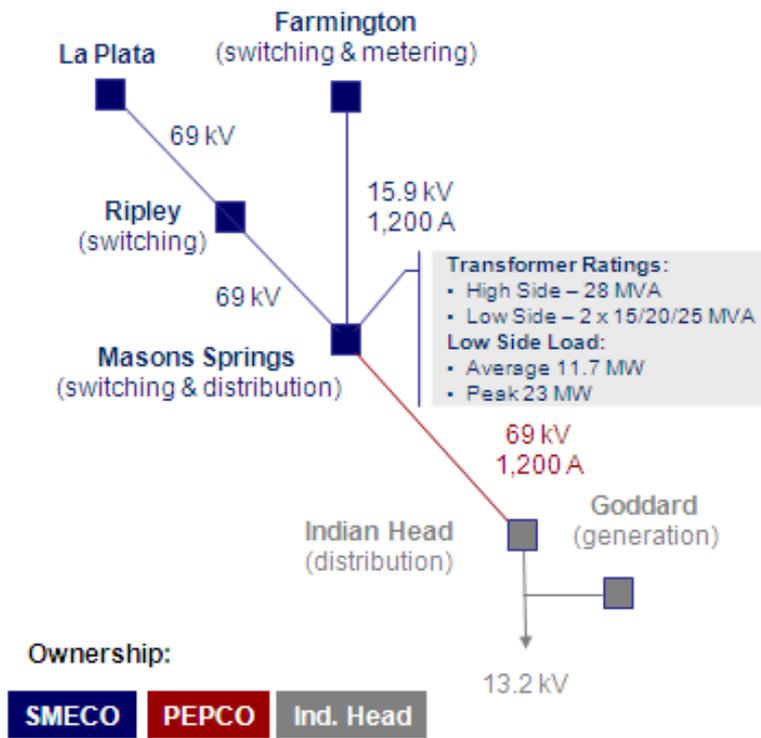
# Local Natural Gas Transmission Infrastructure

- In February 2009 the Navy requested and received a quote to extend this line to Indian Head at the cost of \$5.6 million based on the capital cost and expected revenue from two cogeneration systems. Details are not available.
- Independent estimates place the cost to develop this line at about \$5.7 million, but this does not include the cost of on-site compression required to boost gas pressure for modern gas turbines.



# Local Electrical Transmission & Distribution Infrastructure

Upgrades to electrical transmission tie and transformers may be needed for any plant over about 20-30 MWs



- NSF Indian Head electric service is provided by PEPCO, which owns the physical line into the Base running 6.3 miles along a Maryland Rails for Trails corridor before connecting to Southern Maryland Electric Co-op (SMECO) Mason's Springs substation.

- SMECO/ PEPCO/ Navy have discussed sale of line to SMECO.

— PEPCO Transmission Line Path

# Local Power Market Drivers

## Local supply and demand factors drive electric power markets

| Market         | Price Weekly Avg.                                                                                    | Upward Price Drivers                                                                                                                                                                                                                                                                                                                                                                | Downward Price Drivers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electric Power | <p>\$86.31/ MWh<br/>Jul 7-11, 2010</p> <p>(on peak \$140 off peak \$50/ MWh)</p> <p>(PEPCO Zone)</p> | <ul style="list-style-type: none"> <li>• Economic recovery – demand returns to historic growth patterns.</li> <li>• Increased cost of generation - driven by carbon cap &amp; trade or EPA rule changes.</li> <li>• Delayed retirement of aging assets</li> <li>• Stalled high profile transmission projects (MAPP, PATH, TRAIL).</li> <li>• Energy policies in general.</li> </ul> | <ul style="list-style-type: none"> <li>• CPV St. Charles - Competitive Power Ventures (CPV) proposed 600 MW plant in Charles county, MD. Added 10MW solar PV plant to plan end of 2009.</li> <li>• Calvert Cliffs Unit 3 – final EIS to EPA expected Feb 11', announced DOE loan guarantee.</li> <li>• Energy Efficiency - Increased drive for energy efficiencies in residential, commercial, and industrial sectors.</li> <li>• Demand Response - PJM demand response efforts blunting peak prices relative to previous years.</li> </ul> |

