

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 080281-EI
FLORIDA POWER & LIGHT COMPANY**

MAY 16, 2008

**IN RE: FLORIDA POWER & LIGHT COMPANY'S
PETITION FOR APPROVAL OF SOLAR ENERGY
PROJECTS FOR RECOVERY THROUGH
ENVIRONMENTAL COST RECOVERY CLAUSE**

DIRECT TESTIMONY & EXHIBITS OF:

ERIC SILAGY

2008 MAY 16 10 05 AM

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FPSC-COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF ERIC SILAGY**

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5 **MAY 16, 2008**

6
7 **INTRODUCTION AND CREDENTIALS**

8
9 **Q. Please state your name and business address.**

10 A. My name is Eric Silagy. My business address is Florida Power & Light
11 Company, 700 Universe Boulevard, Juno Beach, Florida, 33408.

12 **Q. By who are you employed and what position do you hold?**

13 A. I am employed by Florida Power & Light Company (“FPL” or the
14 “Company”) as Vice President and Chief Development Officer.

15 **Q. Please describe your duties and responsibilities in that position.**

16 A. I lead FPL’s efforts to develop new electric generation, including the
17 development of clean, zero greenhouse gas emitting renewable generation.

18 **Q. Please describe your professional experience and education.**

19 A. Prior to being appointed Chief Development Officer for FPL, I was employed
20 by FPL Energy as Vice President/General Manager for the Texas region. In
21 this capacity, I was responsible for managing all business activities related to
22 FPL Energy’s generation assets in the region, including 1,600 megawatts
23 (“MW”) of wind power. Prior to undertaking those duties in Texas, I served

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1 as Vice President, Business Development with responsibility for managing
2 and supporting FPL Energy and FPL Group merger and acquisition activities,
3 including all nuclear power plant acquisitions.

4
5 Prior to joining FPL Energy, from 1999 to 2003, I served as Vice President,
6 Mergers, Acquisitions & Divestitures at Entergy Wholesale Operations. In
7 that position, I led the successful sale and purchase of numerous energy
8 related assets and companies in the U.S. and overseas. Prior to joining
9 Entergy, I held the position of Vice President, Development, Southeast Asia
10 for The Wing Group, a subsidiary of Western Resources. In this capacity, I
11 was responsible for managing power generation development activities and
12 offices in Thailand, Indonesia, the Philippines and Singapore.

13
14 From 1987 to 1996, I served on the staff of United States Senator J. Bennett
15 Johnston. During this time, my work included service in a variety of roles
16 including Professional Staff member of the U.S. Senate Energy and Natural
17 Resources Committee, Legislative Assistant and Chief of Staff. I hold a B.A.
18 in Economics from the University of Texas at Austin and a J.D. from the
19 Georgetown University Law Center.

- 1 **Q. Are you sponsoring any exhibits in this case?**
- 2 A. Yes. I am sponsoring Exhibits ES-1 through ES-32, which are attached to my
- 3 direct testimony.
- 4 Martin Next Generation Solar Energy Center (“Martin Solar”)
- 5 ES-1 Martin Solar - Location Map
- 6 ES-2 Martin Solar - Aerial Map
- 7 ES-3 Martin Solar – Typical Parabolic Trough Solar Collector
- 8 ES-4 Martin Solar - Process Flow Diagram
- 9 ES-5 Martin Solar - Artist Conception
- 10 ES-6 Martin Solar - Site Plan
- 11 ES-7 Martin Solar - Tax Receipt
- 12 ES-8 Martin Solar - Transmission
- 13 ES-9 Martin Solar – Zoning Resolution
- 14 ES-10 Martin Solar - Fuel Displacement Information
- 15 ES-11 Martin Solar - CO₂ Emissions Information
- 16 ES-12 Martin Solar - NO_x & SO₂ Emissions Information
- 17
- 18 DeSoto Next Generation Solar Energy Center (“DeSoto Solar”)
- 19 ES-13 DeSoto Solar - Location Map
- 20 ES-14 DeSoto Solar - Aerial Map
- 21 ES-15 DeSoto Solar - Solar Panel Photo
- 22 ES-16 DeSoto Solar - Site Plan
- 23 ES-17 DeSoto Solar - Artist Conception
- 24 ES-18 DeSoto Solar - Fuel Displacement Information
- 25 ES-19 DeSoto Solar - CO₂ Emissions Information
- 26 ES-20 DeSoto Solar - NO_x & SO₂ Emissions Information
- 27 ES-21 DeSoto Solar - Tax Receipt
- 28 ES-22 DeSoto Solar - Transmission
- 29 ES-23 DeSoto Solar - Zoning
- 30
- 31 Space Coast Next Generation Solar Energy Center (“Space Coast
- 32 Solar”)
- 33 ES-24 Space Coast Solar - Location Map
- 34 ES-25 Space Coast Solar - Aerial Map
- 35 ES-26 Space Coast Solar - Solar Panel Photo
- 36 ES-27 Space Coast Solar - Site Plan
- 37 ES-28 Space Coast Solar - Fuel Displacement Information
- 38 ES-29 Space Coast Solar - CO₂ Emissions Information
- 39 ES-30 Space Coast Solar - NO_x & SO₂ Emissions Information
- 40 ES-31 Space Coast Solar - Access and Indemnification Agreement
- 41 ES-32 Space Coast Solar – Transmission

1 **PURPOSE AND SUMMARY**

2
3 **Q. Would you please provide us with an overview of your testimony?**

4 A. Florida’s Legislature recently passed House Bill 7135 (“HB 7135”), which
5 enhances the feasibility of developing clean, zero greenhouse gas emitting
6 renewable generation to serve a portion of the electricity needs of FPL’s
7 customers. Florida’s Governor Crist has announced that he intends to sign
8 this legislation into law, which will become effective July 1, 2008. FPL has
9 reviewed HB 7135 and considered how it can support the Florida
10 Legislature’s policy. Consistent with HB 7135’s emphasis on demonstrating
11 the feasibility and viability of clean, zero greenhouse gas emitting energy
12 systems in Florida, FPL is proposing to construct and operate three separate
13 solar energy projects totaling 110 MW with different characteristics, at
14 diverse locations. These projects will not only generate clean, renewable
15 energy, but will also provide significant information and experience regarding
16 key aspects of siting, constructing and operating different solar technologies at
17 various locations in Florida.

18
19 In this proceeding, FPL requests that the Commission find that the following
20 three proposed solar energy center projects are eligible for recovery through
21 the Environmental Cost Recovery Clause (“ECRC”) recovery pursuant to HB
22 7135:

- 23 • The Martin Next Generation Solar Energy Center (“Martin Solar”).
24 Planned for construction to commence by year end 2008 at FPL’s existing

1 Martin Plant site, Martin Solar will provide up to 75 MW of solar thermal
2 capacity in an innovative way that directly displaces fossil fuel usage in an
3 existing FPL generating unit. Martin Solar will be the second largest solar
4 facility in the world and the largest solar plant of any kind outside of
5 California;

6 • The DeSoto Next Generation Solar Energy Center (“DeSoto Solar”).
7 Planned for construction to commence by year end 2008 on FPL owned
8 property located in DeSoto County, Florida, DeSoto Solar will provide 25
9 MW of solar photovoltaic (“PV”) capacity, making it the world’s largest
10 solar PV facility; and

11 • The Space Coast Next Generation Solar Energy Center (“Space Coast
12 Solar”). Planned for construction to commence by year end 2008 at the
13 Kennedy Space Center, Space Coast Solar will provide 10 MW of solar
14 PV capacity. This innovative public/private partnership will allow both
15 entities to leverage engineering, design and operational expertise and
16 provide unparalleled opportunities to develop and refine solar technology.

17
18 Each one of these facilities is a significant and innovative renewable
19 generating plant in its own right, but collectively these Next Generation Solar
20 Energy Centers will be a landmark achievement. These facilities are expected
21 to produce a total of 213,000 megawatt hours (“MWh”) of electricity per year,
22 and at peak production provide enough power and energy to serve the
23 requirements of more than 15,000 homes and 35,600 people.

1 Taken together, using solar energy to provide customers with renewable
2 energy from these projects will substantially reduce greenhouse gas emissions
3 and decrease fossil fuel usage. Over the life of the projects, FPL’s proposed
4 solar energy centers will prevent emission of more than 3.5 million tons of
5 greenhouses gases, as well as other pollutants, which, according to the U.S.
6 Environmental Protection Agency (“EPA”) is equivalent to removing 25,000
7 cars from our roads. In addition, these projects will decrease fossil fuel usage
8 by more than one million barrels of oil and by about 51 million MMBtu of
9 natural gas, resulting in system fuel savings of about \$262 million.

10
11 In addition to providing electricity for customers with tangible environmental
12 and fuel usage benefits, these projects will constitute significant steps forward
13 for Florida renewable energy and for the energy industry. Construction of
14 these three Next Generation Solar Energy Centers will result in Florida
15 becoming the second largest supplier of utility-scale solar power in the nation.
16 Operating solar resources on this large utility-scale will provide a strong
17 platform from which Florida can build in becoming a global leader in solar
18 power, and will further advance Florida’s efforts and leadership in addressing
19 climate change.

20
21 FPL is in the process of selecting vendors and negotiating contracts to cost-
22 effectively implement the projects. Based upon the information available at
23 the time of this filing, FPL estimates that the total capital cost of the projects

1 is about \$688 million, not including interest during construction. There are
2 uncertainties with respect to the costs of the projects that will continue to be
3 addressed during project development, as described below in my testimony.
4 Necessarily, FPL will have more information with respect to these
5 uncertainties and their potential effects on costs, either positively or
6 negatively, at the time that FPL makes its ECRC filings with respect to the
7 projects.

8
9 Based on the \$688 million estimate, the net cost of the projects in cumulative
10 present value of revenue requirements in 2008 dollars (“CPVRR”) is
11 approximately \$558 million. In 2011, the first year when all three projects are
12 in service for the full year and the impact to customer bills are the highest, the
13 system average bill impact is projected to be an increase of 83 cents per 1,000
14 kWh. Over the first 25 years of operations (2009-2033) the system average
15 bill impact is projected to be an increase of 31 cents per month per 1,000
16 kWh.

17
18 FPL requests that the Commission find that these three zero greenhouse gas
19 emitting renewable energy projects are eligible for cost recovery under the
20 ECRC, as provided for in HB 7135, which was recently passed by the Florida
21 Legislature and which Governor Crist has indicated he plans to sign. FPL
22 recognizes that the prudence of actual expenditures for each of the projects

1 will be subject to review in annual ECRC proceedings pursuant to the
2 standard stated in HB 7135.

3
4
5 **I. FPL'S RENEWABLE ENERGY BACKGROUND**

6
7 **Q. Please provide some background with respect to FPL's use of renewable
8 energy to serve its customers.**

9 A. With over \$7.5 billion invested in renewable energy facilities, FPL Group,
10 FPL's parent company, is the nation's leading provider of clean, renewable
11 energy utilizing wind, hydroelectric and solar technologies. FPL Energy has a
12 proven track record, spanning many years, of being a global leader in
13 developing, owning and operating clean, renewable generating plants. Along
14 with the largest wind fleet in the United States, FPL Energy is an owner and
15 the operator of the world's largest solar facility, the 310 MW Solar Electric
16 Generating System ("SEGS") solar thermal plant located in the Mojave Desert
17 in California. This facility recently completed a major plant and equipment
18 upgrade. FPL Energy also announced in early 2008 the development of a new
19 250 MW solar thermal facility to be located in Southern California. FPL will
20 be able to access FPL Group's unique industry leading skills and in-depth
21 solar experience in developing these three pioneering solar facilities in
22 Florida.

1 Since 1980, a portion of FPL's customers' electricity requirements has been
2 produced from renewable resources, including waste-to-energy, biomass and
3 landfill gas. FPL procured this energy from the owners and operators of
4 renewable energy facilities. On April 1, 2008, FPL filed its latest Standard
5 Offer Contract for renewable energy which is available for renewable
6 suppliers' use. FPL is also willing to negotiate individual contracts with
7 renewable energy project owners and operators. For example, FPL is willing
8 to negotiate individual contracts for renewable energy with pricing based upon
9 fossil units other than the natural gas-fired combined cycle which is the basis
10 for FPL's Standard Offer Contract. In addition, on April 10, 2008, FPL issued
11 a request for proposals for renewable resources.

