

DRAFT

Sparrows Point Project
Pre-Filing Draft Resource Report 5
September 2006

**FERC Pre-Filing Review
Draft Resource Report 5 – Socioeconomics
AES Sparrows Point LNG Terminal & Mid-Atlantic Express Pipeline**

Submitted September 2006

SUMMARY OF REQUIRED FERC REPORT INFORMATION		
TOPIC	FERC Reference	Report Reference or Not Applicable
1. For major aboveground facilities and major pipeline projects that require an EIS, describe existing socioeconomic conditions within the project area.	§ 380.12(g)(1)	Section 5.3
2. For major aboveground facilities, quantify impact on employment, housing, local government services, local tax revenues, transportation, and other relevant factors within the project area.	§ 380.12(g)(2-6)	Section 5.4

Additional Information

Evaluate the impact of any substantial immigration of people on governmental facilities and services and describe plans to reduce the impact on local infrastructure.	Section 5.4
Describe on-site manpower requirements, including the number of construction personnel who currently reside within the impact area, would commute daily to the site from outside the impact area, or would relocate temporarily within the impact area.	Section 5.4
Estimate total worker payroll and material purchases during construction and operation.	Section 5.4
Determine whether existing housing within the impact area is sufficient to meet the needs of the additional population.	Section 5.4
Describe the number and types of residences and businesses that would be displaced by the project, procedures to be used to acquire these properties, and types and amounts of relocation assistance payments.	Section 5.4
Conduct a fiscal impact analysis evaluating incremental local government expenditures in relation to incremental local government revenues that would result from construction of the project. Incremental expenditures include, but are not limited to, school operating costs, road maintenance and repair, public safety, and public utility costs.	Section 5.4

TABLE OF CONTENTS

		Page
LIST OF TABLES		iv
5.	SOCIOECONOMICS	1
5.1	Introduction	1
5.2	Objective and Applicability	1
5.3	Existing Socioeconomic Conditions	2
5.3.1	Population and Housing	2
5.3.2	Local Economy/Workforce Composition	3
5.3.3	Local Revenues and Sources of Funding	3
5.3.4	Per Capita Personal Income	4
5.4	Project Construction and Operation	5
5.4.1	LNG Terminal Construction	6
5.4.2	Pipeline Construction	14
5.4.3	Power Plant Construction	20
5.4.4	Project Operation	24
5.4.5	Dredged Material Recycling Facility Construction and Operation	25
5.5	Environmental Justice Statement (Executive Order 12898)	26
5.5.1	Terminal Site	27
5.5.2	Pipeline Route	28
5.5.3	Community Involvement	28
5.6	References	29

TABLES**FIGURES** None**APPENDICES** None

LIST OF TABLES

Table No.	Title
5.2-1	Existing Socioeconomic Conditions in the Project Area
5.2-2	Local Economy/Workforce Composition
5.2-3	Local Revenues and Sources of Funding
5.3-1	Temporary Construction Employment Positions
5.3-2	Housing and Infrastructure – FY 2000
5.3-3	Permanent Employment Positions
5.4-1	Population Composition
5.4-2	Project Construction and Operation Tax Revenues

5. SOCIOECONOMICS

5.1 Introduction

AES Sparrows Point LNG, LLC proposes to construct, own, and operate a new liquefied natural gas (LNG) import, storage, and regasification terminal (LNG Terminal) at the Sparrows Point Industrial Complex situated on the Sparrows Point peninsula east of the Port of Baltimore in Maryland. LNG will be delivered to the Sparrows Point LNG Terminal via ship, offloaded from the ship to shoreside storage tanks, regasified on the Sparrows Point LNG Terminal site (Terminal Site), and transported to consumers via pipeline. The LNG Terminal will have a regasification capacity of 1.5 billion cubic standard feet of natural gas per day (bcscfd), with potential to expand to 2.25 bcscfd. Regasified natural gas will be delivered to markets in the Mid-Atlantic Region and northern portions of the South Atlantic Region through the Mid-Atlantic Express Pipeline (Pipeline), which is an approximately 87-mile, 30-inch outside diameter natural gas pipeline to be constructed and operated by Mid-Atlantic Express, LLC. The Pipeline will extend from the LNG Terminal to interconnections with existing natural gas pipeline systems near Eagle, Pennsylvania, and may include intermediate interconnections with the Baltimore Gas & Electric (BG&E) Company's local natural gas distribution system. Together the Sparrows Point LNG Terminal and Mid-Atlantic Express Pipeline projects are referred to as the Sparrows Point Project or Project. AES Sparrows Point LNG, LLC and Mid-Atlantic Express, LLC (hereinafter collectively referred to as AES) are subsidiaries of The AES Corporation.

AES is considering the possibility of building a combined cycle cogeneration power plant (Power Plant) on the Terminal Site. The Power Plant will be configured with one F-Class combustion gas turbine, one steam turbine, and associated auxiliaries. The Power Plant will operate only on natural gas, and will produce approximately 300 MW of clean electric power within an area of high energy demand. The Power Plant will be connected to the local utility electric system via an overhead transmission line. The Power Plant is addressed more fully in Section 1.10 of Resource Report 1, *General Project Description*.

The Project footprint is located in the counties of Baltimore, Harford, and Cecil in Maryland and the counties of Lancaster and Chester in Pennsylvania. The Terminal Site, which is located entirely within Baltimore County, is a former shipyard. The route proposed for the Pipeline (Pipeline Route), which crosses all of the listed counties, includes industrial, commercial, agricultural, and residential lands. Together, the Terminal Site and the Pipeline Route comprise the Project Area.

5.2 Objective and Applicability

Resource Report 5, *Socioeconomics*, addresses the socioeconomic conditions affected by the Project, including a description of the potential socioeconomic impacts of the proposed Project. This Resource Report 5 supports AES's application for authorization of the LNG Terminal and for a Certificate of Public Convenience and Necessity pursuant to Sections 3 and 7(c) of the Natural Gas Act (NGA).

This Resource Report provides a description of the potential socioeconomic impacts associated with the Project in four sections. Section 5.3 addresses the existing socioeconomic conditions in the Project Area. Section 5.4 addresses the socioeconomic impact of construction and operation on the Project Area. Section 5.5 addresses the potential environmental effects (including human health, social, and economic) of the Project on minority, low-income, and Native American communities.

The results of the socioeconomic assessment indicate that some temporary negative impacts would occur due to construction of the Project; however, these impacts are mitigated by the positive impacts that would occur due to increased employment opportunities associated with construction activities. These positive economic impacts will be related to wages and economic benefits from the increased incomes being spent within the local economies. Additional positive impacts during the construction period will be related to local purchases of equipment, materials, food and supplies. Overall positive impacts are expected during the operation of the Project, including increased employment opportunities associated with operational activities and wages and economic benefits from the increased incomes being spent within the local economies. Long-term positive impacts will also result from projected tax revenues.

5.3 Existing Socioeconomic Conditions

This section contains a summary of the socioeconomic conditions existing in Baltimore, Harford, and Cecil counties in Maryland, and Lancaster and Chester Counties in Pennsylvania. Sources of information used to identify existing socioeconomic conditions in the Project Area include U.S. Census Bureau demographic data from the most recent official U.S. census (Census 2000) and other Census Bureau information, and the Bureau of Economic Analysis.

The LNG Terminal will be located on a formerly industrial, now mostly vacant approximately 80-acre parcel situated on the western side of the Sparrows Point Peninsula in Baltimore County, Maryland. The Pipeline will extend approximately 87 miles from the Terminal Site to Eagle, Pennsylvania and will traverse (in geographic order from south to north) Baltimore, Harford, Cecil, Lancaster and Chester counties.

5.3.1 Population and Housing

Table 5.2-1 provides a summary of demographic and socioeconomic conditions for the counties in the Project Area. The summary table includes current population and population density statistics, per capita personal income, current unemployment rates, rental vacancy rates for temporary housing (e.g. apartment rentals, hotels/motels, and campgrounds), civilian labor force statistics, and the major industry within these counties.

Baltimore County ranks the highest in population density of the five counties traversed (1260 people/square mile), followed by Chester County, Pennsylvania (573.4 people/square mile), and Harford County, Maryland and Lancaster County, Pennsylvania (roughly equal at about 495 people/square mile). Cecil County, Maryland population density is lowest of the counties traversed (247 people/square mile). Civilian labor forces follow the same trend as population densities among the counties in which facilities associated with the Project will be located.

The number of vacant housing units present in the Project Area is greatest in Baltimore County (13,847). Harford and Cecil Counties each have reported just over 3,000 housing units. Lancaster County has approximately 7,400 units and Chester County nearly 6,000 units.¹

¹ According to the U.S. Census Bureau, a housing unit is vacant if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration entirely by people who have a usual residence elsewhere are also classified as vacant. A housing unit may be a house, apartment, mobile home, group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall.

With the exception of Cecil County, Maryland, vacancy rates for rental units in the Project Area communities are lower than their respective state vacancy rates and the national vacancy rate. Cecil County's rental vacancy rate is 6.8 percent, the same as the national rate. The rental vacancy rate for Maryland is 6.1 percent. Baltimore and Harford Counties are 5.7 and 5.5 percent, respectively. Lancaster and Chester Counties in Pennsylvania are reported to be 4.9 and 4.8 percent, respectively, far below that of the State of Pennsylvania, which is 7.2 percent.

The number of vacant housing units for seasonal, recreational or occasional use is nearly 300 units in Harford County and approximately 1200 and 1400 units in Baltimore County and Cecil County, respectively.² Lancaster County has approximately 800 vacant seasonal, recreational or occasional use housing units and Chester County as approximately 570. Additional information concerning vacancy rates is presented in Table 5.2-1, and information concerning vacant housing units is presented in Table 5.3-2.

5.3.2 Local Economy/Workforce Composition

Table 5.2-2 illustrates the local economies and workforce within the proposed Project Area. The summary table includes local economy composition (e.g., mining/agriculture; construction; manufacturing; transportation and public utilities; wholesale trade; retail trade; finance; and government services) and employment within each industry. According to U.S. Census Data, the workforce in Baltimore County is nearly 380,000, and is approximately 112,000 and 43,000 in Harford and Cecil Counties, respectively. The workforces in Lancaster and Chester Counties are similar to one another, at approximately 236,000 and 221,000 each. The reported Pennsylvania workforce (approximately 5.6 million) is greater than that reported for Maryland (approximately 2.6 million).

Based on number of employed civilians, ages 16 years and older, education, health and social services tends to be the highest percentage of workforce and appears to uniformly range from approximately 17 percent to 23 percent of the workforce in the counties traversed. Professional, finance, retail, trade and manufacturing all appear to range between approximately 7 percent and 12 percent of the workforce composition with the exception of Lancaster County which is higher in manufacturing (22.5 percent of workforce) than the remaining counties (U.S. Census Bureau, Census 2000 – see Table 5.2-2).

5.3.3 Local Revenues and Sources of Funding

Table 5.2-3 summarizes the local government revenues and sources of funding.³ The sources of local revenue include taxes and intergovernmental contribution (from state and federal governments). In general, the trends of revenue in nearly all categories ranks consistent with population of the counties relative to one another (i.e. Baltimore County tends to be highest, followed by Chester and Lancaster counties, then Harford and Cecil counties, across nearly all categories of funding).