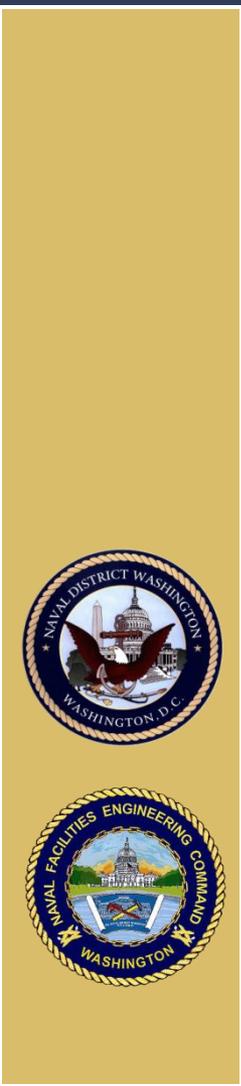
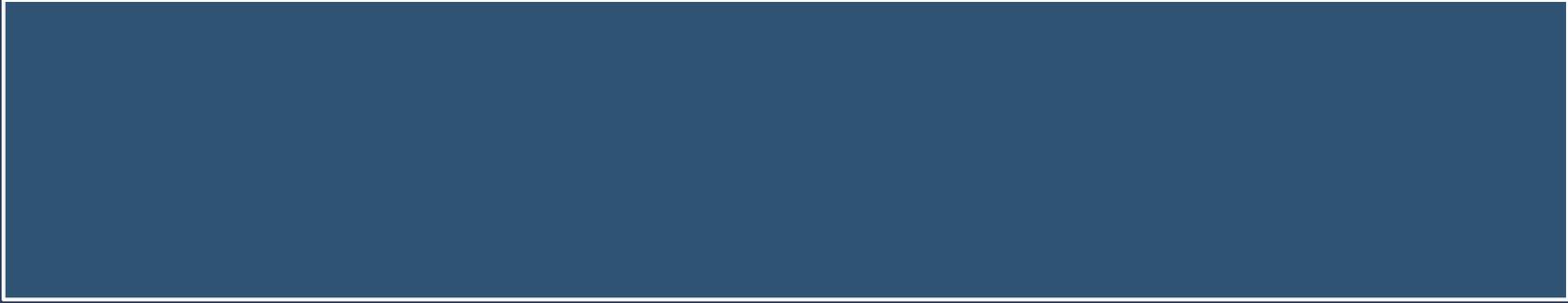


# Local Natural Gas Market Drivers

## Natural gas prices are currently relatively low

| Market      | Price Weekly Avg.                                                                   | Upward Price Drivers                                                                                                                                                                                                                                                                                                                                                                                                                             | Downward Price Drivers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Natural Gas | <p>\$4.99/<br/>mmBtu</p> <p>Jul 7-12,<br/>2010</p> <p>(Transco-Z6<br/>(non-NY))</p> | <ul style="list-style-type: none"> <li>• Increased demand – need for baseload and mid-merit generation continues, but coal unlikely to fill the need.</li> <li>• Increased renewables - drive intermittency &amp; demand for simple cycle CTs for grid stabilization.</li> <li>• Increasingly viewed as a transition fuel - increased use of gas-fired generation to meet base and mid-merit loads until larger renewables available.</li> </ul> | <ul style="list-style-type: none"> <li>• Increased gas supply –               <ul style="list-style-type: none"> <li>○ Shale gas – until recently not economically available, new drilling technology puts it in play.</li> <li>○ Shale supply - Perhaps 100 year supply of proven US shale gas reserves – this expectation has driven down prices of late.</li> <li>○ Local Shale - Marcellus shale gas in the Appalachians economical to extract and close to major ME markets.</li> </ul> </li> <li>• If prices increase enough, LNG imported through Cove Point could serve to dampen prices</li> </ul> |





Recess

Site Tour to Follow