12
13 FPL has been involved since 1976 in solar energy research and development
14 and in facilitating the implementation of various technologies. FPL assisted
15 the Florida Solar Energy Center ("FSEC") in the late 1970s in demonstrating
16 the first residential solar PV system east of the Mississippi. This PV
17 installation at FSEC's Brevard County location was in operation for over 15
18 years and provided valuable information about PV performance capabilities
19 on both a daily and annual basis in Florida. FPL later installed a second PV
20 system at a Miami substation. This 10 kilowatt ("kW") system was placed
21 into operation in 1984. From operating this facility, FPL gained valuable
22 knowledge and experience of solar applications in the Florida environment.
23 For a number of years, FPL maintained a thin-film PV test facility located at

1 the FPL Martin Plant site. The FPL PV test facility was used to test new thin-
2 film PV technologies and to identify design, equipment, or procedure changes
3 necessary to accommodate direct current electricity from PV facilities into the
4 FPL system.

5 **Q. How much renewable energy does FPL provide to its customers?**

6 A. Today, FPL annually provides more than 280 MW of generation that provides
7 either firm capacity and energy or non-firm energy from renewable resources.
8 This energy is purchased from owners of waste-to-energy, biomass and
9 landfill gas power plants located in Florida. From 2002 to 2007, FPL has
10 provided customers with about 1.4% of net energy for load from renewable
11 resources. During 2007, FPL provided its customers with a total of about 1.5
12 million MWh of electricity from renewable sources.

13 **Q. How does FPL encourage the development of renewable resources in**
14 **Florida?**

15 A. FPL has a multi-pronged approach to encouraging and supporting the
16 development of renewable resources in Florida. For example, FPL's Product
17 Management and Operations department supports the development of
18 renewable energy projects and the management of renewable programs
19 offered to FPL's customers. FPL's Resource Assessment and Planning
20 organization supports the negotiation of renewable purchase power
21 agreements. FPL's Project Development organization, for which I am
22 responsible, supports the development of *inter alia* renewable supply side
23 generation projects.

1 **Q. Have there been recent developments with respect to Florida’s renewable**
2 **energy policy?**

3 A. Yes. There have been several recent developments that have emphasized
4 Florida’s strong interest in promoting increased production of clean, zero
5 greenhouse gas emitting renewable energy to serve a portion of customers’
6 needs.

7
8 On July 13, 2007, Florida’s Governor, Charlie Crist, issued Executive Order
9 No. 07-127, which requested that the Commission take actions “to open the
10 market to clean, renewable energy technologies, thus avoiding future
11 greenhouse gas emissions.” This included a request that the Commission
12 initiate rulemaking with respect to establishing a Renewable Portfolio
13 Standard “with a strong focus on solar and wind energy.”

14
15 Consistent with Executive Order No. 07-127, the Commission conducted
16 several workshop sessions that drew extensive participation exploring many
17 renewable energy considerations. The workshops included considerable
18 discussion of the prospects for, and ways to place greater weight on, zero
19 greenhouse gas emitting solar and wind energy generation.

20
21 Then, during the 2008 legislative session, the Florida Legislature enacted HB
22 7135 which, in addition to many other features, provides for cost recovery
23 through the ECRC of prudently incurred costs of up to 110 MW of clean, zero

1 greenhouse gas emitting renewable projects in Florida, which is the genesis of
2 FPL's present petition.

3
4
5 **II. HB 7135 PROVISIONS APPLICABLE TO ZERO**
6 **GREENHOUSE GAS EMITTING RENEWABLE ENERGY**
7 **PROJECTS**

8
9 **Q. Please describe the portions of HB 7135 that apply to zero greenhouse gas**
10 **emitting renewable generation in Florida.**

11 A. Section 366.92, Florida Statutes, expresses the Florida Legislature's support
12 for renewable energy. Part of HB 7135 extends this support by amending
13 Section 366.92 to promote development of up to 110 MW of zero greenhouse
14 gas emitting renewable generation, by permitting full cost recovery for
15 qualifying projects through the ECRC.

16 **Q. Please quote the specific portion of HB 7135 to which you are referring.**

17 A. HB 7135 provides in relevant part that:

18 In order to demonstrate the feasibility and viability of clean
19 energy systems, the commission shall provide for full cost
20 recovery under the environmental cost-recovery clause of all
21 reasonable and prudent costs incurred by a provider for
22 renewable energy projects that are zero greenhouse gas
23 emitting at the point of generation, up to a total of 110
24 megawatts statewide, and for which the provider has secured
25 necessary land, zoning permits, and transmission rights within
26 the state. Such costs shall be deemed reasonable and prudent
27 for purposes of cost recovery so long as the provider has used
28 reasonable and customary industry practices in the design,
29 procurement, and construction of the project in a cost-effective

1 manner appropriate to the location of the facility. The provider
2 shall report to the commission as part of the cost-recovery
3 proceedings the construction costs, in-service costs, operating
4 and maintenance costs, hourly energy production of the
5 renewable energy project and any other information deemed
6 relevant by the commission. Any provider constructing a clean
7 energy facility pursuant to this section shall file for cost
8 recovery no later than July 1, 2009.

9 **Q. How does HB 7135 change the renewable energy policy
10 environment in Florida?**

11 A. HB 7135 provides FPL and the Commission with the opportunity to propose
12 and approve, respectively, substantial new production of renewable energy
13 that is “zero greenhouse gas emitting at the point of generation.”

14
15 HB 7135 does this by providing for full cost recovery under the ECRC of all
16 reasonable and prudent costs incurred for renewable energy projects that are
17 zero greenhouse gas emitting at the point of generation, up to a total of 110
18 MW statewide, and for which the provider has secured necessary land, zoning
19 permits and transmission rights within the state.

20
21
22 **III. FPL’S STUDY OF ZERO GREENHOUSE GAS EMITTING**
23 **RENEWABLE ENERGY**

24
25 **Q. What work has FPL performed to assess possible development of zero
26 greenhouse gas emitting renewable projects in Florida?**

27 A. FPL has conducted extensive due diligence with respect to possible

1 development of zero greenhouse gas emitting renewable projects in Florida.

2

3 For example, FPL obtained and/or conducted solar and wind studies to assess
4 in detail the availability of these zero greenhouse gas emitting resources in
5 Florida. FPL studied typical weather patterns and performed engineering
6 analyses of wind loading, including storm wind loading. The ability to
7 withstand storm winds is an important design consideration for all utility
8 facilities in Florida. FPL analyzed the transmission supply system to ensure
9 that the proposed projects would comply with the legislation. FPL also
10 supports development of other potential zero greenhouse gas emitting
11 technologies, such as ocean current energy, and is participating in further
12 development activities.

13

14 From its development activities, FPL determined that the principal zero
15 greenhouse gas emitting renewable energy resources reasonably available to
16 the Company, based upon resource availability, technology development and
17 other factors, are solar and wind energy. FPL then assessed possible sites for
18 development of solar and wind resources, taking into account factors
19 including resource availability, access to affordable and suitable land, access
20 to existing transmission, land use regulation and local public acceptance.
21 Based upon these assessments FPL identified several promising sites and
22 began developing suitable projects. The three projects described in this
23 testimony are at a sufficient stage of development to satisfy the requirements

1 of HB 7135, and are proposed by FPL in this proceeding as meeting the
2 criteria for a finding of eligibility for cost recovery under the ECRC. These
3 are the Martin Next Generation Solar Energy Center, the DeSoto Next
4 Generation Solar Energy Center, and the Space Coast Next Generation Solar
5 Energy Center.

6
7
8 **IV. FPL'S PROPOSED MARTIN NEXT GENERATION SOLAR ENERGY**
9 **CENTER ("MARTIN SOLAR")**

10
11 **Q. Please provide an overview of FPL's proposed Martin Solar project.**

12 A. FPL proposes to construct an approximately 75 MW solar thermal steam
13 generating facility at the existing Martin Power Plant site in Martin County,
14 Florida, thereby creating the world's first hybrid energy center. (See Exhibit
15 ES-1) Martin Solar will be the second largest solar generating facility in the
16 world. This generation plant will be constructed on an approximately 600-
17 acre site (comprised of 500 acres for the solar field and 100 acres for related
18 construction, operation and maintenance activities), which is fully contained
19 within FPL's existing 11,300-acre Martin Plant site and will be the first of its
20 kind to integrate solar technology with a combined cycle natural gas plant.
21 (See Exhibit ES-2)

1 **Q. Please describe the solar energy technology that will be used for the**
2 **project.**

3 A. The Martin Solar project will involve the installation of solar thermal
4 technology that will be integrated into the existing steam cycle for the existing
5 Martin Power Plant Unit 8 natural gas-fired combined cycle plant. The steam
6 to be supplied by Martin Solar will be used to supplement the steam currently
7 utilized in the heat recovery steam generators. The project will involve the
8 installation of parabolic trough solar collectors that concentrate solar
9 radiation. The collectors will track the sun to maintain the optimum angle to
10 collect solar radiation. The collectors will concentrate the sun's energy on
11 heat collection elements located in the focal line of the parabolic reflectors.
12 These heat collection elements contain a heat transfer fluid which is heated by
13 the concentrated solar radiation to approximately 750 degrees Fahrenheit.
14 The heat transfer fluid is then circulated to heat exchangers that will produce
15 the steam that will be routed to the existing natural gas-fired combined cycle
16 Unit 8 heat recovery steam generators. (See Exhibits ES-3, ES-4, and ES-5)

17 **Q. How much electricity will the proposed Martin Solar project produce?**

18 A. Martin Solar is sized to generate approximately 75 MW (nominal). Based on
19 the initial conceptual designs, the project will consist of up to approximately
20 180,000 mirrors over about 500 acres at the Martin Plant site. The maximum
21 steam generation will be about one million pounds per hour. Over an annual
22 period, the project is expected to have an average capacity factor of about
23 23.6% producing about 155,000 MWh of electricity annually. At its peak, this

1 is enough power to serve the requirements of almost 11,000 homes or 26,000
2 people. (See Exhibit ES-6)

3 **Q. What factors did FPL consider in determining the proposed size of the**
4 **Martin solar project?**

5 A. Martin Solar is optimally sized at approximately 75 MW. This matches the
6 steam generation capacity in the existing Unit 8 heat recovery steam
7 generators and steam turbine that have been sized for the existing duct
8 burners. Therefore, by integrating the solar field into the existing power plant
9 and creating a hybrid energy center, additional capital infrastructure, such as a
10 new steam turbine, transmission lines and high voltage transformers, is not
11 required. In addition, the project will operate within the existing permitted
12 water supply amounts.

13 **Q. What are some of the unique aspects of the project?**

14 A. Martin Solar will be the second largest solar project in the world and will be
15 the first large utility-scale solar thermal project in Florida and the Eastern
16 United States. It is the world's first project to integrate solar thermal steam
17 generation into an existing high efficiency steam turbine. This project results
18 in reduced system-wide fuel costs, reduced carbon and other emissions with
19 no incremental capital expenditures on a steam turbine generator and
20 transmission rights-of-way.

21 **Q. Will the Martin project be “zero greenhouse gas emitting at the point of**
22 **generation” as required under HB 7135?**

23 A. Yes. The electricity generated as a result of the steam generated directly by

1 the solar field will be zero greenhouse gas emitting. Solar energy is created
2 by the sun's heat, not any other fuel. The point of generation is, therefore, the
3 solar thermal heat collection elements. The heat is carried in specialized fluid
4 through tubing to heat exchangers, wherein the heat is transferred to water to
5 create steam that flows to the steam turbine generator.

6 **Q. Has FPL secured the necessary land to construct the Martin Solar**
7 **project?**

8 A. Yes. Martin Solar will be located at the existing 11,300-acre FPL Martin
9 Power Plant site. This land is owned by FPL. (See Exhibit ES-7)

10 **Q. Does FPL have transmission rights with respect to the proposed Martin**
11 **Solar project?**

12 A. Yes. Martin Solar is being integrated into the existing Martin Power Plant
13 Unit 8 and its associated transmission system, including its current
14 transmission rights. (See Exhibit ES-8)

15 **Q. Does FPL have the zoning permits required for the Martin Solar project?**

16 A. Yes. Martin Solar is being located in an area of the existing site which is
17 currently zoned for power generation facilities. (See Exhibit ES-9)

18 **Q. What is the anticipated construction schedule for the Martin Solar**
19 **project?**

20 A. FPL would expect construction to commence by the end of 2008. The first
21 solar generation is expected to come on-line as early as the end of 2009.
22 Construction is expected to be completed by the end of 2010.

1 **Q. Is FPL using reasonable and customary industry practices in the design,**
2 **procurement and construction of the Martin Solar project in a cost-**
3 **effective manner appropriate to the location of the facility?**

4 A. Yes. FPL is highly experienced in designing, procuring and constructing a
5 wide variety of utility facilities in the Florida environment. FPL is using
6 trained and qualified employees following well-established practices and
7 procedures to develop the design, procurement and construction requirements
8 for the project.