² According to the U.S. Census Bureau, seasonal, recreational, or occasional use housing units include vacant units used or intended for use only in certain seasons, for weekends, or other occasional use throughout the year. Interval ownership units, sometimes called shared ownership or time-sharing condominiums, are included in this category.

³ Data presented in Table 5.2-1 was collected from the U.S. Census Bureau and is for the reporting year 1997. The U.S. Census Bureau has collected data more recently (year 2002); however, that data has not yet been compiled and posted on the Census Bureau website.

5.3.4 Per Capita Personal Income

The per capita personal income is included in Table 5.2-1⁴. The per capita personal income was obtained from 2000 U.S. Census data. The state average per capita personal income for Maryland is \$25,614, or 118.6 percent of the national average, which is \$21,587. Pennsylvania's average per capita personal income is \$20,880, or 96.7 percent of the national average.

The per capita personal income of residents of Harford and Cecil counties is below that of the State of Maryland. Cecil County's per capita personal income is also below the national average. The per capita personal income of residents of Lancaster County, Pennsylvania is slightly below Pennsylvania's state average and is also below the national average. Baltimore County, Maryland and Chester County, Pennsylvania are above their respective state averages and above the national average per capita personal income.

Related to income are employment and poverty rates. The unemployment rate in Baltimore County was 4.2 percent in the last recorded census (2000), slightly above that of the overall state of Maryland (3.2 percent) and US (3.7 percent). The remaining counties have unemployment rates that range between 2 percent and 2.8 percent. Of the counties in which facilities associated with Project will be located, poverty rates are relatively highest in Lancaster and Cecil counties (7.8 percent and 7.2 percent respectively). Baltimore County has a median poverty rate of the counties traversed at 6.5 percent. Chester County and Harford County have the lowest relative poverty rates at 5.2 percent and 4.9 percent respectively. The poverty rates in all of the counties in which facilities associated with the Project will be located are lower than both State of Maryland (8.5 percent) and United States (12.4 percent) poverty rates.

⁴ Per capita personal income is defined as the income received by, or on behalf of, all the residents of a given area. 2000 U.S. Census figures include per capita income data collected for year 1999.

5.4 Project Construction and Operation

The Project will create a new source of natural gas supply to meet the growing demand of consumers of Maryland and throughout the Mid-Atlantic Region. Should construction of the Power Plant proceed, a new source of electric power will also be introduced into the region. Given the rigorous environmental standards contained in Maryland's recently passed Healthy Air Act, introduction of a power generating facility that, as described in Section 5.4.3, would be consistent with the emission reduction goals set forth in that Act is all the more important to the region's continued prosperity.

In addition to the more general benefits described above, the Project's components will generate revenue through construction employment and related construction spending, as well as permanent jobs related to the operation of the permanent facility. The amount of revenue expected to be generated by the components of the Project is described herein. All components will also have tax generation elements, but these will vary depending on state and local taxing authority; the variations are described herein. Construction material purchases, sales tax on miscellaneous purchases, labor wages to local workers, and construction worker expenditures will have positive short-term effects during the development and construction phases of the Project. In the operational phase, AES will pay county and local property taxes representing a positive effect of continuing tax revenue generation for the counties in the Project Area. In summary, based on the analysis of employment and spending anticipated to be associated with the construction and operation of the LNG Terminal, the Pipeline, and, possibly, the Power Plant, the Project is expected to have a positive socioeconomic impact on the Project Area.

Construction of the LNG Terminal, including the marine facilities, will take nearly three years to complete. The estimated completion cost of constructing the LNG Terminal is \$400 million. Construction of the Pipeline will take one to two years depending on construction timing restrictions, and will cost approximately \$240 million.⁵ The Power Plant will take approximately 20 months to complete and will cost approximately \$160 million.

Assuming receipt of all required regulatory approvals and permits, construction of the facilities associated with the LNG Terminal would commence in early 2008. Pipeline construction is planned to commence in early 2009. Completion of both aspects of the Project is expected to be achieved in 2010. The Pipeline is expected to be completed during one construction season with the use of multiple construction spreads. If restoration is not completed by the 15th of November, a winterization plan will be implemented to stabilize and monitor disturbed areas through the winter and subsequent spring thaw. Restoration activities would then be completed no later than the year following construction.

In addition to the new permanent employee positions that will be created to support Project operations, after the construction period, local services and personnel will be required to be provided to support Project operations. Indirect activities associated with operation of the LNG Terminal and operation of the Power Plant each include: maintenance of facility equipment, calibration services, purchasing of consumables and other supplies, security services, snow removal, and facility maintenance. Indirect activities associated with operation of the Pipeline include: maintenance of the Pipeline right-of-way (ROW), including mowing and brushing, aerial patrolling, snow plowing, and utility services. Resource

⁵ The crossing of environmentally-sensitive resources (e.g., waterbodies with fisheries) and in agricultural lands (i.e., topsoil management) will be in accordance with state timing restrictions where applicable. This may require the use of pipeline tie-in crews to work out of sequence with the scheduled construction activities of a main construction spread. Information concerning construction of the individual components of the terminal facilities and pipeline, as well as the Project schedule can be found in Resource Report 1, *General Project Description*.

Report 1, *General Project Description*, contains additional information concerning both the proposed direct and indirect operational activities.

5.4.1 LNG Terminal Construction

5.4.1.1 Estimated Construction Population

It is anticipated that an average of 325 workers would be employed annually during the nearly three-year LNG Terminal construction period. Many of the construction employee positions will primarily originate within the region, while others will temporarily relocate to the area. Economic impact would also be generated in the form of increased revenues for local businesses (e.g. lodging, transportation, retail) supporting the increased temporary workforce.

A summary of the number of positions associated with construction of the LNG Terminal and the Pipeline, annual salary range, and estimated payroll is shown in Table 5.3-1. The estimated multiplier effect on local economies is also included in the table.

5.4.1.2 Construction Employment and Payroll

A temporary positive impact on local employment is expected to result from construction of the LNG Terminal. When available, local workers will be employed for construction. Some positions will require specialized skill sets, and where such specialists are unavailable within the Project Area, employment will come from elsewhere in Maryland, Pennsylvania, Virginia, or other Mid-Atlantic states. It is expected that local workers will be primarily hired for positions such as equipment operators, truck drivers, and general construction labor. If needed, a small number of specialized workers will be brought into the region by the prime contractor(s) based on skills needed within each spread and construction location.

Employment of local construction workers should have a positive effect on the construction component of unemployment rates during the construction season. As shown in Table 5.2-1, unemployment rates within the affected counties range from 2.0 percent to 4.2 percent. The unemployment rate for Baltimore County, where the LNG Terminal facilities will be constructed, is above the State and national unemployment rates. The remaining four counties in the Project Area experience unemployment rates below their respective state rates and the national rate. This may compel use of some construction employees from outside the region to support Pipeline construction (U.S. Census Bureau, Census 2000).

The salary range for the construction jobs associated with construction of the LNG Terminal is expected to be approximately \$25,000 to \$150,000 annually, generating an average of \$18.4 million in annual personal income earnings during the Project construction period – please refer to Table 5.3-1⁶.

A summary of the number of positions associated with the LNG Terminal and Pipeline construction, annual salary range, and estimated payroll is shown in Table 5.3-1. The

⁶ Annual payroll is estimated based on average number of employees per year, estimated staff profile, and range of salary values for the range of staff positions.

multiplier effects on local economies are also included in the table and are based on information provided by the Bureau of Economic Analysis.

The Economic Impact Analysis of a similar energy infrastructure project, the Dominion Resources Cove Point LNG facility (2004), located in Calvert County Maryland, concluded that a direct effect earnings multiplier of 2.2 would result from expansion of the facility. Using a slightly more conservative estimate of 2.0, the Project, which is expected to have a combined payroll for LNG Terminal and Pipeline construction period of approximately \$66.5 million, could have an estimated \$133 million ripple effect on local economies over the construction duration

5.4.1.3 Housing

AES anticipates approximately 40 percent of the LNG Terminal construction workers will temporarily relocate to areas in close proximity to the Terminal Site. Non-local construction workers will temporarily reside at various locations within the Project Area. Because AES will not provide housing or dictate commuting distance, the areas in which workers will seek temporary housing cannot be identified or qualified. Workers will choose housing based on personal preference; however, they are likely to reside within short commuting distances of the construction site areas. Most construction workers relocating within the proposed Project Area are anticipated to opt for temporary housing such as hotels, motels, and rental housing units, and therefore not compete with the permanent housing needs of the new workers coming into Maryland as a result of the U.S. Department of Defense Base Realignment and Closure (BRAC) plan. This will increase demand for lodging in the Project Area. Due to the nature of LNG Terminal construction, the demand for such lodging will extend for the duration of construction of the LNG Terminal, with likely seasonal highs.

As shown in Table 5.3-2, an adequate number of lodging establishments appear to exist within the Project Area, and are expected to be sufficient for the Project construction crews. Short-term hotel/motel shortages may exist in tourist areas and may compel construction workers to find housing at somewhat greater distance; however it appears that the existing temporary housing should be adequate to meet the demands required by the construction workforce. See Table 5.3-2 for U.S. Census data regarding the availability of vacant housing in the counties near the Terminal Site.

5.4.1.4 Public Services

LNG Terminal construction may temporarily impact public services; however, AES plans to minimize the impact on fire, rescue, and police through training and close cooperation of AES contractors.

AES will require successful contract bidders to contact fire departments and emergency response agencies prior to the start of construction. Through these meetings, AES intends to establish a relationship between the contractors and the emergency response organizations. This relationship will explore and plan timely response options and facilitate response coverage in case of an accident or injury.

AES does not anticipate Project construction impacting school or healthcare facility operating costs. Due to the duration of the construction phases of the Project, it is anticipated that the non-local workers temporarily working in the Project Area will not relocate their families.

AES expects that the short-term spending generated by the Project will create significant tax revenue within the Project Area. Short-term spending includes money spent on food, entertainment, recreation, housing, and miscellaneous purchases. It is expected that non-local workforce will stay in lodging with an estimated \$110 per night⁷. Based on approximately 40 percent of the LNG Terminal facilities construction workforce temporarily relocating to the Project Area, the cumulative revenue generated in local sales of lodging is anticipated to be approximately \$14,300 per night. During the seventy-eight weeks of peak construction, the Project is expected to generate approximately \$5,577,000 in revenues for hotels alone, plus food and other incidental purchases. The local taxes paid by these establishments provide some offset of burden that may be created by the short-term use of public services.

5.4.1.5 Transportation

The alignment sheets included with Resource Report 1, *General Project Description*, Appendix 1A indicate the road and rail crossing locations and crossing techniques. AES will initiate contacts with local public works departments and Maryland highway agencies and will, prior to construction and in concert with its contractors, establish detours where needed and will provide sufficient notice and signs on roadways that will be affected. Use of state highway information systems such as Maryland's CHART system will be available to help disseminate information to motorists on Maryland roadways. Refer to Resource Report 1 for additional information concerning types of roadways crossed, construction methods, and construction duration.

Transportation to the construction site will be facilitated to minimize traffic. Construction will occur primarily during daylight hours; therefore, the peak construction traffic is expected from 6:00 a.m. until 6:00 p.m., Monday through Saturday. The communities near designated construction worker parking areas may experience heavy traffic during the beginning and end of the construction shift, but the duration of peak staffing is short lived and progresses geographically along the route with pipeline activities. Traffic associated with the LNG Terminal portion of the Project will have far

⁷ Baltimore County Conference and Visitors Bureau, June 2006

less of an impact than that of the steel plant adjacent to the Terminal Site. Mittal Steel, formerly Bethlehem Steel, was once the largest steel mill in the world, with estimates ranging from 26,500 to 33,000 employees commuting to its worksite daily in the 1950s and 1960s.⁸

During peak traffic periods, local communities may also experience minor and temporary negative impacts from delivery trucks and the movement of construction equipment. AES will instruct its contractor(s) to coordinate these activities with local highway departments and law enforcement to minimize the impact on surrounding communities. In addition, if damage does occur to roadways as a result of this project, AES will repair (or bond for repair of) those roadways to their previous condition.

Maryland's water and air transportation systems will also be considered in the planning phase of the Project including extensive interaction with maritime interests associated with the Port of Baltimore and commercial and civilian air traffic to and from Baltimore-Washington International Thurgood Marshall Airport, Martin State Airport and local airports through the Maryland Aviation Administration and the Federal Aviation Administration.

5.4.1.6 Economic Value of Removal of Agriculture/Pasture Land or Timberland from Production

Construction of the LNG Terminal onshore facilities is expected to have no impact on agricultural/pasture land or timberland production, as the construction will occur at a vacant shipyard, which is a previously developed site. Construction of the LNG Terminal facilities will result improvement of the existing, former industrial site.

5.4.1.7 Displacement of Residences or Businesses

No residences or businesses are anticipated to be displaced by construction of the LNG Terminal.

5.4.1.8 Impact on Local Tourism

In 2004 there were 230,537 tourism related jobs in Maryland. Of these, 11.91 percent (27,447) were in the City of Baltimore, 13.64 percent (31,449) were in Baltimore County, 1.45 percent (3,347) were in Cecil County, and 3.39 percent (7,827) were in Harford County. The 2004 tourism payroll for Baltimore City was approximately \$566 million, and for Baltimore County was approximately \$578 million. The tourism payrolls for Cecil and Harford counties were approximately \$50 million and \$96 million, respectively.⁹ AES recognizes the importance of tourism to this region and will take the necessary precautionary steps to ensure that Project activities will have the least possible impact on local tourism by maintaining clean and orderly worksites, routing construction

⁸ See "Feeling Pressure for Profits" and "Sparrows Point Sale Possible", Articles by Allison Connolly, originally published in the *Baltimore Sun*, May 14, 2006 and June 1, 2006, respectively; Significant Events in the History of Sparrows Point High School & Community, http://www.myedgemere.com/sphs_&_community.htm.; and Point Steel Workers History, <http://www.sparrowspointsteelworkers.com/html/history.html>

⁹ Hospitality and Tourism, Maryland Department of Labor Licensing and Regulation, May 2006.

traffic, to the extent feasible, around any major tourist areas of interest and scheduling construction activities around major holidays.

5.4.1.9 Impact on Community Development

Portions of a report titled *Dundalk, A Second Century Vision* (Dundalk Report) were submitted during the FERC scoping process. The report was prepared by the Baltimore County Office of Community Conservation and the Office of Planning. The Dundalk Renaissance Corporation was also involved with the effort. The Dundalk Report, which identified a plan that represents a roadmap to possible futures for Dundalk over the next 100 years, was adopted as a component of Baltimore County's Master Plan in February 2000. The multi-faceted strategy for re-development identified three main projects. All of those projects are located on the north side of the Francis Scott Key Memorial Bridge (Key Bridge), i.e., none of the proposed projects – whether considered long-term or short-term – are located in areas that would conflict with the construction or operation of the Project. Indeed, a key component of the Dundalk Report is the belief that “a brighter future for Dundalk lies in establishing closer ties – physically and socially – with Baltimore City.” Baltimore City is located in directly the opposite direction from Dundalk as is the Terminal Site. Accordingly, due to its remote distance from the Dundalk community, and the physical barrier between the Terminal Site and Dundalk presented by the Key Bridge and Interstate Highway 695 (I-695), construction and operation of the Project will have no negative impact on those proposed projects or any other revitalization efforts described in the Dundalk Report.

The Turner Station Community Conservation Plan (TSCC Plan) was introduced during the scoping process. The TSCC Plan identified numerous opportunities and challenges facing the Turner Station community, which, in its location immediately north of the Key Bridge, is the nearest residential community to the Terminal Site. The major challenge for the community “is to embark on a redevelopment effort that strikes a healthy balance between preserving its unique charm and history, while at the same time maximizing upon its potential as a desirable, waterfront community that is a destination for both old and new residents, businesses and institutions.” The redevelopment / revitalization concepts considered in the TSCC Plan include improvements to the Turner Station waterfront, promotion of heritage preservation within the Turner Station community, identification of historical sites within the community, remediation of housing violations within the community, improvements to infrastructure and traffic within the community, formation and/or improvement to community service programs, participation in shoreline enhancement programs with the Maryland Department of the Environment at specific locations within the community, formation of public safety programs for residents, businesses, and institutions, within the community, improvements to recreation facilities within the community, and attention to community appearance / beautification programs. The TSCC Plan defines the community boundaries as consisting of approximately 200 acres stretching from Dundalk Avenue on the north to I-695 and the Key Bridge on the south. Construction and operation of the Project will have no negative impacts on the community redevelopment / revitalization concepts contained in the TSCC Plan due to the distance of the LNG Terminal from the Turner Station community. This distance is well defined by the physical barriers between the Turner Station community and the Terminal Site presented by Bear Creek, I-695, and the Key Bridge. None of the concepts presented in the TSCC Plan involve activities south of I-695.

Portions of the Baltimore County Master Plan 1989-2000, as amended July 27, 1989, (BC Plan) were introduced during the FERC scoping process. The portions introduced included those BC Plan sections dealing with the eastern side of Baltimore County, which is where the LNG Terminal is proposed to be located, and certain BC Plan amendments. The BC Plan identified the area of the proposed Terminal Site as industrial (for purposes of land use), as an industrial employment area (for purposes of development policy), and as high ground with pollution potential (for purposes of environmental policy). The BC Plan also encouraged the re-use of land at Sparrows Point for redevelopment for new industrial purposes. Construction and operation of the Project is entirely consistent with the BC Plan.

5.4.1.10 Materials Purchases

In addition to the construction payroll associated with the LNG Terminal, new sales tax revenue to state and local governments will be generated associated with spending millions of dollars on materials, equipment and supplies.

Much of the construction materials associated with the LNG Terminal will be supplied by AES's wide array of local suppliers. AES expects to obtain many of its products and services from manufacturers and or distributors in the Mid-Atlantic Region of the U.S. In addition, local retailers will benefit from the general contractor's purchase of materials such as fuel, stone, sand, concrete, etc. Following construction, AES will continue to purchase materials and services for routine operation and maintenance of the facility and its grounds. AES expects construction material purchased, construction payroll and construction worker spending to result in a positive impact on the communities near the Project Area.

5.4.1.11 Property Values

In order to assess the potential economic impacts of construction and operation of the LNG Terminal on local properties, a comprehensive literature review of studies conducted on projects similar to the LNG Terminal was performed. Information presented in the research literature reviewed generally addresses two types of facilities: fixed and linear. Fixed facilities are those such as the proposed LNG Terminal (and Power Plant), while linear facilities are similar to the proposed Pipeline. Such facilities not only differ in form (e.g. fixed versus linear), but in land occupancy, facility construction and function. Their potential impacts on property value, are therefore, evaluated differently in the published case studies. A discussion on the potential impact on property values associated with LNG Terminal facilities is presented below. That discussion, because it deals with fixed facilities, parallels the discussion on the potential impact on property values associated with the Power Plant presented in Section 5.4.3.11. Information pertaining to potential property value impacts associated with construction and operation of the proposed Pipeline is presented in Section 5.4.2.10.

A 1993 study conducted by the Argonne National Laboratory examined the economic impacts of the presence of "noxious" facilities on local wages and property values. Noxious facilities include both those facilities that may cause harm to human health or the environment and those where there is a perception of such adverse impacts. Eight

types of these facilities were studied: nuclear power plants; coal-, gas-, or oil-fired power plants; military chemical weapons sites; hazardous waste sites; refineries; chemical weapons storage facilities; former storage sites that are now contaminated; and LNG facilities. The study examined the effects of 262 facilities that were identified to be included in the analysis on standardized 1,000 square-mile areas across the United States. Eleven of the identified facilities were LNG facilities. The conclusions of the study indicated that five of the eight types of noxious facilities had a significantly negative impact on property values but a positive effect on wages; however, the study concluded the presence of an LNG facility had neither a significant positive or negative effect on either wages or property values (FERC, 2005).

As discussed in the Final Environmental Impact Statement for an LNG terminal in Fall River, Massachusetts, a real estate study was performed by the Real Estate Counseling Group of Connecticut, Inc. (RECG). In 1995, RECG contacted local tax assessors in four New England communities in close proximity to existing LNG storage facilities in Haverhill, Ludlow, and South Yarmouth, Massachusetts, and Tilton, New Hampshire, as well as communities where LNG storage facilities had recently been built (North Carolina, Georgia, and Indiana) and asked the following questions: (1) whether they had received property owner requests for lower valuations due to the presence of an LNG facility; and (2) whether the presence of a storage tank was a factor they considered in doing their valuations. The study concluded that in no case did the planned LNG facilities play a role in the assessments. The study further concluded that no requests for lower valuations had been made or granted (FERC, 2005).

In a 2002 study of property values in areas proximate to an existing LNG peak-storage facility in Fall River, Massachusetts, results indicated that the Fall River LNG facility had not deterred residential development in surrounding areas. Several new homes had been constructed in the vicinity of the facility since its activation in 1970; a condominium project was scheduled to be constructed next to the facility; and recent sales in the area indicated that property values or price increases had not diminished due to the facility (Giroux, 2002).

In March 2006, AES commissioned a study of real estate values in the area of the Cove Point LNG terminal in Calvert County, Maryland. The Cove Point facility is very similar to that proposed by AES with the exception that the Cove Point facility uses single-containment tanks and the ship unloading facilities are located offshore.¹⁰ At the time the study was commissioned, the Cove Point facility was in the process of applying for a proposed expansion in which public notice was required. The study consisted of canvassing six years home sale prices in the neighborhoods adjacent to the Cove Point facility and comparing those prices to sale prices of homes in Calvert County over the same period. The results of the study indicated that housing prices in southern Calvert County have been rising steadily in recent years, and the prices of the homes in Cove Point Beach, Cove of Calvert, Cove Point Woods, and Chesapeake Cove Estates (the

¹⁰ The LNG Terminal will consist of full-containment storage tanks and a shoreside unloading facility. The shoreside unloading facility will be located approximately the same distance away from residential areas as the offshore unloading facility associated with Cove Point. Distance from the nearest residential area to the single-containment LNG tanks at Cove Point is significantly closer than the distance from the full-containment LNG tanks at the LNG Terminal to the nearest residential area in Turner Station.

residential communities closest to the Cove Point facility) have been rising at rates that are consistent with the overall price rise of homes in southern Calvert County.