9
10 FPL is also calling upon the expertise and experience of its sister company,
11 FPL Energy, which is the operator and an owner of the world’s largest solar
12 thermal facility, the 310 MW Solar Electric Generating System (“SEGS”)
13 located in the Mojave Desert in California. The Martin Solar project will use
14 very similar, albeit updated, solar collection technology that has produced
15 reliable renewable solar power and energy for about 20 years at SEGS. FPL
16 Energy recently completed an upgrade at SEGS, for which it did a global
17 assessment of potential suppliers of tubing, which is at the heart of solar
18 thermal energy collection. FPL Energy is also in the process of developing a
19 250 MW solar thermal facility in California. FPL is drawing upon the
20 expertise, international relationships and experience of FPL Energy in order to
21 achieve design, procurement and construction efficiencies for the benefit of its
22 customers.

1 **Q. Will the operation of the Martin Solar project reduce FPL’s use of fossil**
2 **fuels, specifically natural gas and oil?**

3 A. Yes. There will be fuel savings to FPL’s customers as a result of Martin
4 Solar. Over the 30-year life of the project, the Martin Solar project is
5 estimated to save customers approximately 41 million MMBtu of natural gas,
6 591,000 barrels of residual oil and 20,000 barrels of distillate oil. (See Exhibit
7 ES-10)

8 **Q. What effect will the Martin Solar project have with respect to FPL’s**
9 **greenhouse gas emissions?**

10 A. The expected reduction of system-wide CO₂ emissions as a result of the
11 Martin Solar project is projected to be approximately 2.75 million tons over a
12 30-year period. According to the U.S. EPA this is the equivalent of removing
13 over 18,700 cars from the road every year for the entire life of the project.
14 (See Exhibit ES-11)

15 **Q. What effect will the Martin Solar project have with respect to other air**
16 **emissions?**

17 A. The expected reduction of system-wide emissions as a result of the Martin
18 Solar project is estimated to be approximately 2,000 tons of NO_x and 1,900
19 tons of SO₂, over a 30-year period. (See Exhibit ES-12)

20 **Q. What other benefits generally will the Martin Solar project provide?**

21 A. The technology choice and design of the Martin Solar project took into
22 consideration a number of factors including the existing topography, impact
23 on natural resources, weather, and other operational considerations

1 appropriate to the location. The Martin Solar project will be the first hybrid
2 energy center in the world which integrates solar power generation into a large
3 combined cycle plant. This approach could be used at other duct-fired
4 combined cycle units in Florida. This technology will be implemented
5 without drawing from new water sources, requires no further acquisition of
6 land and will not require new transmission rights-of-way.

7
8
9 **V. FPL'S PROPOSED DESOTO NEXT GENERATION SOLAR ENERGY**
10 **CENTER ("DESOTO SOLAR")**

11
12 **Q. Please provide an overview of FPL's proposed DeSoto Solar project.**

13 A. The DeSoto Solar project will be built utilizing solar PV technology. The
14 project is planned to be 25 MW of capacity and is projected to produce an
15 average of 42,000 MWh of electricity annually. Construction of the plant is
16 planned to begin during the fourth quarter of 2008 with an in-service date
17 during the second quarter of 2010. (See Exhibits ES-13 and ES-14)

18 **Q. Please describe the solar energy technology that will be used for the**
19 **project.**

20 A. DeSoto Solar will utilize solar PV technology that converts sunlight directly
21 into electric power. Depending on the final outcome of design parameters,
22 which are currently being reviewed and negotiated, this facility will utilize
23 either a fixed array, oriented to ensure the facility captures the maximum

1 amount of electricity from the sun over the entire year, or a tracking array that
2 is designed to follow the sun as it traverses through the sky. In addition to the
3 possible differences in mounting technologies this facility will utilize cutting
4 edge solar panel technology. (See Exhibit ES-15)

5 **Q. How much electricity will the proposed DeSoto Solar project produce?**

6 A. DeSoto Solar will have an installed capacity of 25 MW. FPL is calculating
7 the facility will produce electricity at a capacity factor of approximately
8 19.4%, which will likely be conservative if a tracking system is determined to
9 be cost effective and utilized. At a minimum, FPL currently projects this
10 facility to produce an average of 42,000 MWh of electricity per year, enough
11 to meet the needs of over 3,000 homes or over 7,000 people.

12 **Q. What are some of the unique aspects of the DeSoto Solar project?**

13 A. DeSoto Solar will be the largest solar PV facility in the world. As previously
14 noted, the facility is projected to have 25 MW of capacity. This project will
15 require up to 180 acres of land. (See Exhibits ES-16 and ES-17)

16 **Q. Will the operation of the DeSoto Solar project reduce FPL's use of fossil
17 fuels, specifically natural gas and oil?**

18 A. Yes. The electricity generated from DeSoto Solar is projected to reduce the
19 consumption of fossil fuels by 7 million MMBtu of natural gas, 266,000
20 barrels of residual oil, and 11,000 barrels of distillate oil over the life of the
21 asset. (See Exhibit ES-18)

- 1 **Q. What effect will the DeSoto Solar plant have with respect to FPL’s**
2 **greenhouse gas emissions and other air emissions?**
- 3 A. DeSoto Solar is projected to prevent more than 575,000 tons of CO₂ from
4 entering the atmosphere. It is projected also to avoid the release of
5 approximately 780 tons of NO_x as well as the release of over 800 tons of SO₂
6 into the atmosphere. According to the EPA this is equivalent to avoiding
7 emissions from over 4,500 cars per year. (See Exhibits ES-19 and ES-20)
- 8 **Q. HB 7135 requires clean energy resources to be “zero greenhouse gas**
9 **emitting at the point of generation.” Does the DeSoto Solar project**
10 **satisfy this requirement?**
- 11 A. Yes. FPL’s proposed DeSoto Solar facility will be zero greenhouse gas
12 emitting at the point of generation.
- 13 **Q. Has FPL secured the necessary land to construct the DeSoto Solar**
14 **project?**
- 15 A. Yes. FPL is the owner of the land associated with the proposed DeSoto Solar
16 project. (See Exhibit ES-21)
- 17 **Q. Does FPL have transmission rights with respect to the proposed DeSoto**
18 **Solar project?**
- 19 A. Yes. FPL has the necessary transmission rights. (See Exhibit ES-22)
- 20 **Q. Does FPL have the zoning permits required for the DeSoto Solar project?**
- 21 A. Yes. FPL has secured all necessary zoning permits required to build the
22 proposed facility. (See Exhibit ES-23)

1 **Q. Is FPL using reasonable and customary industry practices in the design,**
2 **procurement and construction of the DeSoto Solar project in a cost-**
3 **effective manner appropriate to the location of the facility?**

4 A. Yes. FPL is highly experienced in designing, procuring and constructing a
5 wide variety of utility facilities in the Florida environment. In this case, FPL
6 has secured bids from several leading solar PV manufacturers and contractors
7 who have experience in utility-scale projects.

8
9 For example, FPL followed a well-defined request for information and request
10 for proposals process to identify qualified suppliers of PV systems necessary
11 for the project. FPL has issued a request for proposals to take advantage of
12 competition in order to obtain the best pricing and to ensure the most
13 technically advanced and experienced companies participate. FPL's design
14 specifications also require compliance with applicable building code
15 requirements. This site will be designed and constructed to meet or exceed
16 applicable wind loading requirements.

17 **Q. What is the anticipated construction schedule for the DeSoto Solar**
18 **project?**

19 A. FPL would expect construction to commence by the end of 2008. The first
20 solar generation is expected to come on-line as early as mid 2009.
21 Construction is expected to be completed by the second quarter of 2010.

1 **Q. What other benefits generally will the DeSoto Solar project provide?**

2 A. The engineering analyses for the design of the DeSoto Solar project took into
3 consideration a number of factors including the existing topography, impact
4 on natural resources, weather, and other operational considerations
5 appropriate to the location. The use of PV technology at the DeSoto site will
6 not require extensive displacement of soil/land and will not require the
7 utilization of cooling water. DeSoto County will also reap the benefits of
8 having the largest solar PV facility in the world that incorporates innovative
9 new green technology and will serve as a showcase for educational and other
10 community outreach programs. In addition, FPL will work with the County to
11 develop and provide outreach programs and an educational kiosk that will
12 serve to further increase public awareness and education of renewable energy
13 technologies. Public access to the educational kiosk will be available during
14 the day to be used by area schools as a field trip destination.

15
16

17 **VI. FPL’S PROPOSED SPACE COAST NEXT GENERATION SOLAR**
18 **ENERGY CENTER (“SPACE COAST SOLAR”)**

19

20 **Q. Please provide an overview of FPL’s Space Coast Solar project.**

21 A. Space Coast Solar will utilize solar PV technology and will be located at
22 NASA’s Kennedy Space Center, Florida. The project is planned for 10 MW
23 of installed capacity that is projected to produce approximately 16,000 MWh

1 of electricity annually. Construction of the project is expected to begin as
2 early as December 2008 with an in-service date during the fourth quarter of
3 2009. (See Exhibits ES-24 and ES-25)

4 **Q. Please describe the solar energy technology that will be used for the Space**
5 **Coast Solar project.**

6 A. Solar PV is the technology to be utilized at the Space Coast Solar facility. PV
7 is a technology that converts sunlight directly into electricity. This project
8 will be constructed to ensure the facility captures the maximum amount of
9 electricity from the sun over the entire year. (See Exhibit ES-26)

10 **Q. How much electricity will the proposed Space Coast Solar project**
11 **produce?**

12 A. The proposed Space Coast Solar facility will have an installed capacity of 10
13 MW. FPL is projecting the facility will produce electricity at approximately
14 an 18% capacity factor. FPL estimates that this facility will produce an
15 average of 16,000 MWh of electricity per year, enough for more than 1,100
16 homes or 2,600 people.

17 **Q. What are some of the unique aspects of the Space Coast Solar project?**

18 A. The Space Coast Solar facility will be the first large scale solar PV facility
19 located near the Florida coastline and will be located on federally owned
20 property. Further, the project will utilize one of the newest and most
21 advanced technologies available on the market. Thus, the proposed Space
22 Coast Solar facility will provide a platform to examine the technical and
23 economic attributes of a large scale solar PV facility near Florida's east coast.

1 (See Exhibit ES-27)

2 **Q. Will the operation of the Space Coast Solar facility reduce FPL's use of**
3 **fossil fuels, specifically natural gas and oil?**

4 A. Yes. Generating electricity from solar energy reduces the consumption of
5 fossil fuels. Space Coast Solar is projected to reduce fuel costs by decreasing
6 fossil fuel consumption by 2.8 million MMBtu of natural gas, 117,000 barrels
7 of residual oil and 5,000 barrels of distillate oil. (See Exhibit ES-28)

8 **Q. What effect will the Space Coast Solar facility have with respect to**
9 **greenhouse gas emissions and other air emissions?**

10 A. Space Coast Solar is projected to prevent more than 227,000 tons of CO₂ from
11 entering the atmosphere over the life of the project. It will also avoid the
12 release of 343 tons of NO_x, as well as the release of 356 tons of SO₂ into the
13 atmosphere. This is equivalent to avoiding emissions from over 1,800 cars
14 per year. (See Exhibits ES-29 and ES-30)

15 **Q. HB 7135 requires clean energy sources to be "zero greenhouse gas**
16 **emitting at the point of generation." Will the Space Coast Solar project**
17 **satisfy this requirement?**

18 A. Yes. FPL's Proposed Space Coast Solar facility will be zero greenhouse gas
19 emitting at the point of generation.

20 **Q. Has FPL secured the necessary land to construct the Space Coast Solar**
21 **facility?**

22 A. FPL and NASA have an existing Memorandum of Understanding under which
23 the parties may undertake studies to determine the technical and financial

1 feasibility of renewable energy projects on land, or at/in facilities, owned by
2 NASA-Kennedy Space Center (“KSC”). On May 13, 2008, FPL and KSC
3 executed an access and indemnification agreement, which grants FPL an
4 option to lease the property in accordance with terms and conditions agreed
5 upon by the parties in the lease and a right of access to the property to
6 determine the suitability of constructing the PV facility on the property. FPL
7 expects to exercise its option to lease the property by entering into a binding
8 agreement by June 30, 2008. (See Exhibit ES-31)

9 **Q. Does FPL have transmission rights with respect to the proposed Space**
10 **Coast Solar facility?**

11 A. Yes. FPL has the necessary transmission rights. (See Exhibit ES-32)

12 **Q. Does FPL have the zoning permits required for the Space Coast Solar**
13 **facility?**

14 A. Yes. The project will be located on NASA’s land which is government
15 owned; thus, the project will not be subject to local zoning requirements. (See
16 Exhibit ES-31)

17 **Q. Is FPL using reasonable and customary industry practices in the design,**
18 **procurement and construction of Space Coast Solar in a cost-effective**
19 **manner appropriate to the location of the facility?**

20 A. Yes. FPL is highly experienced in designing, procuring and constructing a
21 wide variety of utility facilities in the Florida environment. As with the
22 Martin Solar and DeSoto Solar projects, FPL is using trained and qualified
23 employees following well-established practices and procedures to develop the

1 design, procurement and construction requirements for the project.