Based on existing publicly available information, LNG facilities have neither a negative nor a positive affect on property values. AES anticipates that property values in the vicinity of the Terminal Site will continue to change based on real estate factors extant in the communities near the LNG Terminal, but would not be influenced significantly, either negatively or positively as a result of development of the LNG Terminal.

5.4.1.12 Homeowner Insurance

Insurance rates will not be impacted by the presence of the proposed LNG Terminal. As stated in the Final Environmental Impact Statement on the Crown Landing LNG and Logan Lateral Projects (Docket Nos. CP04-411-000 and CP04-416-000) Issued: April 28, 2006), the Federal Energy Regulatory Commission (FERC) staff found that:

Homeowner insurance rates are generally set on a county-wide basis, with individual rate adjustments made to reflect the age and value of the property and the claims record of the owner; insurance rates are not based on the surrounding landscape or structures at the local level. Properties in the vicinity of an industrial facility may be older and not as well maintained, which can affect the availability of insurance coverage or the insurance rates.

Based on this, it is not anticipated that the presence of an LNG Terminal would affect the insurance rates of nearby residences.

5.4.1.13 Tax Revenues

Personal income tax rates for the Year 2006 in the State of Maryland range from 2.0 percent to 4.75 percent. The City of Baltimore and the counties of Maryland level local “piggyback” income taxes at rates between 1.25 percent and 3.2 percent of Maryland taxable personal income. These additional taxes are levied by counties to generate revenue necessary to support local governments. Local personal income taxes for Baltimore, Harford, and Cecil counties are 0.0283 percent, 0.0306 percent and 0.0280 percent, respectively.

Pennsylvania’s personal income tax rate is 3.07 percent. Pennsylvania does not levy or collect taxes on real estate or personal property. Pennsylvania municipalities (cities, townships, and boroughs) are permitted to levy real estate property taxes that cannot exceed 30 mills on the assessed value of the property without special permission of the courts.

Property in Maryland is also subject to property tax. Assessments are determined on a fair market value basis, issued by the Department of Assessments and Taxation. Cities and counties can set tax rates at the level they deem necessary to fund governmental services. These rates can increase, decrease, or remain the same from year to year.

The overall tax revenue generated from the construction and operation of the LNG Terminal and Pipeline will have a significant positive socioeconomic impact in the

Project Area. AES estimates that approximately \$10 million in taxable spending will be generated by construction of the LNG Terminal and an additional \$1.5 to 2 million per year by the operation of the LNG Terminal and the Pipeline. This spending will be generated by the locally purchased equipment, services and supplies. In addition, an estimated \$7 million will be generated from new property tax payments to schools and localities on an annual basis.

Construction of the Project, including the LNG Terminal, Pipeline and Power Plant, will generate approximately \$3.5 million in Maryland state sales tax revenue. Table 5.4-2 contains a summary of projected state tax revenues associated with construction and operation of the Project facilities.

5.4.2 Pipeline Construction

5.4.2.1 Estimated Construction Population

Construction of the Pipeline will take approximately twelve to fourteen months (Pipeline construction alone; restoration of the Pipeline right-of-way will potentially require longer), with completion of the Pipeline approximately coinciding with completion of the LNG Terminal.

Approximately 200 workers (annual average) would be employed over the duration of Pipeline construction.

5.4.2.2 Construction Employment and Payroll

There will be a temporary positive impact on local employment due to construction of the Pipeline facilities. When available, local workers will be employed for construction. Some positions will require specialized skill sets, for example welders and pipe fitters. Where such specialists are unavailable within the Project Area, employment will come from elsewhere in Maryland, Pennsylvania, or other states. It is expected that local workers will be primarily hired for positions such as equipment operators, truck drivers, and general construction labor. Specialized work force will be brought into the region by the prime contractor(s) based on skills needed within each spread and construction location. Experienced pipeline construction companies capable of constructing this project are located within Maryland and neighboring states.

Where possible, local construction workers will be employed, which should reduce unemployment rates during the construction season. However, this effect will be short-term during construction. Once the construction season ends, it is anticipated that unemployment will return to pre-construction rates, with the exception of pipeline and operation services typically performed by local contractors. As shown in Table 5.2-1, unemployment rates within the affected counties ranges from 2.0 percent to 4.20 percent (U.S. Census Bureau, 2000).

Annual personal income earnings associated with construction of the Pipeline are anticipated to be \$11.3 million during the construction period¹¹. Using the conservative

¹¹ Annual payroll is estimated based on average number of employees per year, estimated staff profile, and range of salary values for the range of staff positions.

estimate of a 2.0 direct effect earnings multiplier, construction of the Pipeline could result in a \$22.6 million ripple effect for the local communities. A summary of the number of positions associated with LNG Terminal and Pipeline construction, annual salary range, and estimated payroll is presented in Table 5.3-1.

5.4.2.3 Housing

AES anticipates 50 percent of the Pipeline construction workers will temporarily relocate to the Project Area. Non-local pipeline construction workers will temporarily reside at various locations within the Project Area. Because AES will not provide housing or dictate commuting distance, the areas in which workers will seek temporary housing cannot be identified or qualified. Workers will choose housing based on personal preference; however, they are likely to reside within short commuting distances of the construction site. Most construction workers relocating within the proposed Project Area are anticipated to opt for temporary housing such as hotels, motels and rental housing units. Due to the nature of pipeline construction and the fact that AES will be using multiple construction spreads, the construction periods will be relatively short and construction crews will pass through the areas rapidly, thus minimizing the temporary housing impact in any one area along the Pipeline Route. According to Table 5.3-2, an adequate number of lodging establishments exists within the area of the Pipeline Route that will be sufficient for the Pipeline construction crews. Short-term hotel/motel shortages will likely not exist in tourist areas. AES believes that the existing temporary housing should be adequate to meet the demands required by the Pipeline construction workforce.

5.4.2.4 Public Services

Pipeline construction may impact public services; however, AES plans to minimize the impact on fire, rescue, and police through training and close cooperation of AES contractors.

AES will require successful contract bidders to contact fire departments and emergency response agencies prior to the start of construction. Through these meetings, AES intends to establish a relationship between the contractors and the emergency response organizations. This relationship will explore timely response options and facilitate response coverage in case of an accident or injury.

AES does not anticipate Project construction impacting school or healthcare facility operating costs. Due to the duration of the construction phases of the Project, it is anticipated that the non-local workers temporarily working in the Project Area will not relocate their families.

AES expects that the short-term spending generated by the Pipeline will create significant tax revenue within the area of the Pipeline Route. Short-term spending includes money spent on food, entertainment, recreation, housing, and miscellaneous purchases. It is expected that non-local workforce will stay in lodging with an estimated \$103 per night rate¹². Based on approximately 50 percent of the Pipeline construction workforce temporarily relocating to the area of the Pipeline Route, the cumulative revenue generated in local sales of lodging is anticipated to be approximately \$10,300 per night. During the forty-four weeks of peak construction activities associated with the Pipeline, approximately \$2,266,500 in revenues for hotels alone, plus food and other incidental purchases are expected to be generated. The local taxes paid by these establishments should help to offset the burden created by the short-term use of public services.

5.4.2.5 Transportation

The alignment sheets included with Resource Report 1, *General Project Description, Appendix 1A* indicate the road and rail crossing locations and crossing techniques. AES plans to minimize the potential impact to Maryland and Pennsylvania transportation systems by boring under major highways, railroads, and some paved roads to avoid interruption of traffic flow on the roadways crossed. AES will initiate contacts with local public works departments and state highway agencies and will, prior to construction and in concert with its contractors, establish detours where needed and will provide sufficient notice and signs on roadways that will be affected. Use of state highway information systems such as Maryland's CHART system will be available to help disseminate information to motorists on Maryland roadways. Refer to Resource Report 1 for additional information concerning types of roadways crossed, construction methods, and construction duration.

¹² Averaged figure based on lodging rates obtained 2006 from Harford County Chamber of Commerce (phone: 800-682-8536); Cecil County Tourism Board (phone: 410-996-6292); Lancaster County Visitors Bureau (phone: 800-723-8824); Chester County Visitors Center (phone: 800-228-9933)

Workers for the Pipeline portion of the Project will park vehicles at pipeyards, staging and warehouse areas, and along access roadways. Transportation to the construction site will be facilitated to minimize traffic. Construction will occur primarily during daylight hours; therefore, the peak construction traffic is expected from 6:00 a.m. until 6:00 p.m., Monday through Saturday. The communities near the designated parking areas may experience heavy traffic during the beginning and end of the construction shift, but the duration of peak staffing is short lived and progresses geographically along the route with Pipeline activities.

During peak traffic periods, communities may also experience minor and temporary negative impacts from delivery trucks and the movement of construction equipment. At this time, it is not possible to quantify the number of trips anticipated or determine when deliveries are likely to occur. AES will instruct its contractors to coordinate these activities with local highway departments and law enforcement to minimize the impact on surrounding communities. In addition, if damage does occur to roadways as a result of this project, AES will repair (or bond for repair of) those roadways to previous or improved condition.

Access roads will be necessary during construction activities to provide temporary access to the construction right-of-way in addition to public road access. To the extent possible, existing access roads will be used for this purpose. In some instances, improvements will be necessary (e.g., widening and reinforcing). Once temporary access roads are no longer necessary, they will be returned to their as-found condition or better, subject to provisions of applicable permits and landowner agreements. Access roads will be designed and constructed in accordance with local and state standards and codes (e.g., with respect to specifications, materials, adequate drainage).

5.4.2.6 Economic Value of Removal of Agriculture/Pasture Land or Timberland from Production

The impacts to agriculture/pasture land or timberland will be temporary, except on the permanent right-of-way. Agricultural/pasture land will be restored to pre-construction production capacity. The permanent right-of-way on timberland will require that no timber crop be re-established over the Pipeline and will therefore reduce production of timber in some areas. The Pipeline alignment has been selected to avoid timber resources to the extent feasible and therefore routing has already minimized the potential for impact to such resources. The temporary and permanent agriculture/pasture and timberland that will be affected by the Project are summarized in Resource Report 8, *Land Use, Recreation and Aesthetics*. AES will negotiate with landowners to provide fair compensation for loss of production in agricultural/pasture land and timberland due to the Project construction and operation.

Potential for impacts to timber have been minimized through the route selection process. Marketable timber removed during clearing of the right-of-way will be cut to standard lengths and stacked at the edge of the right-of-way or removed. AES will coordinate with the landowners prior to construction and provide compensation for crop damages.

5.4.2.7 Displacement of Residences or Businesses

Construction may impact residences and business along very limited portions of the Pipeline construction right-of-way. Refer to Resource Report 8, *Land Use, Recreation and Aesthetics*, for a summary of residences located within the proposed temporary construction right-of-way. For any residence affected, a Residential Mitigation Plan will be prepared. Impacts to residences and businesses would be temporary.