2

3 As with the DeSoto Solar project, FPL followed a well-defined request for
4 information and request for proposals process to identify qualified suppliers of
5 PV panels necessary for the project. FPL has issued a request for proposals to
6 take advantage of competition in order to obtain the best pricing and has
7 received a number of responses from qualified, internationally recognized
8 firms. The companies have demonstrated engineering design and construction
9 capabilities, and final agreements are being structured to contain provisions
10 which will ensure that strict performance and schedule commitments are met.
11 FPL's design specifications also require compliance with all local building
12 code requirements, including wind loading standards.

13 **Q. What is the anticipated construction schedule for the Space Coast Solar**
14 **facility?**

15 A. FPL would expect construction to commence by the end of 2008. The first
16 solar generation is expected to come on-line as early as mid 2009.
17 Construction is expected to be completed during the fourth quarter of 2009.

18 **Q. What other benefits generally will the Space Coast Solar project provide?**

19 A. The engineering analyses for the design of the Space Coast Solar project, like
20 the DeSoto Solar project, took into consideration a number of factors
21 including the existing topography, impact on natural resources, weather, and
22 other operational considerations appropriate to the location. Also, like the
23 DeSoto Solar project, use of PV technology at the Space Coast Solar site will

1 not require extensive soil displacement and will not require cooling water.
2 The Space Coast Solar project represents an innovative approach of partnering
3 NASA, a highly qualified governmental organization that will develop and
4 use solar technology on a commercial scale for the space program, with FPL,
5 the global leader in utilizing solar technology. This partnership creates a
6 platform for the development of solar technology on a joint initiative basis for
7 the state as well as the nation. In addition, FPL will work with NASA and
8 Brevard County to develop and provide outreach programs and an educational
9 kiosk that will serve to further increase public awareness and education of
10 renewable energy technologies. Public access to the educational kiosk will be
11 available during the day to be used by area schools as a field trip destination.
12
13

14 VII. SOLAR GENERATION DEVELOPMENT

15
16 **Q. Please describe the benefits of pursuing these three solar projects on the**
17 **scale proposed by FPL.**

18 A. FPL is proposing to construct and operate three discrete solar energy projects
19 totaling 110 MW with different designs, operating at diverse locations.
20 Consistent with HB 7135's direction toward demonstrating the feasibility and
21 viability of clean, zero greenhouse gas emitting energy systems in Florida,
22 these projects will provide utility-scale solar power to Florida and FPL
23 customers. These projects not only will generate large amounts of clean,

1 renewable energy, but also will provide significant information and
2 experience regarding key aspects of designing, siting, constructing and
3 operating different solar technologies at various locations in Florida.
4 Moreover, by constructing three large scale projects in parallel, FPL will be
5 able to capture significant economies of scale in procurement and construction
6 costs. Additionally, the opportunity to participate in such pioneering projects
7 has led to intense competition by some of the world's leading solar firms. Our
8 process ensures that FPL will be able to secure the best options available in
9 the world. Solar power can act as a hedge in scenarios where fossil fuel prices
10 continue to escalate and carbon costs are higher. FPL's proposed projects also
11 position FPL to meet likely federal or state renewable portfolio standards.
12 Finally, this approach supports the important initiative passed by the
13 Legislature and the governor's intention of securing Florida's clean energy
14 future.

15 **Q. Please describe the costs of the projects.**

16 A. Based upon the information available at the time of this filing, FPL estimates
17 that the total capital cost of the projects is about \$688 million, not including
18 interest during construction. There are uncertainties with respect to the costs
19 of the projects that will continue to be addressed during project development,
20 discussed below. Necessarily, FPL will have more information with respect
21 to these uncertainties and their potential effects on costs, either positively or
22 negatively, at the time that FPL makes its ECRC filings with respect to the
23 projects.

1 Based on the \$688 million estimate, the net cost of the projects in cumulative
2 present value of revenue requirements in 2008 dollars (“CPVRR”) is
3 approximately \$558 million. In 2011, the first year when all three projects are
4 in service for the full year and the impact to customer bills are the highest, the
5 system average bill impact is projected to be an increase of 83 cents per 1,000
6 kWh. Over the first 25 years of operations (2009-2033) the system average
7 bill impact is projected to be an increase of 31 cents for a typical customer bill
8 of 1,000 kWh per month.

9 **Q. Why is FPL providing information for all three projects together in this**
10 **filing, rather than with respect to each separate project?**

11 A. FPL is in the process of selecting vendors and negotiating contracts to cost-
12 effectively implement the projects. FPL is stating total cost information for
13 all three projects, rather than each separate project, to help maintain its
14 bargaining position in relation to prospective vendors. This assists FPL in
15 cost-effectively implementing the projects and benefits its customers.

16 **Q. Are there uncertainties with respect to the costs of the projects?**

17 A. Yes. FPL is providing the best available information with respect to the costs
18 of the projects at this stage of development. However, all the projects are
19 subject to pricing changes, to the benefit or otherwise, due to the global
20 volatility of key commodities such as steel, copper, concrete and silicone.
21 Additionally, fluctuations in the value of the U.S. dollar could impact, either
22 positively or negatively, final project pricing since many key components are
23 currently manufactured overseas. FPL estimates that the overall costs of the

1 project could vary by plus or minus ten to fifteen percent, due to these and
2 other considerations.

3
4 With respect to DeSoto Solar and Space Coast Solar, uncertainties include that
5 final agreements have not been negotiated or executed for solar PV panels or
6 installation, and that solar PV projects of this scope and scale have not
7 previously been constructed in Florida. FPL is using thorough due diligence
8 in its project planning as well as care in its contract negotiations to manage
9 such uncertainties.

10
11 Martin Solar similarly is not subject to completed procurement and
12 installation contracts. In addition, important aspects of the Martin Solar
13 project are novel in the industry. Designing and implementing new
14 technology is less certain than designing and implementing well-established
15 technology, such as gas-fired combined cycle plants.

16
17 FPL can take advantage of solar thermal lessons learned from FPL Energy's
18 SEGS plant, its current efforts on a 250 MW project in California and intends
19 to fully leverage its buying power due to the large economies of scale of these
20 projects to reduce costs. Access to such existing expertise and buying power
21 with respect to solar steam generation is invaluable. However, the integration
22 proposed for Martin Solar -- namely, to provide the solar generated steam into
23 an existing combined cycle plant as a substitute for steam generated from

1 combusting natural gas -- has not previously been done. This gives rise to
2 cost and technical uncertainties that have not been resolved at this stage of the
3 project. As with the solar PV projects, FPL will use thorough due diligence,
4 careful contract negotiation and other appropriate measures to manage such
5 risks.

6 **Q. Will the three proposed solar energy projects provide firm capacity to**
7 **FPL?**

8 A. As mentioned, by its design the Martin Solar project will serve as a “fuel
9 substitution” resource, replacing steam generated by fossil fuels with steam
10 generated by the solar thermal facility. Consequently, this facility is not
11 designed to provide firm capacity.

12
13 The two PV based projects, DeSoto Solar and Space Coast Solar, may be able
14 to supply firm capacity. However, due to the intermittent nature of the solar
15 resource, FPL will initially consider these PV facilities as non-firm resources
16 until sufficient operating experience is obtained to determine what
17 contribution these facilities can reliably provide at FPL’s system peak hours
18 for system reliability planning purposes.

19 **Q. Is FPL filing a site certification application pursuant to the Power Plant**
20 **Siting Act for Martin Solar, Desoto Solar or Space Coast Solar?**

21 A. No. DeSoto Solar and Space Coast Solar are not subject to the requirement
22 for a filing with the Florida Department of Environmental Protection pursuant
23 to the Power Plant Siting Act. FPL recently filed a site certification

1 modification with respect to the proposed construction of Martin Solar at its
2 existing certified Martin Plant site.

3 **Q. What is the status of FPL's development of wind renewable energy**
4 **projects?**

5 A. FPL is working to develop its St. Lucie Wind project, which is designed to
6 generate up to 13.8 MW of renewable wind energy, at the FPL owned St.
7 Lucie Nuclear Power Plant site on Hutchinson Island. In order to rezone the
8 property for construction of the project, FPL has provided extensive
9 information and analyses to the County planning staff and the St. Lucie
10 County Commissioners. This information has also been provided to State and
11 local officials, and to the general public, through a series of ongoing public
12 meetings, and at FPL's dedicated website (www.stluciewind.com). A formal
13 review and zoning determination hearing has been requested by FPL. FPL
14 has currently provided answers to the County's questions in the rezoning
15 process and FPL continues to work with County staff. Once FPL satisfies the
16 County staff technical review, the project is expected to receive formal
17 consideration by the St. Lucie County Planning and Zoning Board and then be
18 brought before the St. Lucie County Commission. Currently, the dates are not
19 set for this formal consideration. It is uncertain whether the needed approvals
20 will be granted; therefore, unless and until the approvals are obtained, FPL is
21 not in a position to proceed with the St. Lucie Wind project. In addition, FPL
22 continues with its due diligence efforts to further identify possible locations
23 for future wind development project(s) in the state of Florida.

1 **Q. How does FPL propose to recover the costs of its renewable energy**
2 **projects once they have been determined by the Commission to be eligible**
3 **under HB 7135?**

4 A. HB 7135 envisions that cost recovery for eligible renewable energy projects
5 will occur under the ECRC. The Commission has a continuing series of
6 dockets for the review and approval of costs to be recovered by electric
7 utilities through the ECRC; for 2008, this is Docket No. 080007-EI.
8 Consistent with the procedural schedule for Docket No. 080007-EI, FPL
9 intends to file for recovery of those items that it is eligible to recover based on
10 the costs it has incurred and expects to incur for the renewable energy projects
11 through the end of 2008, as part of the estimated/actual true-up filing that will
12 be made on August 4, 2008. FPL will then file its projection of those items
13 that it expects to be eligible to recover based on expected costs for the
14 renewable energy projects in 2009, as part of the projection filing that will be
15 made on August 29, 2008. As with its other projects recovered under the
16 ECRC, FPL will ask that the 2008 estimated/actual and 2009 projected
17 recoverable items associated with the renewable energy projects be included
18 in the ECRC factor that will be applied to customer bills during 2009. The
19 ECRC currently provides for recovery of operating and maintenance expenses
20 and for a return both on and of capital expenditures on qualifying projects.
21 FPL expects that both forms of recovery will be utilized with respect to the
22 renewable energy projects. FPL will continue to follow the procedures for

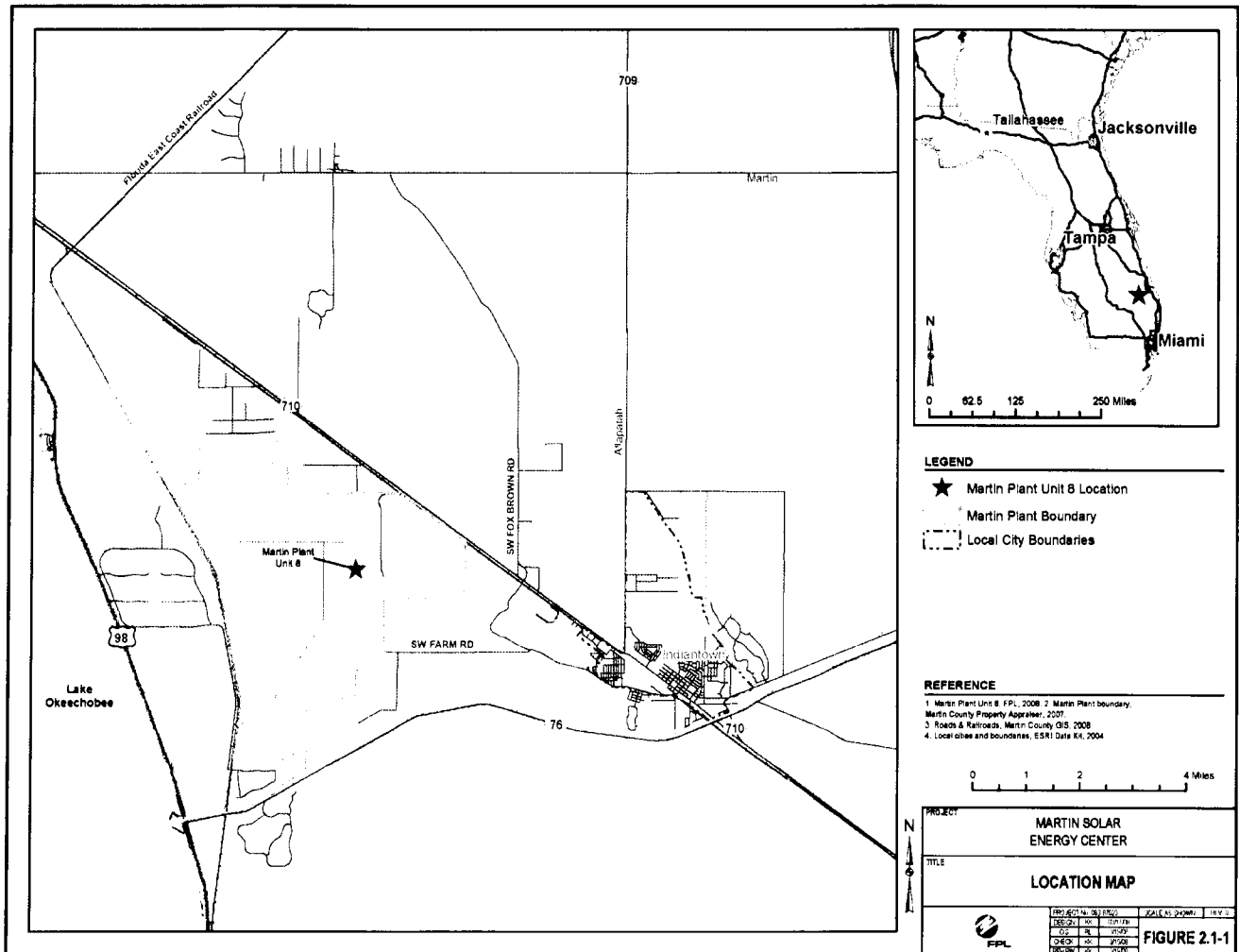
1 ECRC recovery of the renewable energy project costs in the subsequent years'
2 ECRC dockets.