5.4.2.8 Impact on Local Tourism

In 2003 there were 555,442 tourism related jobs in Pennsylvania. Of these, 12.07 percent (28,549) were in Lancaster County, and 5.78 percent (12,100) were in Chester County. The 2003 tourism payrolls for the counties of Lancaster and Chester were approximately \$833 million and \$349 million respectively.¹³ AES recognizes the importance of tourism to this region, and will take the necessary precautionary steps to ensure that Pipeline activities will have the least possible impact on local tourism by maintaining clean and orderly worksites, routing construction traffic, to the extent feasible, around any major tourist areas of interest and scheduling construction activities around major holidays.

5.4.2.9 Materials Purchases

In addition to Pipeline construction payroll, the Project will generate new sales tax revenue to state and local governments associated with the spending of millions of dollars on materials, equipment and supplies.

Pipeline construction materials will be supplied by a wide array of local suppliers. AES expects to obtain many of its products and services from manufacturers and or distributors in the Mid-Atlantic Region of the U.S. In addition, local retailers will benefit from the general contractor's purchase of materials such as fuel, stone, sand, concrete, seed, hay/straw, fertilizer, wood and welding supplies. Following construction, AES will continue to purchase materials and services, including right-of-way maintenance services such as mowing and brushing, aerial patrolling, snow plowing and utilities services. AES expects construction material purchased, construction payroll and construction worker spending to result in a positive impact on the Project Area communities.

¹³ Data derived from Economic Impact Report of Travel in Pennsylvania 2002-2003 (<http://media.experiencepa.com/statistics/PATourismImpact2003and2003.pdf>)

5.4.2.10 Property Values

As discussed in Section 5.4.1.11, published case studies were considered in evaluated the potential impact on property values associated with construction of the Pipeline. Those studies are summarized below.

Since the late 1970s, studies using hedonic methodologies have been used to estimate the effect of environmental hazards on property values. Hedonic property value models can be used to derive point estimates for identifying the relationship between environmental quality and property prices. It should be noted that variables reflecting different perceptions about environmental quality may result in implicit prices that vary substantially. See reference list attached (Michael, Boyle and Bouchard, 2000).

These studies have included such environmental variables as nuclear power plants, chemical plants, power plants, and pipelines carrying products defined as hazardous. Specific to pipelines, studies indicate that, in the absence of an attention-focusing event, a pipeline has neither a positive or negative affect on property values. However, where an attention-focusing event has occurred, post-event property values have shown a localized and temporal devaluation (Hansen, Benson, and Hagen, 2005).¹⁴ This temporal devaluation is discussed below.

Studies have historically focused on the proximity of the property to the perceived hazard. In such studies it has been shown that immediately following the attention-focusing event, property values can be undervalued; however, until recently these studies have failed to consider the effects of time and changing conditions (e.g., people moving in and out of the area). Previous research regarding the perceived environmental risk, proximity to pipelines, and properties values have not addressed the persistence of these discounts over time.

In a follow-up paper to be published in the November 2006 edition of the *Journal of Land Economics*, Hansen, et. al. evaluated property sales near two pipelines in Bellingham, Washington using hedonic methodologies that looked at both proximity and persistence over time. Both pipelines considered in the study carry liquid fuel defined to be hazardous. One of the pipelines had an incident (i.e., spill) during the studied time frame. In comparing property values near each of the pipelines, both before the incident and after, the authors found that the mean price for properties did decline, but those impacts diminished as the distance from the pipeline increased. Additionally, home prices regained their expected value as time passed after the incident. The data suggests that the maximum price decrease, within 50 feet of the pipeline at which the incident occurred, was less than 5 percent of the property's estimated value. At distances greater than 1000 feet, little (0.2 percent) or no influence to property value was expected (Hansen, et. al., 2005).

AES will negotiate fair market value compensation for landowners whose property is crossed by the proposed Pipeline. Professional, third-party appraisers will research comparable property sales to provide AES a basis for calculation of compensation.

¹⁴ Hansen, et. al. are professors of economics and finance at Western Washington University.

5.4.2.11 Homeowner Insurance

As described in section 5.4.1.12, homeowner insurance rates are generally set on a county-wide basis, with individual rate adjustments made to reflect the age and value of the property and the claims record of the owner; insurance rates are not based on the surrounding landscape or structures at the local level. It is not anticipated that the presence of a natural gas pipeline would affect the insurance rates of nearby residences.

5.4.2.12 Tax Revenues

Section 5.4.1.13 of this Resource Report contains the relevant information concerning potential tax revenues associated with construction of the Project. Table 5.4-2 contains a summary of projected state tax revenues associated with construction and operation of the Project facilities.

5.4.3 Power Plant Construction

AES is considering the potential co-location of a 300 megawatt natural gas fired combined cycle power plant at the Terminal Site. There will be synergies with the LNG Terminal, such as fuel supply to the combined cycle plant, transfer of cold from the LNG Terminal heat transfer system to the combined cycle process for cooling, and transfer of waste heat from the Power Plant into the LNG heat transfer system for vaporization of the LNG. The Power Plant would require a gas supply from the LNG Terminal and transmission lines leaving the site to tie into the local utility system. The power plant will provide the primary power source to the LNG Terminal and the back up supply will come from the 110 kV utility system. The Power Plant will make additional power supplies available for purchase by BG&E and other consumers and distributors at competitive market prices, will create additional union construction and permanent jobs, will provide additional tax revenues for the local area, will be a “cogeneration” plant whose heat will be used to re-vaporize the LNG at the LNG Terminal, and will be consistent with the emission reduction goals set forth in the recently passed Maryland Healthy Air Act, which mandates significant reductions in air pollution from power plants.¹⁵ As more electric power is needed in congested areas of growing demand, clean-burning options such as might be proposed by AES are environmentally preferred over options with higher air emissions. Accordingly, whether the potential Power Plant displaces existing power generating sources or meets a portion of the increasing demand in the area, net air emissions will be less than would be experienced were a generating option with higher air emissions to fulfill that same demand.

As described in Section 5.4.1.9, due to its remote distance from the Dundalk and Turner Station communities, the physical barriers between the Terminal Site and those communities presented by the Patapsco River and Key Bridge, and fact that no redevelopment / revitalization efforts are

¹⁵ The Healthy Air Act mandates reductions in carbon dioxide (10 percent cut by 2018), sulfur dioxide (83 percent cut by 2010 and 90 percent by 2015), nitrogen oxides (67 percent cut by 2010 and 80 percent by 2015), and mercury (90 percent cut by 2010). Natural gas plants typically emit 43.7 percent less carbon dioxide, 99.6 percent less sulfur dioxide, 79.8 percent less nitrogen oxide, and 99.7 percent less particulates than coal plants. Natural gas plants also do not emit mercury. A further description of the benefits potentially offered by the Power Plant, including its expected mode of baseload operation, is set forth in Section 1.10 of Resource Report 1, *General Project Description*. Only the most reliable, efficient, and/or cost-effective power plants operate to provide the base of power for the regional electric supply system.

planned by either community on or anywhere near the Terminal Site, construction and operation of the Project is expected to have no negative impact on the proposed revitalization efforts described in the Dundalk Report or the TSCC Plan. Additionally, the BC Plan identified the area of the proposed Terminal Site as industrial (for purposes of land use), as an industrial employment area (for purposes of development policy), and as high ground with pollution potential (for purposes of environmental policy). The BC Plan also encouraged the re-use of land at Sparrows Point for redevelopment for new industrial purposes. Construction and operation of the potential Power Plant within the Terminal Site would be entirely consistent with the BC Plan.

5.4.3.1 Estimated Construction Population

During construction, the peak workforce for the power plant is expected to be approximately 180 workers. Construction of the Power Plant will take approximately 20 months. The majority of the Power Plant construction workforce will originate locally, while approximately 20 percent of the workforce is expected to temporarily re-locate to the area. Economic impact would be realized in the form of increased revenues for local businesses (e.g. lodging, transportation, retail, services) supporting the increased temporary workforce.

5.4.3.2 Construction Employment and Payroll

A temporary positive impact on local employment is expected to result from construction of the Power Plant. When available, local workers will be employed for construction. Some positions will require specialized skill sets, and where such specialists are unavailable within the Project Area, employees will come from elsewhere in Maryland, Pennsylvania, Virginia, or other states. It is expected that local workers will be primarily hired for positions such as equipment operators, truck drivers, and general construction labor. Specialized work force will be brought into the region by the prime contractor(s) based on skills needed within each spread and construction location.

Employment of local construction workers should have a positive effect on unemployment rates during the construction season. As shown in Table 5.2-1, unemployment rates within the affected counties range from 2.0 percent to 4.2 percent. The unemployment rate for Baltimore County, where the Power Plant will be constructed, is above the State and national unemployment rates.

The salary range for the construction jobs associated with construction of the Power Plant is expected to be approximately \$25,000 to \$150,000 annually. Annual personal income earnings associated with construction of the Power Plant are anticipated to total \$18 million which would generate approximately \$30 million in personal income during the approximately twenty-month construction period¹⁶. A summary of the number of positions associated with Power Plant construction, annual salary range, and estimated payroll is shown in Table 5.3-1. The Baltimore County economy could realize a total economic benefit of \$60.1 million associated with power plant construction period, based upon a direct effect earnings multiplier of 2.0.

¹⁶ Annual payroll is estimated based on average number of employees per year, estimated staff profile, and range of salary values for the range of staff positions.

5.4.3.3 Housing

AES anticipates 20 percent of the Power Plant construction workers will temporarily relocate to the Project Area. Section 5.4.1.3 addresses the potential impact of the LNG Terminal on local housing. That section is equally applicable to construction and operation of the Power Plant.

5.4.3.4 Public Services

Section 5.4.1.4 addresses the potential impact of the LNG Terminal on public services. Generally speaking, that section is equally applicable to construction and operation of the Power Plant in that (i) AES plans to minimize the impact on fire, rescue, and police through training and close cooperation of AES contractors; (ii) AES will require successful contract bidders to contact fire departments and emergency response agencies prior to the start of construction; and (iii) AES does not anticipate that construction of the Power Plant will impact school or healthcare facility operating costs, as it is not anticipated that the non-local workers temporarily working in the Project Area will relocate their families during the construction phases.

With regard to short-term spending it is expected that the non-local Power Plant construction workforce will stay in lodging with an estimated \$110 per night rate¹⁷. Based on approximately 20 percent of that workforce temporarily relocating to the area nearby the Terminal Site, the cumulative revenue generated in local sales of lodging is anticipated to be approximately \$3,960 per night. During the thirty-two weeks of peak construction period, it is expected that activities associated with the Power Plant construction will generate approximately \$633,600 in revenues for hotels alone, excluding food and other incidental purchases. The local taxes paid by these establishments provide some offset of burden that may be created by the short-term use of public services.

5.4.3.5 Transportation

Section 5.4.1.5 addresses the potential impact of the LNG Terminal on transportation. That section is equally applicable to construction and operation of the Power Plant.

5.4.3.6 Economic Value of Removal of Agriculture/Pasture Land or Timberland from Production

Construction of the Power Plant is expected to have negligible impact on agricultural/pasture land or timberland production, as the construction will occur a vacant shipyard, which is a previously developed site. Construction of the Power Plant will result in improvement of the existing, former industrial site.

5.4.3.7 Displacement of Residences or Businesses

No residences or businesses will be displaced by construction of the Power Plant.

5.4.3.8 Impact on Local Tourism

¹⁷ Baltimore County Conference and Visitors Bureau, June 2006

Section 5.4.1.8 addresses the potential impact of the LNG Terminal on local tourism. That section is equally applicable to construction and operation of the Power Plant.

5.4.3.9 Impact on Community Development

Section 5.4.1.9 addresses the potential impact of the LNG Terminal on community development plans. That section is equally applicable to construction and operation of the Power Plant.

5.4.3.10 Materials Purchases

In addition to the construction payroll associated with the Power Plant, the Project will generate new sales tax revenue to state and local governments associated with spending millions of dollars on materials, equipment and supplies.

Power Plant construction materials will be supplied by a wide array of local suppliers. AES expects to obtain many of its products and services from manufacturers and or distributors in the Mid-Atlantic Region of the U.S. In addition, local retailers will benefit from the general contractor's purchase of materials such as fuel, stone, sand, concrete, etc. Following construction, AES will continue to purchase materials and services for routine operation and maintenance of the Power Plant and its grounds. AES expects construction material purchased, construction payroll and construction worker spending to result in a positive impact on the communities near the Project Area.

5.4.3.11 Property Values

Construction and operation of the Power Plant is not anticipated to have any negative impact on property values in the area. The proposed Power Plant would be operated as a clean-burning, natural-gas fired facility. Power plants are currently located in the vicinity of the Terminal Site, and have been historically located throughout the region for many decades. A power plant has historically and is currently located at the Mittal steel plant at Sparrows Point. Its boilers are fueled with No. 6 oil, waste oil and natural gas. Additionally, BG&E operates a power plant across from the Project site, along the Cox Creek. Both of these facilities have been in operation for many years with no reported impact on local property values. Refer to Section 5.4.1.11 of this document for additional information concerning potential impacts on property values associated with construction and operation of fixed facilities.

5.4.3.12 Homeowner Insurance

As described in section 5.4.1.12, homeowner insurance rates are generally set on a county-wide basis, with individual rate adjustments made to reflect the age and value of the property and the claims record of the owner; insurance rates are not based on the surrounding landscape or structures at the local level. It is not anticipated that the presence of power plant in this already industrialized area would affect the insurance rates of nearby residences.

5.4.3.13 Tax Revenues

Personal income tax rates for the Year 2006 in the State of Maryland range from 2.0 percent to 4.75 percent. The City of Baltimore and the counties of Maryland level local “piggyback” income taxes at rates between 1.25 percent and 3.2 percent of Maryland taxable personal income. These additional taxes are levied by counties to generate revenue necessary to support local governments. Local personal income tax for Baltimore County is 0.0283 percent.

Property in Maryland is also subject to property tax. Assessments are determined on a fair market value basis, issued by the Department of Assessments and Taxation. Cities and counties can set tax rates at the level they deem necessary to fund governmental services. These rates can increase, decrease, or remain the same from year to year.

AES estimates that construction of the Power Plant will generate taxable spending of \$5 million. During the construction period of the Power Plant, \$1.5 million dollars in Maryland state sales tax is expected to be generated annually. AES anticipates operation of the Power Plant will generate approximately \$1 million annually. Additional new property tax payments to schools and localities are estimated to be approximately \$3 million annually. These additional revenues will further boost the positive socioeconomic impact in the Project Area.

5.4.4 Project Operation

5.4.4.1 Employment and Payroll

Operations associated with the LNG Terminal and Pipeline are expected to require an estimated 50 full-time positions. Forty-one positions would be created for operation of the LNG Terminal and are anticipated to include the following positions: terminal manager, ship coordinator, maintenance manager and personnel, shift supervisors and operational personnel, instrumentation supervisor and technicians, laborers and ship handlers, clerks and administrative staff. Annual salaries would range from approximately \$28,000 to \$150,000. The LNG Terminal’s annual payroll would be approximately \$3.5 million.

The Economic Impact Analysis of a similar energy infrastructure project, the Dominion Resources Cove Point LNG facility (2004) located in Calvert County Maryland, concluded that a direct effect earnings multiplier of 13.3 would result from operation of the facility. Using a slightly more conservative direct effect multiplier value of 10.0, an economic ripple effect of \$35 million could be experienced by the local community.

Operation of the Pipeline would require a full-time workforce of nine personnel. Pipeline positions include pipeline manager, maintenance positions, accounting and administration. Annual salaries for Pipeline operation positions would range from \$30,000 to \$100,000, with an annual payroll of approximately \$455,000. Again using a conservative direct effect multiplier assumption of 10.0, operation and maintenance of the Pipeline could have an annual impact of \$4.55 million spending in the community.

Operation of the Power Plant would require a full-time workforce of 16 additional personnel. Power Plant positions include administrative staff, operations staff, and maintenance personnel. Annual salaries for Power Plant operation positions would range

from \$30,000 to \$150,000, with an annual payroll of approximately \$1.5 million. Based on the direct effect multiplier of 10.0 an estimated annual impact of \$15 million in additional spending could result in the local community.

Table 5.3-3 contains a summary of the permanent positions anticipated to be created for operation of the proposed Project.

5.4.4.2 Tax Revenues

Operation of the Project, including the LNG Terminal, Pipeline and Power Plant, is anticipated to generate a combined average of \$16.3 million in Maryland state tax (sales, income, and property) revenues annually over the 30-year anticipated lifecycle of the facilities. AES anticipates the operation of the Project will generate a combined average of \$1.02 million in Pennsylvania state sales and income tax revenues over the same period of time. Table 5.4-2 contains a summary of projected state tax revenues associated with construction and operation of the Project facilities.

5.4.5 Dredged Material Recycling Facility Construction and Operation

The Project includes widening and deepening the existing approach channel and turning basin at Sparrows Point to accommodate the larger ships expected at the LNG Terminal than have utilized the existing shipyard, floating dry dock (north of the proposed LNG facility) and graving yard/coal channel (south of the proposed LNG Terminal). Depending on final facility design, AES anticipates generating between 3.5 to 4.5 million cubic yards of dredged materials during the installation of marine facilities and development of channel access to the LNG Terminal.

Currently, the U.S. Army Corps of Engineers dredges a minimum of one-half million cubic yards of material annually from the bottom of the major approach channels and Baltimore Harbor to maintain these waterways at a depth that will allow safe passage of deep draft commercial vessels. Under current law, this dredged material must be transported for containment at a permitted dredged material containment facility such as Hart-Miller Island (HMI), or Cox Creek, or be beneficially reused through a process identified in Maryland statute as Innovative Reuse. State legislative requirements prohibit placing dredged material at HMI after December 31, 2009. Acceptance of dredged material may be limited as early as 2008 (Federal Register 2005, page 30422). The capacity of the other existing permitted facility at Cox Creek is limited as well, having an annual capacity of only about 500,000 cubic yards.

The Dredged Material Disposal Alternatives Act of 2004 (House Bill 1471, Maryland General Assembly) establishes a program to provide financial assistance for creating beneficial use technologies for dredged material. Goals of the program include fostering beneficial reuse of dredged material, fostering markets for end-use products using dredged materials as a resource, and facilitating the reuse of at least 500,000 cubic yards of dredged material annually.

As part of the Project construction phase, AES will construct a dredged material recycling facility adjacent to the existing waterway at the Terminal Site. The 10,000 cubic yard per day dredged material recycling facility ("DMRF") will occupy approximately 5.5 acres of upland property within the boundaries of the site. This phase will precede actual dredging operations. Additional information concerning dredging activities can be found in Resource Report 1, *General Project Description*.

The DMRF that would facilitate cost-effective reuse (e.g., generate construction materials, environmentally safe fill material, etc.) of materials dredged during the construction of the LNG Terminal and routine maintenance of channel access thereafter. In addition to managing dredged materials associated with construction and operation of the LNG Terminal, the DMRF could manage materials generated by the Port of Baltimore's maintenance activities, resulting in a cost effective and environmentally preferable alternative for meeting the State of Maryland's dredged material management needs.

In creating a new DMRF, the dredged material recycling operation would generate additional jobs in the area. Newly created positions would include dredge operators, heavy (earth moving and processing) equipment operators, trucker drivers, and facility managers. During the first two years of implementation, it is anticipated that 41 full-time positions would be needed to dredge, process, and stockpile materials generated by the Project. Salaries associated with these positions (i.e. facility managers, supervisors, mechanics, operators, laborers) would range from \$28,000 to \$75,000 resulting in an annual payroll of about \$2.01 million in the first two years of operation.

The recycling operation would require 23 full-time positions for years three and four. Positions and salaries would be similar to those of the first two years of operation. The annual payroll would be approximately \$1.14 million for the third and fourth years. Refer to Tables 5.3-1 and 5.3-3 for a summary of this information.

It is assumed that the DMRF would continue as a commercial operation with nine full-time positions to manage the regular operation of the facility, including maintenance of the new channel and turning basin associated with the LNG Terminal. Annual salaries would range from approximately \$28,000 for laborers to approximately \$75,000 for the facility manager. The estimated annual payroll for the facility would be \$411,000. Using a conservative estimate of a 10.0 direct effect earnings multiplier, the local economy could be expected to experience a \$4.11 million annual ripple effect during the operational lifecycle of the facility. The multiplier values for employment direct economic impact are also shown in Tables 5.3-1 and 5.3-3.

5.5 Environmental Justice Statement (Executive Order 12898)

This section describes the results of Environmental Justice analysis prepared for the Project. Consistent with Executive Order 12898 of February 11, 1994 and the accompanying Presidential Memorandum, any disproportionately high and adverse human health or environmental effects of actions on minority and low-income populations must be evaluated and identified (if present); this evaluation is summarized in this section.¹⁸

The socioeconomic impact area of the Project, i.e., the areas where the additional employment will be based, where additional expenditures will be made, where additional taxes will be paid, and where potential environmental impacts may be felt, is largely urban and the population density is generally high. Table 5.2-1 lists the population densities for the Project Area. While the Project will be constructed in communities of diverse ethnic and economic composition, it is not anticipated to have adverse effects on minority and low-income communities. As shown in Table 5.2-1, the poverty rate for the five counties

¹⁸ Guidance provided by EPA dictates that minority population issues must be addressed when minority populations comprise over 50 percent of an affected area or when the minority population is substantially greater than the minority percentage in the larger area of the general population.

ranges from 4.9 percent to 7.8 percent. Each of the five counties is below the respective state poverty rate; Maryland's poverty rate is 8.5 percent, and Pennsylvania's poverty rate is 11 percent. The poverty rates of Maryland and Pennsylvania are both below the national average of 12.4 percent (U.S. Census Bureau, Census 2000).