3 **Q. Will FPL report to the Commission as part of ongoing ECRC cost-**
4 **recovery proceedings the construction costs, in-service costs, operating**
5 **and maintenance costs, hourly energy production and any other**
6 **information required by the Commission?**

7 A. Yes. FPL will provide the required information as part of its ongoing ECRC
8 filings.

9 **Q. Does this conclude your testimony?**

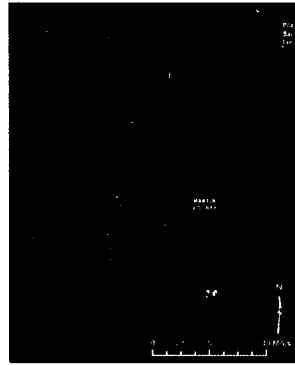
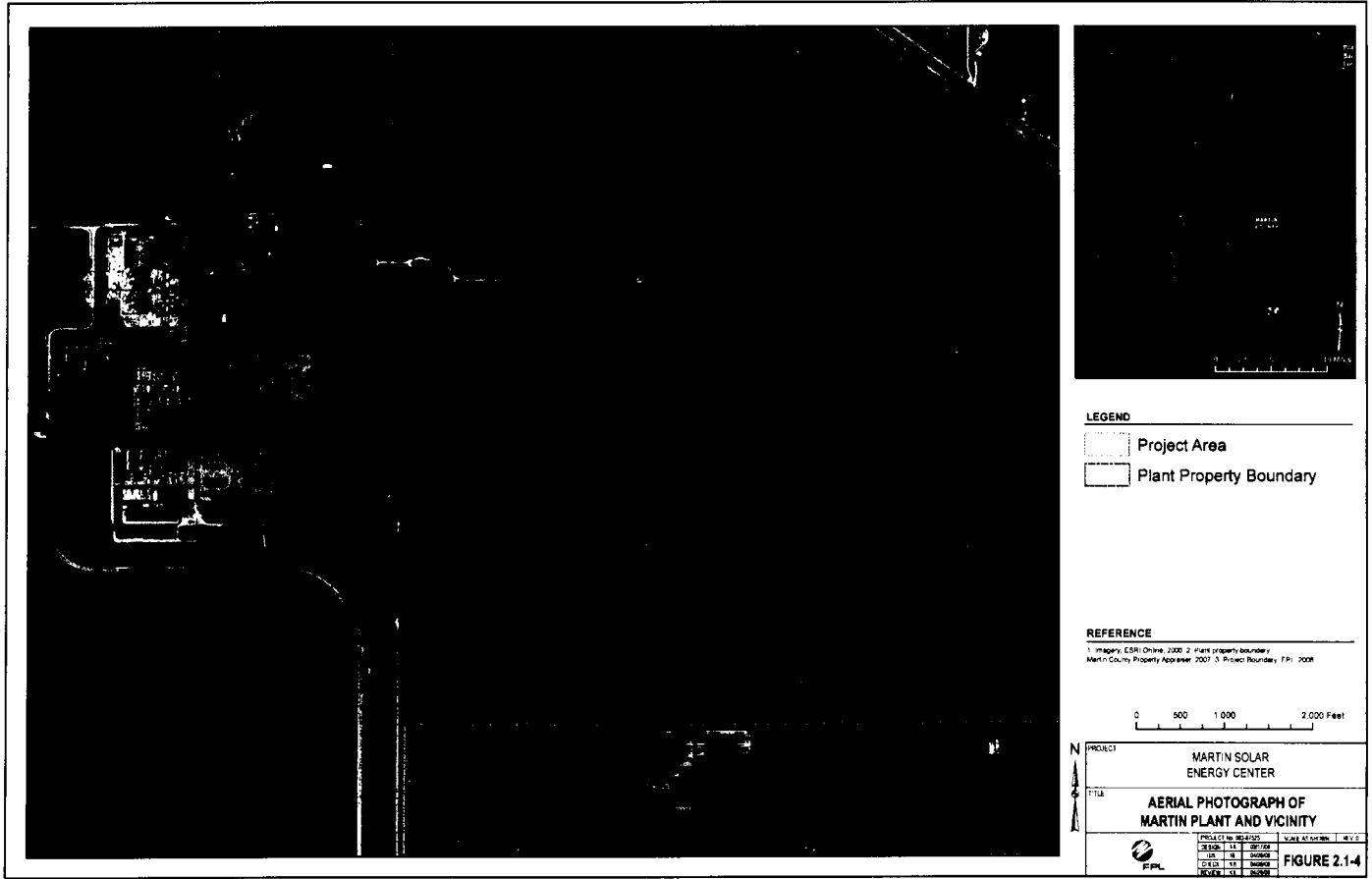
10 A. Yes.





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FPSC-COMMISSION CLERK

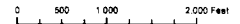


LEGEND

-  Project Area
-  Plant Property Boundary

REFERENCE

1. Imagery, ESRI, Oracle, 2000; 2. Plant property boundary; Martin County Property Appraiser, 2007; 3. Project boundary; FPI, 2008




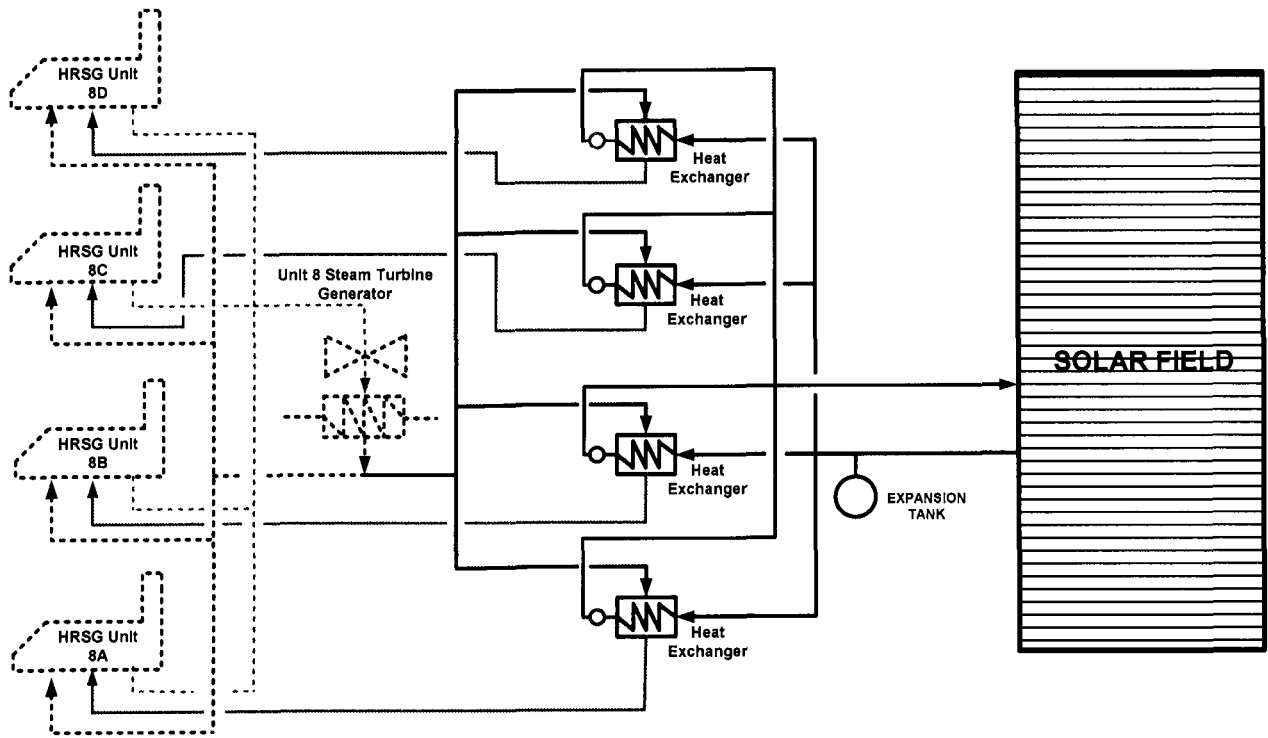
PROJECT	MARTIN SOLAR ENERGY CENTER		
TITLE	AERIAL PHOTOGRAPH OF MARTIN PLANT AND VICINITY		
	PROJECT NO.	SCALE	REV.
	08-11-0000	AS SHOWN	1
	08-11-0000	AS SHOWN	1

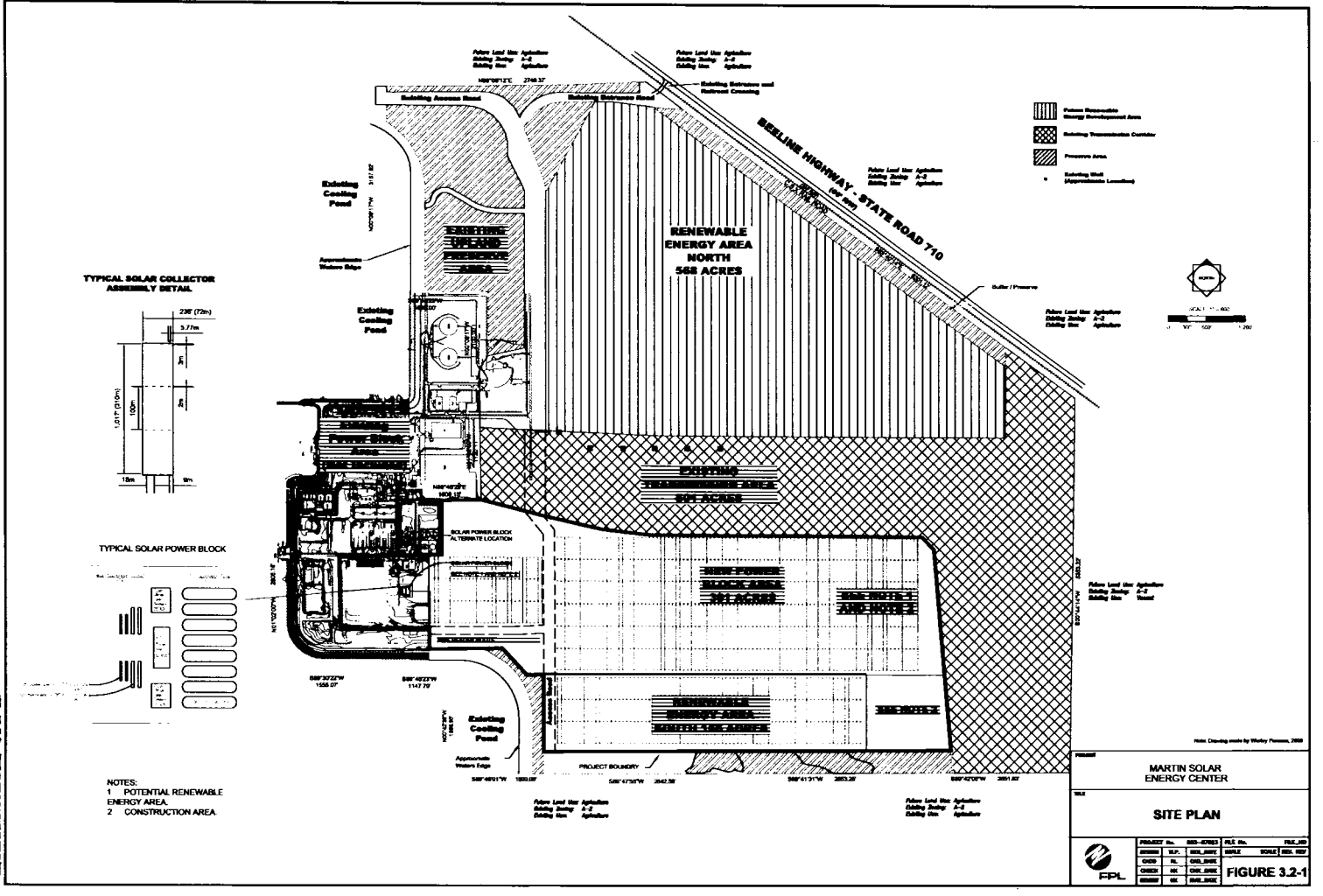
FIGURE 2.1-4







Martin Solar - Artist Conception



MARTIN PLANT Page 1 of 2

FPL Property Information

Created by Tim Corson on 09/11/2002 at 09:04:15 AM

Site Code (New):	1-12-085-005 An FPL internal unique identifier based on Rights - StateFIPS - CountyFIPS - SeqProperty#
Property Name:	<input checked="" type="checkbox"/> Martin Plant; Martin Substation
Map Name:	Martin Plant; Martin Sub
Site Type:	Power Plant - Fossil
Site Type Code:	PPF
Site Code (Old):	1-03-21-005
Site Rights:	1 - Fee Owned
Purchase Information:	Consists of 8 individual purchase(s) totaling 11309.43 original acres
Title Owner:	FPL
Links to Site Images:	>> No images currently available <<