None of the five counties in the Project Area are above their respective state or the national minority population percentages. The minority populations of the states of Maryland and Pennsylvania are 36 percent and 14.6 percent, respectively, and the national minority rate is approximately 25 percent (U.S. Census Bureau, Census 2000). In Maryland's Cecil County, the minority population is 6.6 percent, and Baltimore and Harford Counties are approximately 25 percent each. In Pennsylvania, the minority populations in Lancaster and Chester Counties are 8.5 percent and 10.8 percent, respectively. Table 5.4-1 illustrates the ethnic composition of the counties where Project facilities will be located.

The residential neighborhood closest to the Terminal Site is Turner Station, which is located approximately 1.1 miles from the Terminal Site. Demographic information from the Census 2000 indicates that the population of Turner Station is approximately 3,301. Eighty percent of the population is African American, 16 percent is white, and 4 percent is other. The median household income is \$28,324. Turner Station forms a part of the larger Dundalk community.

Dundalk is a transitioning community that grew around the industrial complex of steelmaking, shipbuilding, military (the U.S. Army's Camp Holabird), distilling, automobile and other manufacturing throughout the 20th century. Many residents of the Dundalk community have connections to industries now in decline. For example, steelmaking now employs 2,500 direct jobs, down from 28,000 at its peak employment years a half century ago. There are examples where - as industry has withdrawn - pensions and health care benefits have eroded for many individuals who drew their livelihood from industry. The resulting sentiment that industry has abandoned the community is generating a belief that industrial areas are likely to be transformed into residential and recreational uses in the near term. This sentiment is inconsistent with Baltimore County's master plan and local zoning. The Project proposed by AES will help to stimulate spin-off industrial and commercial activities that should provide new employment opportunities for the current residents of Dundalk.

5.5.1 Terminal Site

AES selected the location for the Terminal Site in an attempt to avoid environmental justice issues in the first instance. Construction of facilities on the Terminal Site involves development on an area of land that is located within a larger industrial complex (The Sparrows Point Industrial Complex, which has remained vacant for a number of years,. The Sparrows Point Industrial Complex has been utilized for shipbuilding and other industrial activities since the Sparrows Point Shipyard was originally constructed in 1889. The BC Plan identifies the area of the Terminal Site and significant acreage surrounding the Terminal Site as open for industrial use or re-use for redevelopment for new industrial purposes. Further, the nearest residential area is more than one mile away from the Terminal Site and is separated from the Terminal Site by the physical barrier of the Key Bridge and I-695 and a sound barrier that borders the community along Broening Highway. Finally, the environmental impacts associated with the LNG Terminal and, if constructed, the Power Plant have been demonstrated in other Resource Reports to have no adverse human health or environmental effects on all surrounding populations, including minority and low-income communities or Native American programs.

With specific regard to dredging activities, such activities are routinely conducted in basins and channels in the Project Area under conditions of a dredge maintenance permit. Proposed dredging activities in approach channel and turning basin do not represent increased risk to environmental and human health to any areas adjacent to those activities, as AES will ensure the use of a dredging methodology suitable for the level of chemical constituents contained in the sediments.

Because facilities proposed to be located on the Terminal Site will have the no human health or environmental effects on the communities closest to the Terminal Site or on any reference community, all environmental justice concerns have been addressed. In other words, the facilities proposed to be located on the Terminal Site are not anticipated to have disproportionately adverse human health or environmental effects on minority and low-income communities or Native American programs.

5.5.2 Pipeline Route

Routes for Pipeline construction have been carefully selected so as to minimize, to the extent practicable, adverse impact to landowners and other stakeholders. In this manner, similar to the selection process associated with the Terminal Site, AES proactively sought to avoid environmental justice issues in the first place. Specifically, in selecting the proposed route for the Pipeline, AES sought to avoid and minimize potential impacts to natural resources present within the area of the Pipeline Route, as well as to avoid to the maximum extent practicable impacts to landowners and other stakeholders. Using these criteria, AES selected a route that maximizes the use of existing utility and highway rights-of-way, thereby minimizing potential impacts to individual landowners and previously undisturbed lands. Alternate route segments that were reviewed were considered less desirable than the primary route selected because the alternate route corridor is already occupied by two powerline lattice tower alignments, and one to two pipelines. The alternate route is more densely populated and construction activities along that route would disrupt more landowners than would construction along the primary route. The alternate route segments also required routing along segments of interstate (Routes I-695 north and I-95 east) that are being widened and reconstructed over the next few years, involving greater distance, and disturbance of a greater amount of “greenfield” property.

As addressed in the other resource reports supporting this application, the environmental impacts associated with the Pipeline are temporary and will not have a significant long term impact. Accordingly, the proposed Pipeline does not have disproportionately adverse human health or environmental effects on minority and low-income communities or Native American programs.

5.5.3 Community Involvement

AES has and will continue to coordinate with all stakeholders potentially affected by the Project development to address both agency and community concerns and to incorporate appropriate mitigation measures into design and construction activities to offset potential impacts as they are identified. Specifically, in developing the Project, AES has had numerous in-person discussions, telephone conferences, and written consultation with various local, state, and Federal regulatory agencies (see Resource Report 1, *General Project Description*). This coordination is expected to continue throughout the development and execution of the Project. More importantly, AES has performed extensive outreach to residential communities near the Terminal Site and along the Pipeline Route, and has specifically included recreational and commercial users of the waterways,

and the environmental community. This outreach has included, among other things, numerous publicly announced meetings (both as required by the Commission's regulations and in addition to such required meetings), delivery of updates on the Project, invitations to tours and learning opportunities about LNG terminal and shipping issues, and issuance of over 2,200 letters to landowners and stakeholders. One objective of this broad outreach has been the generation of meaningful public comment into the process at an early stage in order that the project application can best address and resolve stakeholder concerns and issues, and that information on those issues can be provided to stakeholders. As evidenced by the very strong public participation and informed comment in both the FERC required open house meetings, and the FERC scoping meetings, AES believes this objective is being met. A summary of AES's community outreach efforts is included in Table 1.8-2 of Resource Report 1, *General Project Description*. In addition, consistent with the Commission's requirements under 18 CFR §157.6(d), letters have been sent to residents within one-half mile of the proposed Terminal Site (note there are no residential areas within one mile of the Terminal Site; however, landowners within one mile of the Terminal Site have been notified by letter), and letters have been sent to landowners on and abutting the proposed primary and alternative segments of the Pipeline Route. AES will continue to perform such outreach and will notify affected landowners whose property is crossed or otherwise affected by the Project facilities. The landowners and street addresses of the affected properties are included in Resource Report 1, *General Project Description*, Appendix 1B.

5.6 References

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TABLES

Resource Report 5- Socioeconomics
Table 5.2-1
Existing Socioeconomic Conditions in the Project Area
AES Sparrows Point Project

Area	Population	Population Density (people per square mile)*	Per Capita Personal Income	Rental Vacancy Rate (%)	Civilian Labor Force	Unemployment Rate (%)	Poverty Rate (%)	Major Industry
Baltimore County, MD	754,292	1260.1	\$26,167	5.7	396,226	4.20	6.5	Educational, Health, and Social Services
Harford County, MD	218,590	496.4	\$24,232	5.5	115,314	2.15	4.9	Educational, Health, and Social Services
Cecil County, MD	85,951	247	\$21,384	6.8	44,787	2.83	7.2	Educational, Health, and Social Services
Lancaster County, PA	470,658	495.9	\$20,398	4.9	243,015	2.00	7.6	Manufacturing
Chester County, PA	433,501	573.4	\$31,627	4.8	229,631	2.50	5.2	Educational, Health, and Social Services
State of MD	5,296,486	541.9	\$25,614	6.1	2,737,359	3.20	8.5	Educational, Health, and Social Services
State of PA	12,281,054	274	\$20,880	7.2	5,992,886	3.50	11	Educational, Health, and Social Services
U.S.	296,410,404	79.6	\$21,587	6.8	137,668,798	3.70	12.4	Educational, Health, and Social Services

NOTES:

1. All data compiled from the U.S. Census Bureau (http://factfinder.census.gov/home/saff/main.html?_lang=en), except data denoted by *
2. Data are limited to the household population and exclude the population living in institutions, college dormitories, and other group quarters
3. Data are based on a sample and are subject to sampling variability
4. * Data compiled from (<http://www.fedstats.gov/>)

Resource Report 5- Socioeconomics
 Table 5.2-2
 Local Economy/Workforce Composition
 AES Sparrows Point Project

Area	Total for all Industries	Construction	Manufacturing	Retail Trade	Finance, insurance, real estate, and rental and leasing	Professional, scientific, management, administrative, and waste management services	Education, health, and social services	Public Administration
Baltimore County, MD	379,705	22,494 / 5.9%	34,029 / 9.0%	42,862 / 11.3%	36,030 / 9.5%	40,049 / 10.5%	87,102 / 22.9%	29,039 / 7.6%
Harford County, MD	111,792	9,325 / 8.3%	12,278 / 11.0%	14,102 / 12.6%	8,027 / 7.2%	10,287 / 9.2%	22,112 / 19.8%	10,039 / 9.0%
Cecil County, MD	42,953	4,491 / 10.5%	6,793 / 15.8%	5,053 / 11.8%	3,099 / 7.2%	3,163 / 7.4%	7,578 / 17.6%	2,435 / 5.7%
Lancaster County, PA	235,686	18,242 / 7.7%	53,028 / 22.5%	30,563 / 13.0%	10,432 / 4.4%	15,674 / 6.7%	42,794 / 18.2%	4,751 / 2.0%
Chester County, PA	221,255	12,345 / 5.6%	32,810 / 14.8%	24,769 / 11.2%	22,064 / 10.0%	30,589 / 13.8%	43,715 / 19.8%	5,025 / 2.3%
State of MD	2,608,457	181,280 / 6.9%	189,327 / 7.3%	273,339 / 10.5%	186,159 / 7.1%	323,834 / 12.4%	538,350 / 20.3%	273,959 / 10.5%
State of PA	5,653,500	339,363 / 6.0%	906,398 / 16.0%	684,179 / 12.1%	372,148 / 6.6%	478,937 / 8.5%	1,237,090 / 21.9%	235,767 / 4.2%
U.S.	129,721,512	8,801,507 / 6.8%	18,286,005 / 14.1%	15,221,716 / 11.7%	8,934,972 / 6.9%	12,061,865 / 9.3%	25,843,029 / 19.9%	6,212,015 / 4.8%

NOTES:

1. All data compiled from the U.S. Census Bureau, Census 2000 http://factfinder.census.gov/home/saff/main.html?_lang=en
2. Numbers represent employed civilian population, 16 years and older in the respective industry classification.
3. Percent values depicts percentage of employed civilian population employed in the respective industry classification for the county listed.

Resource Report 5- Socioeconomics

Table 5.2-3

Local Revenues and Sources of Funding (in Thousands of Dollars) - 1997
 AES Sparrows Point Project

Area	Total Revenue	General Revenue	Intergovernmental Revenue from Federal Government	Intergovernmental Revenue from State Government	Total Taxes	Property Taxes	General Sales and Gross Receipts Taxes	General Current Charges	Interest Revenue	Other General Revenue	Utility and Liquor Store and Insurance Trust Revenue
Baltimore County, MD	1,936,332	1,526,612	47,182	346,769	870,029	476,519	38,954	170,441	55,476	36,715	409,720
Harford County, MD	409,569	400,689	3,773	130,530	206,666	127,521	430	46,730	7,590	5,400	8,880
Cecil County, MD	157,759	154,332	4,083	56,589	71,559	46,580	239	16,999	3,302	1,800	3,427
Lancaster County, PA	937,950	867,940	10,331	266,338	395,614	307,365	3,776	139,204	34,875	21,578	70,010
Chester County, PA	944,224	985,176	2,029	225,444	491,493	400,494	4,606	106,623	47,190	22,397	49,048
State of MD	14,303,664	12,632,015	721,433	3,474,149	6,206,546	3,608,286	223,005	1,445,795	435,124	348,968	1,671,649
State of PA	33,228,951	30,375,878	1,721,564	10,197,476	12,502,270	8,805,983	295,127	3,638,990	1,560,022	755,556	2,853,073
U.S.	847,769,879	747,030,290	28,767,625	258,235,194	284,397,653	208,524,416	45,307,452	118,380,881	30,932,396	26,316,541	100,739,589

NOTES:

Data compiled from U.S. Census Bureau(<http://harvester.census.gov/finance/asp/county.asp?county=00003>)

Total Revenue: This category comprises intergovernmental revenue, total taxes, interest revenue, general current charges, other general revenues, and utility, liquor store and insurance trust revenues.

General Revenue: This category comprises all revenue except that classified as liquor store, utility or insurance trust revenue.

Intergovernmental Revenue from State Government: This category comprises monies from other governments, including grants, shared taxes, and contingent loans and advances for support of particular functions or for general financial support; any significant and identifiable amounts received as reimbursement for performance of governmental services for other governments; and any other form of revenue representing the sharing by other governments in the financing of activities administered by the receiving government. All intergovernmental revenue is reported in the general government sector, even if it is used to support activities in other sectors (such as utilities).

Total Taxes: This category comprises amounts received (including interest and penalties) from taxes (1) imposed by a government and collected by that government or (2) collected on its behalf by another government serving as its agent.

Property Tax: This category comprises taxes imposed on ownership of property and measured by its value.

Sales and Gross Receipts Taxes: This category comprises taxes on goods and services measured on the basis of the volume or value of their transfer, upon gross receipts or gross income from, or as an amount per unit sold (gallon, package, etc.); and related taxes based upon use, storage, production, importation, or consumption of goods and services. Includes licenses levied at more than minor rates.

General Current Charges: This category comprises charges imposed for providing current services or for the sale of products in connection with general government activities.

Interest Revenue: This category comprises amounts received from interest on all interest-bearing deposits and accounts; accrued interest on investment securities sold; interest on funds held for construction; and interest related to public debt for private purposes.

Other General Revenue: This category comprises all other general revenue of governments from their own sources (i.e., other than liquor store, utility, and insurance trust revenue).

Utility, Liquor Store, and Insurance Trust Revenue: 1. Utility revenue comprises receipts from sales and directly related services and by-products of the four types of state and local government utilities recognized by the Census Bureau: water supply, electric supply, gas supply, and public mass transit systems. 2. Liquor store revenue comprises only receipts from sales and associated services or products of liquor stores owned and operated by state and local governments. 3. Insurance trust revenue consists of contributions distinctively imposed for the support of public employee retirement and social insurance systems plus net earnings on their investment assets.

Resource Report 5- Socioeconomics

TABLE 5.3-1

Temporary Construction Employment Positions¹

AES Sparrows Point Project

Project	Number of Positions	Duration (years)	Low Salary Range	High Salary Range	Annual ² Payroll (million)	Direct Effect Multiplier ³ (million, annually)
LNG Terminal	325	3	\$25,000	\$150,000	\$18.4	\$36.8
LNG Pipeline	200	1			\$11.3	\$22.6
Power Plant	180	1.67			\$18	\$36
Dredged Material Recycling Facility	50	2			\$2.8	\$5.6

NOTES:

1 Temporary construction employment positions are those jobs generated during the construction period. The data have been estimated based on similar projects. Annual payroll is estimated based on average number of employees per year, estimated staff profile, and range of salary values for the range of staff positions.

2 Direct effect earnings multiplier of 2.0 used to estimate annual economic impact of construction of the Project to the local communities. This figure has been conservatively derived from the the Economic Impact Analysis of the Dominion Resources' Cove

Resource Report 5- Socioeconomics

Table 5.3-2

Housing and Infrastructure - FY2000

AES Sparrows Point Project

Area	Number of Vacant Housing Units ¹	Number of Vacant Housing Units for Seasonal, Recreational, or Occasional Use ²	Number of Renter-Occupied Housing Units ¹
Baltimore County, MD	13,857	1,212	97,298
Harford County, MD	3,479	299	17,519
Cecil County, MD	3,238	1,410	7,819
Lancaster County, PA	7,430	808	50,352
Chester County, PA	5,868	571	37,477
State of MD	164,424	38,880	639,108
State of PA	472,747	148,230	1,370,666
U.S.	10,424,540	3,578,718	35,664,348

NOTES:

Data compiled from the U.S. Census Bureau, Census 2000 (http://factfinder.census.gov/home/saff/main.html?_lang=en)

1. *Vacant Housing Unit:* According to the U.S. Census Bureau, a housing unit is vacant if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration entirely by people who have a usual residence elsewhere are also classified as vacant. A housing unit may be a house, apartment, mobile home, group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall.

2. *Seasonal, Recreational, or Occasional Use Housing Unit:* According to the U.S. Census Bureau, seasonal, recreational, or occasional use housing units include vacant units used or intended for use only in certain seasons, for weekends, or other occasional use throughout the year. Interval ownership units, sometimes called shared ownership or time-sharing condominiums, are included in this category.

Resource Report 5- Socioeconomics

Table 5.3-3

Permanent Employment Positions (Operation)

AES Sparrows Point Project

Project	Project Cost (million)	Number of New Positions	Low Salary Range	High Salary Range	Annual Payroll	Direct Effect Multiplier ² (million, annually)
LNG Terminal	\$400	41	\$28,000	\$150,000	\$3,500,000	\$35
LNG Pipeline	\$250	9	\$30,000	\$100,000	\$455,000	\$4.55
Power Plant	\$165	16	\$30,000	\$150,000	\$1,500,000	\$15
Dredged Material Recycling Facility ¹	\$120	9	\$28,000	\$75,000	\$411,000	\$4.11

NOTES:

1 The staffing plan for the Dredged Material Recycling Facility is phased over 4 years; 41 full-time positions during the first two years, 23 during years 3 and 4. Approximately 9 full-time employees would be needed to manage regular operations of the facility for the remainder of the facility's operational lifecycle. Annual payroll is estimated based on average number of employees per year, estimated staff profile, and range of salary values for the range of staff positions.

2 Direct effect earnings multiplier of 10.0 used to estimate annual economic impact of operation of the Project to the local communities. This figure has been conservatively derived from the the Economic Impact Analysis of the Dominion Resources' Cove Point LNG project (2004), a similar energy infrastructure project located in Calvert County, Maryland..

Resource Report 5- Socioeconomics
 Table 5.4-1
 Population Composition
 AES Sparrows Point Project

Area	Individuals Under 18 Years Old (percent)	Individuals 65 Years Old and Older (percent)	White Individuals (percent) ^(a)	Black or African American Individuals (percent) ^(a)	American Indian and Alaska Native Individuals (percent) ^(a)	Asian Individuals (percent) ^(a)	Native Hawaiian and Other Pacific Islander Individuals (percent) ^(a)	Individuals Reporting Some Other Race (percent)	Individuals Reporting Two or More Races (percent)	Individuals of Hispanic or Latino Origin (percent) ^(b)	Minority Population (percent)
Baltimore County, MD	23.2 [†]	14.6	74.4	20.1	0.3	3.2	0.0*	0.6	1.4	1.8	25.6
Harford County, MD	26.3 [†]	10.1	75.1	9.3	0.2	1.5	0.1	0.7	1.5	1.9	24.9
Cecil County, MD	25.7 [†]	10.5	93.4	3.9	0.3	0.7	0.0*	0.5	1.2	1.5	6.6
Lancaster County, PA	25.8 [†]	14	91.5	2.8	0.1	1.4	0.0*	2.9	1.3	5.7	8.5
Chester County, PA	24.9 [†]	11.7	89.2	6.2	0.1	2	0.0*	1.3	1.1	3.7	10.8
State of MD	25.1 [†]	11.3	64.0	27.9	0.3	4.0	0.0*	1.8	2.0	4.3	36.0
State of PA	22.9 [†]	15.6	85.4	10.0	0.1	1.8	0.0*	1.5	1.2	3.2	14.6
U.S.	25.0 [†]	12.4	75.1	12.3	0.9	3.6	0.1	5.5	2.4	12.5	24.9

NOTES:

All data compiled from the U.S. Census Bureau, Census 2000 (http://factfinder.census.gov/home/saff/main.html?_lang=en), except data denoted by †
 † Denotes a 2004 U.S. Census estimated value, compiled from (<http://quickfacts.census.gov/qfd/index>). See <http://www.census.gov/popest/estimates.php> for estimate methodologies
 * Value greater than zero but less than half unit of measure shown
 (a) Includes persons reporting only one race
 (b) Hispanics may be out of any race, so also are included in applicable race categories

Resource Report 5- Socioeconomics

Table 5.4-2

Project Construction and Operation Estimated Tax Revenue
AES Sparrows Point Project

Project	Construction				Operations ³			
	Sales Tax (million)	Income Tax ¹ (million)	Property Tax ¹ (million)	Construction Total Revenues (million)	Sales Tax (million)	Income Tax (million)	Property Tax ⁴ (million)	Operations Total Revenues (million)
Terminal & Pipeline								
Maryland	\$2.0	\$0	\$0	\$2.0	\$0.1	\$6.0	\$7.0	\$13.1
Pennsylvania ²	\$0	\$0	\$0	\$0	\$0.02	\$1.0	\$0	\$1.02
Total	\$2.0	\$0	\$0	\$2.0	\$0.12	\$7.0	\$7.0	\$14.12
Power Plant								
Maryland	\$1.5	\$0	\$0	\$1.5	\$0.1	\$0.5	\$2.6	\$3.2
Pennsylvania ²	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$1.5	\$0	\$0	\$1.5	\$0.1	\$0.5	\$2.6	\$3.2
Combined Totals								
Maryland	\$3.5	\$0	\$0	\$3.5	\$0.2	\$6.5	\$9.6	\$16.3
Pennsylvania ²	\$0	\$0	\$0	\$0	\$0.02	\$1.0	\$0	\$1.02
Total	\$3.5	\$0	\$0	\$3.5	\$0.22	\$7.5	\$9.6	\$17.32

NOTES:

1. No income tax revenue or property tax revenue associated with facility construction activities in Maryland and Pennsylvania.
2. No Pennsylvania state sales tax revenue associated with construction activities.
3. Projected average value per year for expected lifecycle of the facilities (at least 30 years).
4. Projected net property tax revenue associated with Project operations in Maryland includes tax credits for operational years 1 through 10.