General Information:		Property Information:	
Address1:	PO Box 1247	Total Original Acres:	11,309.4300
Address2:		Sold Acres:	130.0000
City:	Indiantown	Remaining Acres:	11179.4300
County / FIPS:	Martin / 085	101 - In Service:	11,179.4300
State / FIPS:	FL / 12	105 - Future Use:	0.0000
Zip Code:	34956	121 - Non Utility:	0.0000
Area / Code:	East / ED	Total Purchase Price:	\$7,591,903.00
Primary Status / Code (Single Value) (i.e. In Use, Planned Use):	In Use / IU	Balance Capitalized:	\$7,501,421.77
Primary Land Use / Code (Single Value) (i.e. Office, Substation):	Power Plant - Fossil / PPF	Average Price/Acre:	\$671.29
Surplus Acres:	0.0000	Total Taxes Paid (Annual Amount):	\$1,566,691.74
Based on Tax Year:	2005		
Current Assessed Value (Annual Amount):	\$96,800,100.00		

Purchases/Land Use:		License(s):	
Total Purchases:	8	Total Licenses:	0
Dates Acquired:	12/6/1972 - 1/12/1979	Total Acres Licensed:	0.000
Status (Multi-Value) (i.e. In Use, Planned Use, Surplus, Non Utility, Sold):	In Use	Total License Payments (Annual Revenue):	\$0.00
Land Use (Multi-Value) (i.e. Office, Substation):	Power Plant - Fossil	License Reference(s) #:	

Conveyance(s):		Easement(s):	
Total Conveyances:	6	Total Easements:	3
Conv. Acres by Deed:	130.000	Acres Encumbered:	0.000
Total Conv. Sale Price:	\$131,267.06	Total Easement Price:	\$0.00
Total Acres Conveyed:	130.000	Total Acres Granted:	30.000
Total Acres Compensated:		Average Price/Acre:	

Status (Multi-Valued) 101 - In Use 105 - Future Use 121 - Non Utility	130.000 101	Status (Multi-Valued) 101 - In Use 105 - Future Use 121 - Non Utility	\$0.00 101
--------------------------------------------------------------------------------	----------------	--------------------------------------------------------------------------------	---------------

# of Vertical Improvements	7
Vertical Improvements:	<input type="checkbox"/> Martin Plant Yard A Substation <input type="checkbox"/> Martin 500Kv Switchyard <input type="checkbox"/> Martin Substation <input type="checkbox"/> Martin Plant Yard B Substation <input type="checkbox"/> Martin Plant - Radio Tower <input type="checkbox"/> Martin Plant - Fiber Hut <input type="checkbox"/> Martin Plant
Folios:	06-40-39-000-000-00191-00000 22-39-37-000-000-00010-20000 22-39-37-000-000-00030-80000 23-39-37-000-000-00010-00000 24-39-37-000-000-00010-80000 25-39-37-000-000-00010-50000 26-39-37-000-000-00010-30000 29-39-38-000-000-00010-50000 30-39-38-000-000-00010-30000 31-39-38-000-000-00010-10000 32-39-38-000-000-00010-90000 35-39-37-000-000-00010-40000 36-39-37-000-000-00010-20000 19-39-38-000-000-00010-60000 20-39-38-000-000-00030-00000 28-39-38-000-000-00010-70000 13-39-37-000-000-00010-10000 13-39-37-001-000-06280-00000 13-39-37-002-000-00230-30000 13-39-37-002-000-00250-80000 13-39-37-002-000-00510-40000 13-39-37-002-000-00590-70000 13-40-37-000-000-00070-60000 14-39-37-000-000-00010-90000 15-39-37-000-000-00020-40000 20-39-38-000-000-00020-20000 21-39-38-000-000-00030-80000 01-40-37-000-000-00010-40000 02-40-37-000-000-00010-20000 11-40-37-000-000-00010-30000 12-40-37-000-000-00010-10000 06-40-38-000-000-00010-10000 07-40-38-000-000-00030-50000 18-40-38-000-000-00050-70000
S-T-R (Section-Township-Range)	22 39 37 23 39 37 24 39 37 25 39 37 26 39 37 35 39 37 36 39 37 29 39 38 30 39 38 31 39 38 32 39 38 19 39 38 20 39 38 28 39 38 04 40 38 05 40 38

Inter-Office Correspondence



To: Buck Martinez – EX1/JB

Date: May 14, 2008

From: G. L. Whiting, Jr.

Location: Transmission Services

Subject: PV Installation Martin #8

As we discussed today, and as follow up confirmation to the Email dated April 21, 2008 to John Gnocco from Genese Doyle, this memo is to confirm that the existing rights on FPL's transmission system reserved for Martin Unit No. 8 are sufficient for the full output of the unit after installation of the Solar array since there will be no change in the electrical output of the unit.

A handwritten signature in black ink, appearing to read "G. L. Whiting, Jr.", is written over the typed name.

G. L. Whiting, Jr.
Transmission Business Manager
Transmission Services

[1124]

BEFORE THE BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

796485 RESOLUTION NUMBER 89-8.21(b)

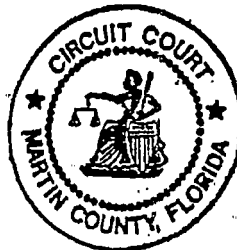
[REGARDING REQUEST FOR A SPECIAL EXCEPTION TO ALLOW FOR A HEIGHT IN EXCESS
OF SIXTY (60) FEET ON CERTAIN LANDS LOCATED EIGHT (8) MILES WEST OF
INDIANTOWN ON SR 710 AND FIVE (5) MILES EAST OF LAKE OKEECHOBEE

WHEREAS, this Board has made the following determinations of fact:

1. Pursuant to Chapter 35-5.8, CODE OF LAWS AND ORDINANCES OF MARTIN COUNTY, FLORIDA, Florida Power and Light Company has applied to this Board for a special exception to allow a height in excess of sixty (60) feet on lands in Martin County, Florida as described in Exhibit A attached hereto;
2. This Board has considered such recommendation;
3. Pursuant to the notice of hearing and affidavit of publication thereof attached as Exhibit B, this Board has held a public hearing on such application on the following date: August 8, 1989;
4. At such public hearing, all interested parties were given an opportunity to be heard for or against the granting of such application;
5. All conditions precedent to the granting of the special exception have been met.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MARTIN COUNTY, FLORIDA, THAT:

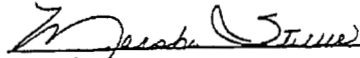
- A. Special exception to allow a height in excess of sixty (60) feet is hereby approved, for smokestacks and other industrial structures, not including buildings.
- B. The Clerk of the Circuit Court as ex-officio Clerk of this Board be and hereby is directed to record this resolution in the Official Records Book as well as in the Minutes of this Board.
- C. A certified copy of this resolution shall be forwarded to the applicant(s).

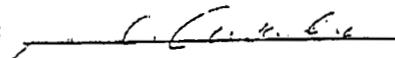


DULY PASSED AND ADOPTED THIS 8TH DAY OF AUGUST, 1989.

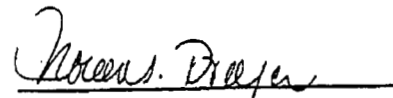
ATTEST:

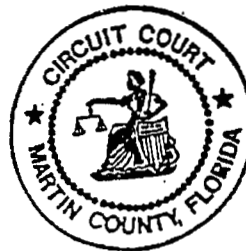
BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA


MARSHA STILLER, CLERK

BY: 
FRANK A. WACHA, CHAIRMAN

APPROVED AS TO FORM AND CORRECTNESS:

BY: 
NOREEN S. DREYER, COUNTY ATTORNEY



101300

FLORIDA POWER & LIGHT COMPANY
MARTIN EXPANSION PROJECT

EXHIBIT "A"

LEGAL DESCRIPTION

A parcel of land lying in Township 39 South, Range 38 East, Martin County, Florida, said land being described as follows:

The East 1,555 feet of the East half of Section 19, as measured parallel to and perpendicular to the East line of Section 19, and the South 2,100 feet of the East half of Section 19, as measured parallel to and perpendicular to the South line of Section 19; the South 2,100 feet of the West half of Section 20, as measured parallel to and perpendicular to the South line of Section 20; the North 3,750 feet of the West half of Section 29, as measured parallel to and perpendicular to the North line of Section 29, and the East 1,555 feet of the North 3,750 feet of the East half of Section 30, as measured parallel to and perpendicular to the East and North line of Section 30 respectively.

TOGETHER WITH:

The West half of Section 20, less the South 2,100 feet, as measured perpendicular and parallel to the South line of Section 20; all that part of the East half of Section 20, and Section 21 lying South of the South right-of-way line of the C.S.X. Railroad; all of Section 28, and the East half of Section 29; the East 1,500 feet of the West half of Section 29, as measured parallel and perpendicular to the East line of the West half of Section 29, less the North 3,750 feet, as measured parallel and perpendicular to the North line of Section 29.

LESS:

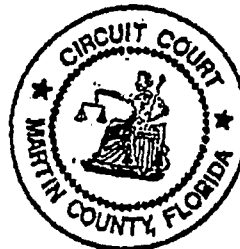
The East 1,555 feet of the South 2,100 feet of Section 19, Township 39 South, Range 38 East.

The West 1,600 feet of the South 2,100 feet of Section 20.

The West 1,600 feet of the North 1,120 feet of Section 29, LESS the West 52 feet of the South 178 feet of the North 1,120 feet of said Section 29.

The East 1,555 feet of the North 1,332 feet of Section 30, LESS the East 620 feet of the South 390 feet of the North 1,332 feet of said Section 30.

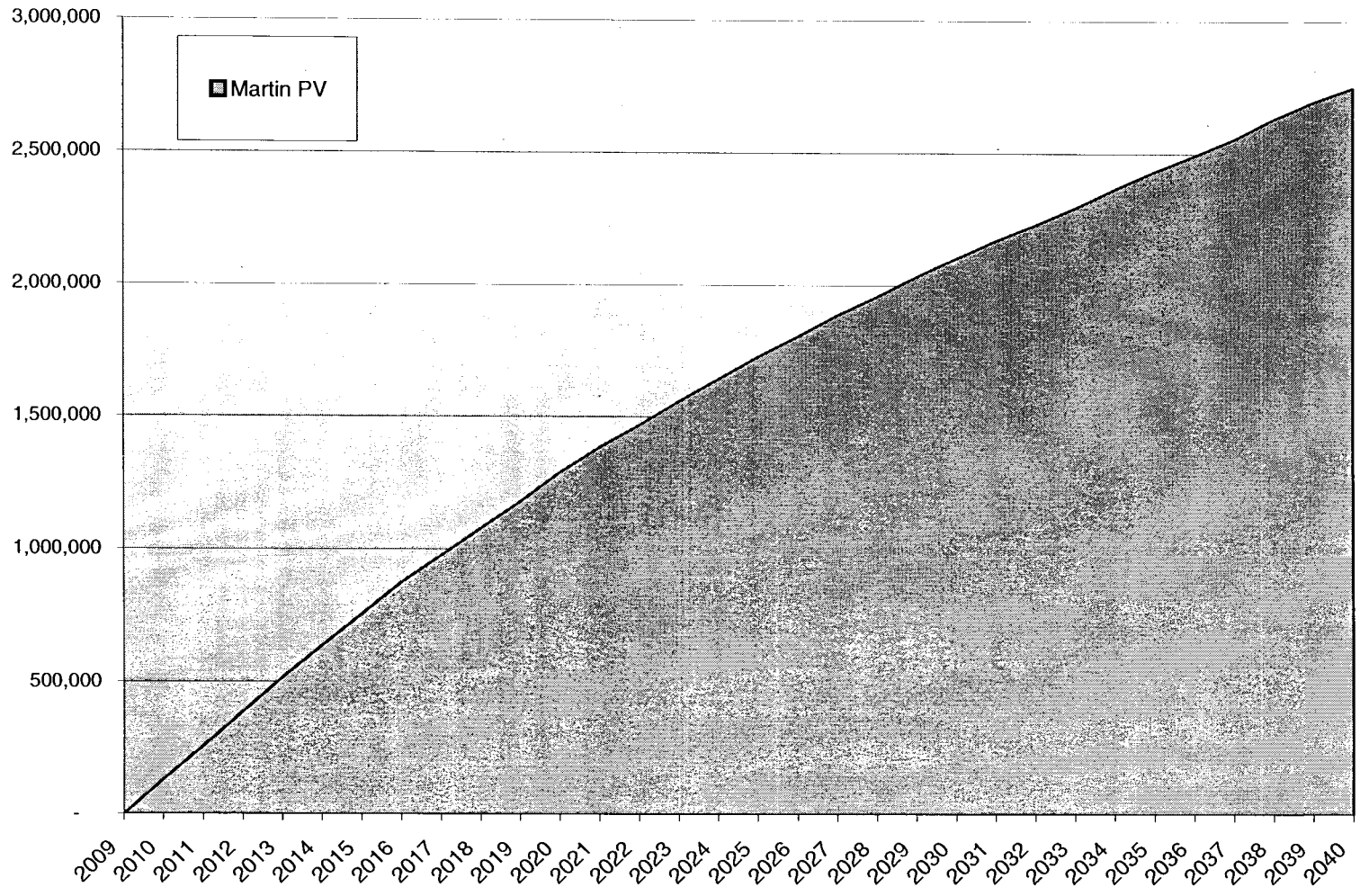
Containing 2.182 acres, more or less, and subject to easements and rights-of-way of record.



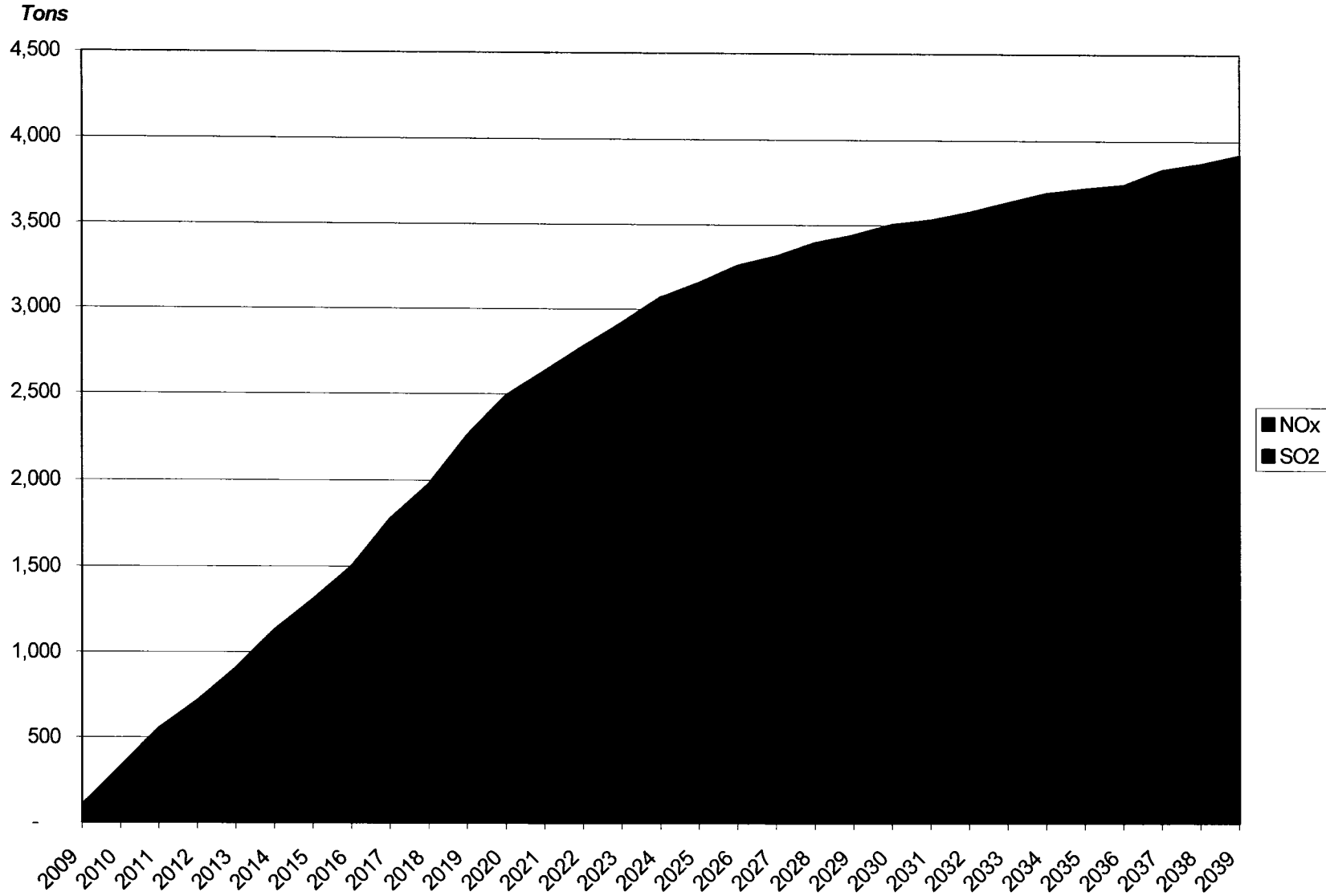
YEAR	Martin Solar		
	Residual Oil Barrels	Distillate Oil Barrels	Natural Gas MMBtu
2008	0	0	0
2009	0	0	0
2010	7,000	7,000	2,045,395
2011	35,000	1,000	1,819,926
2012	38,000	0	1,851,926
2013	27,000	0	1,885,926
2014	8,000	1,000	1,910,116
2015	47,000	0	1,637,116
2016	36,000	0	1,713,116
2017	39,000	0	1,452,830
2018	65,000	0	1,238,830
2019	39,000	6,000	1,368,830
2020	47,000	0	1,347,830
2021	38,000	3,000	1,068,900
2022	17,000	2,000	1,359,212
2023	19,000	0	1,248,587
2024	20,000	0	1,202,900
2025	21,000	0	1,261,900
2026	10,000	0	1,356,900
2027	12,000	0	1,301,900
2028	8,000	0	1,153,934
2029	9,000	0	1,092,934
2030	4,000	0	1,187,934
2031	6,000	0	1,237,934
2032	1,000	0	1,194,934
2033	4,000	0	1,146,934
2034	4,000	0	1,102,934
2035	9,000	0	1,127,934
2036	6,000	0	1,145,934
2037	3,000	0	1,172,934
2038	5,000	0	1,043,934
2039	3,000	0	1,042,934
2040	4,000	0	736,934
TOTAL	591,000	20,000	41,460,277

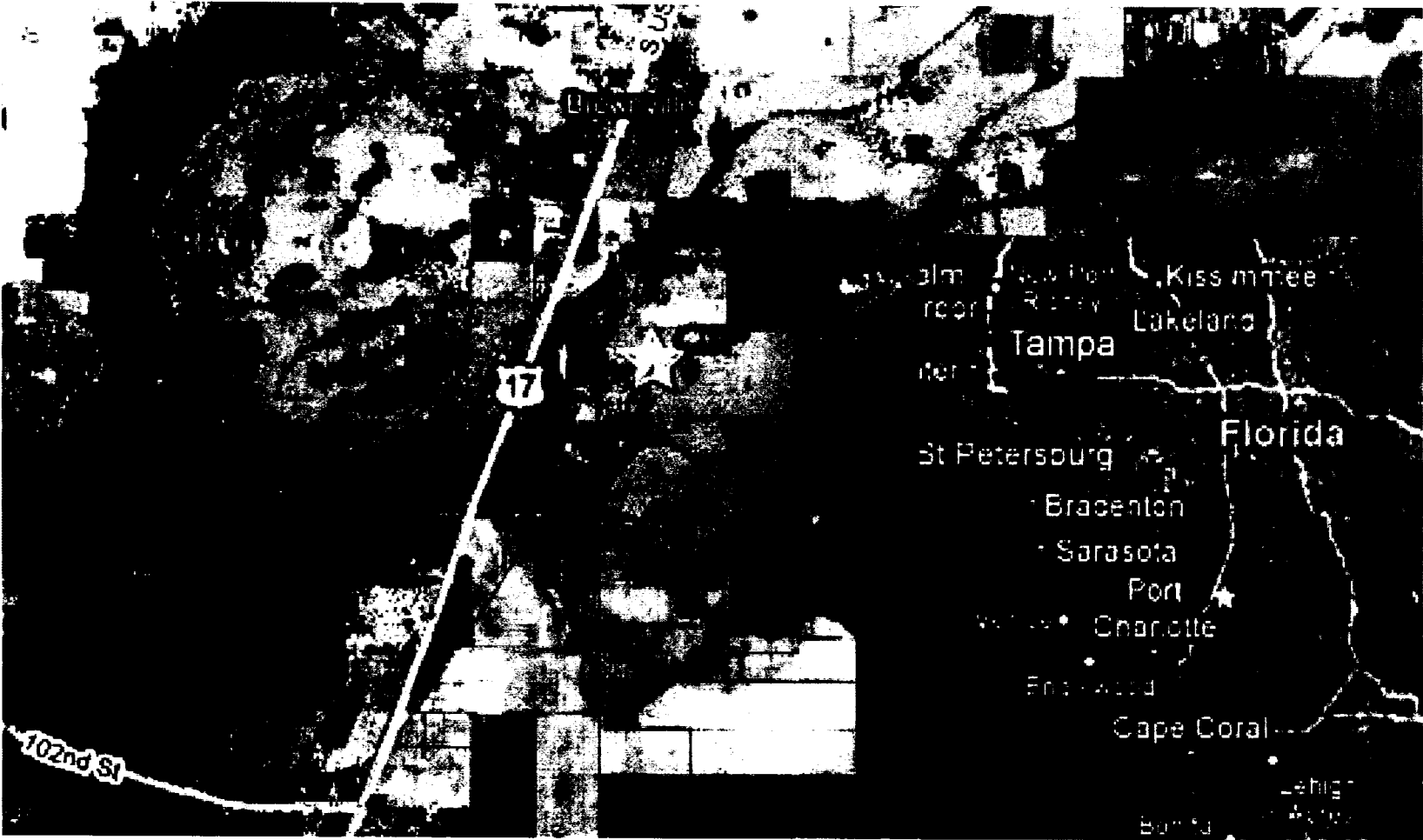
FPL Martin Solar Energy Center - System CO2 Reductions 2009-2040

Avoided CO2
Tons



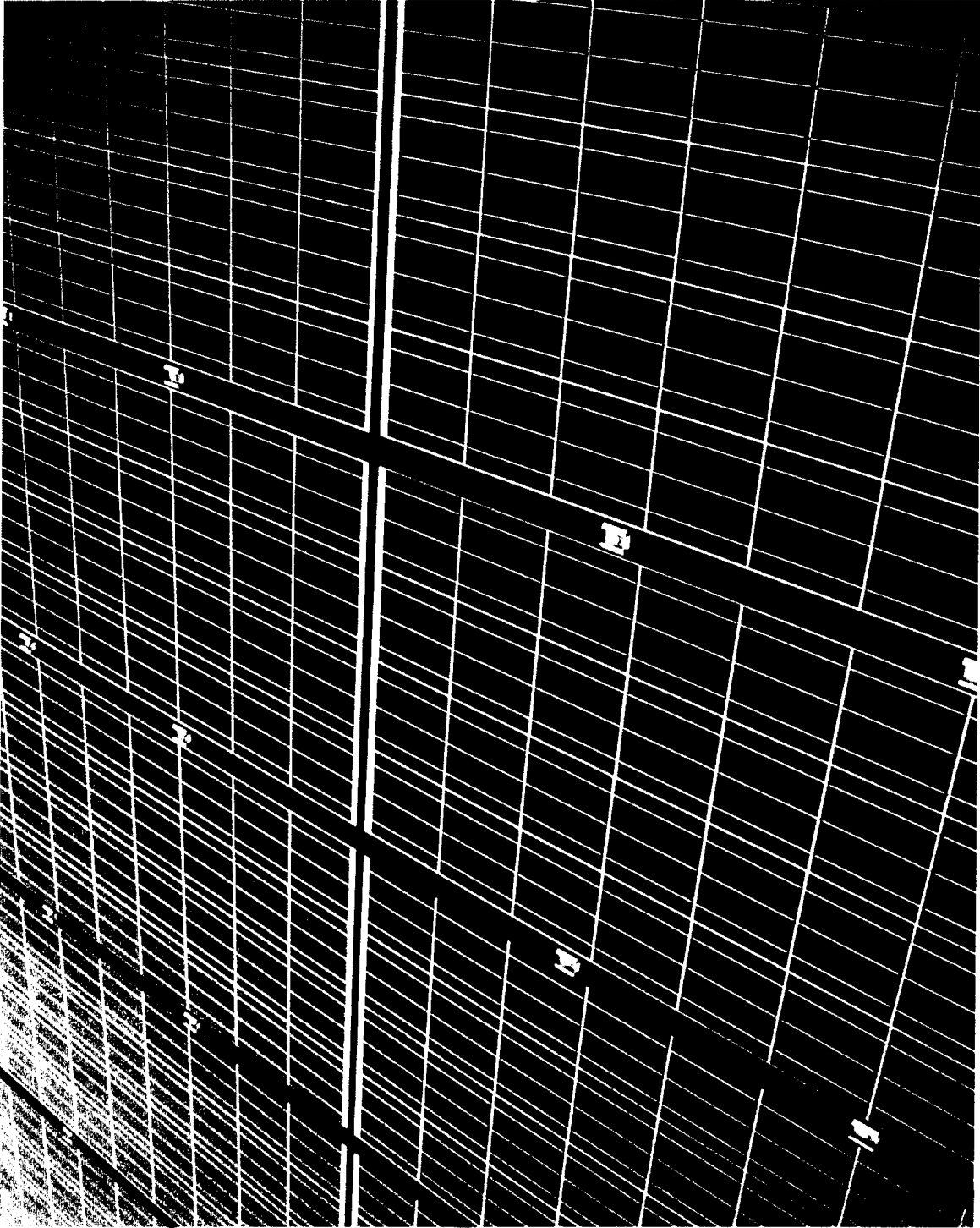
FPL Martin Solar Energy Center - Cumulative System SO2 and NOx Reductions 2009-2040










WSP <small>Power Systems Group</small>		CLIENT: FLORIDA POWER AND LIGHT PROJECT: DESOTO REZONE AND SE APPLICATION	TITLE: LOCATION MAP PROJECT NO: 06240-001-000 SHEET NO: 1 of 1
ACTIVITY: [] DESIGNED BY: [] CHECKED BY: [] CONTACT ADMIN. BY: []	DRAWN BY: [] DATE: []	FILED: 4/8/2008 10:54:22 AM BRACH M:\Brock\F\06240\EP-06240-001\002.dwg	FILED: 4/8/2008 10:54:22 AM BRACH M:\Brock\F\06240\EP-06240-001\002.dwg







NOTES

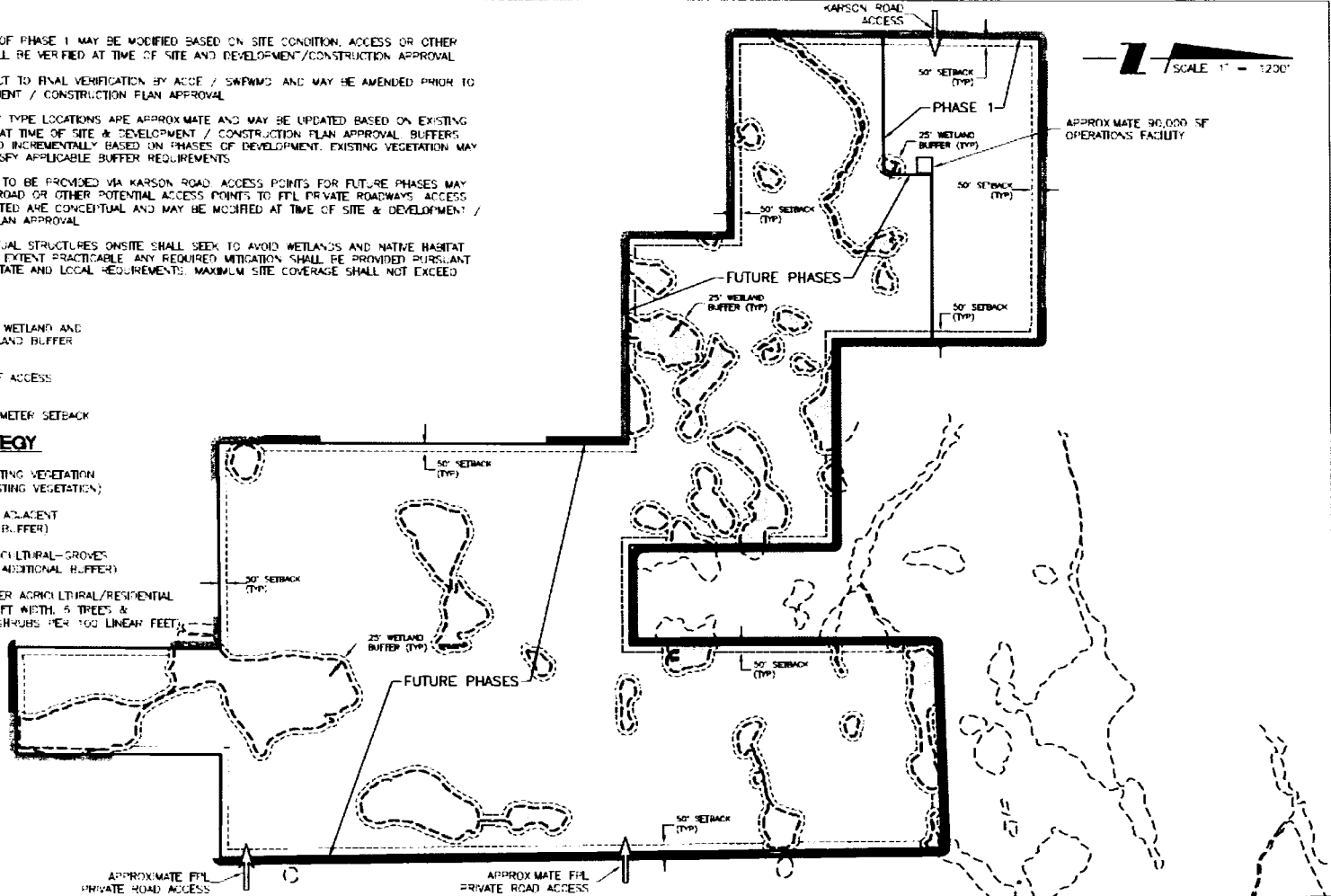
1. EXACT LOCATION OF PHASE 1 MAY BE MODIFIED BASED ON SITE CONDITION, ACCESS OR OTHER FACTORS, AND WILL BE VERIFIED AT TIME OF SITE AND DEVELOPMENT/CONSTRUCTION APPROVAL
2. WETLANDS SUBJECT TO FINAL VERIFICATION BY ACCE / SWPMD AND MAY BE AMENDED PRIOR TO SITE & DEVELOPMENT / CONSTRUCTION PLAN APPROVAL
3. BUFFER STRATEGY TYPE LOCATIONS ARE APPROXIMATE AND MAY BE UPDATED BASED ON EXISTING SITE CONDITIONS AT TIME OF SITE & DEVELOPMENT / CONSTRUCTION PLAN APPROVAL. BUFFERS MAY BE INSTALLED INCREMENTALLY BASED ON PHASES OF DEVELOPMENT. EXISTING VEGETATION MAY BE USED TO SATISFY APPLICABLE BUFFER REQUIREMENTS
4. PRIMARY ACCESS TO BE PROVIDED VIA KARSON ROAD. ACCESS POINTS FOR FUTURE PHASES MAY UTILIZE KARSON ROAD OR OTHER POTENTIAL ACCESS POINTS TO FFL PRIVATE ROADWAYS. ACCESS POINTS AS INDICATED ARE CONCEPTUAL AND MAY BE MODIFIED AT TIME OF SITE & DEVELOPMENT / CONSTRUCTION PLAN APPROVAL
5. LOCATION OF ACTUAL STRUCTURES ONSITE SHALL SEEK TO AVOID WETLANDS AND NATIVE HABITAT TO THE MAXIMUM EXTENT PRACTICABLE. ANY REQUIRED MITIGATION SHALL BE PROVIDED PURSUANT TO APPLICABLE STATE AND LOCAL REQUIREMENTS. MAXIMUM SITE COVERAGE SHALL NOT EXCEED 70%

LEGEND

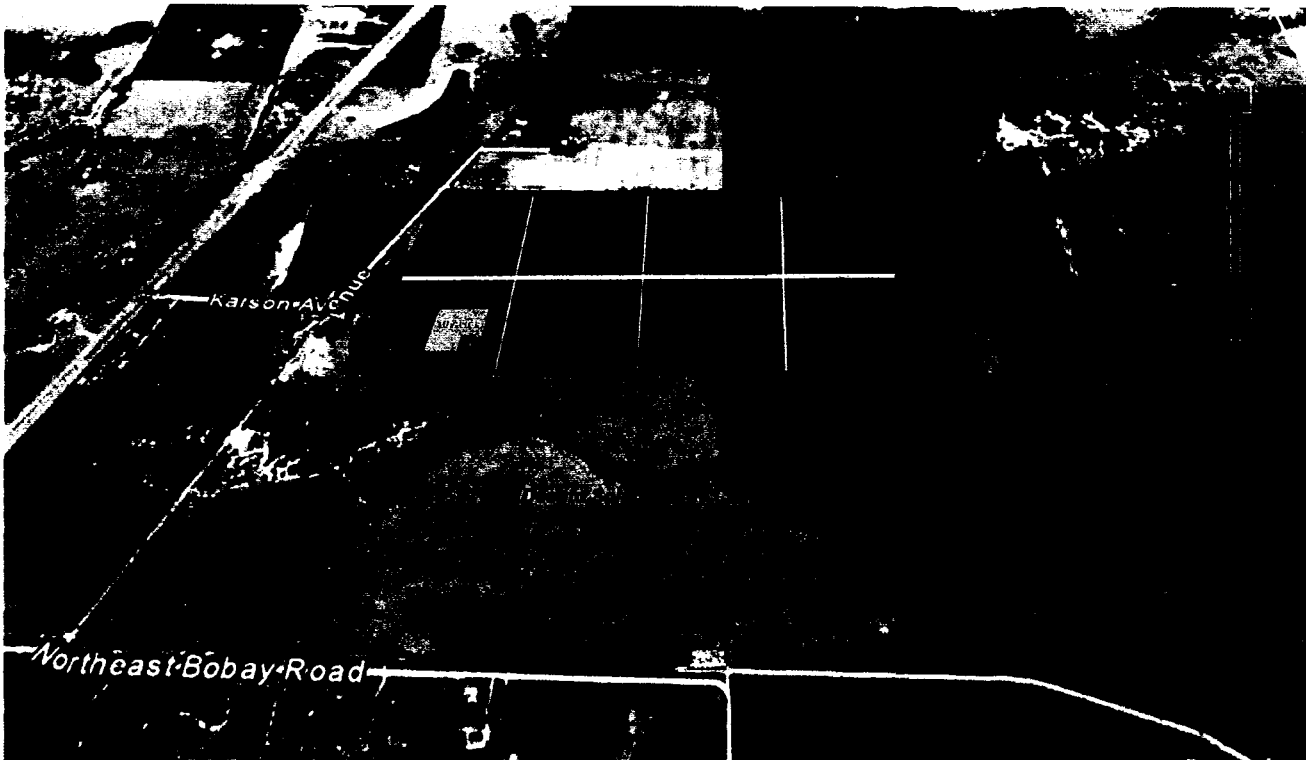
-  EXISTING WETLAND AND 25' WETLAND BUFFER
-  POINT OF ACCESS
-  50' PER METER SETBACK

BUFFER STRATEGY

-  1' EXISTING VEGETATION (EXISTING VEGETATION)
-  2' FFL ADJACENT (NO BUFFER)
-  3' AGRICULTURAL-GROVES (NO ADDITIONAL BUFFER)
-  4' OTHER AGRICULTURAL/RESIDENTIAL (20 FT WIDTH, 5 TREES & 24 SHRUBS PER 100 LINEAR FEET)



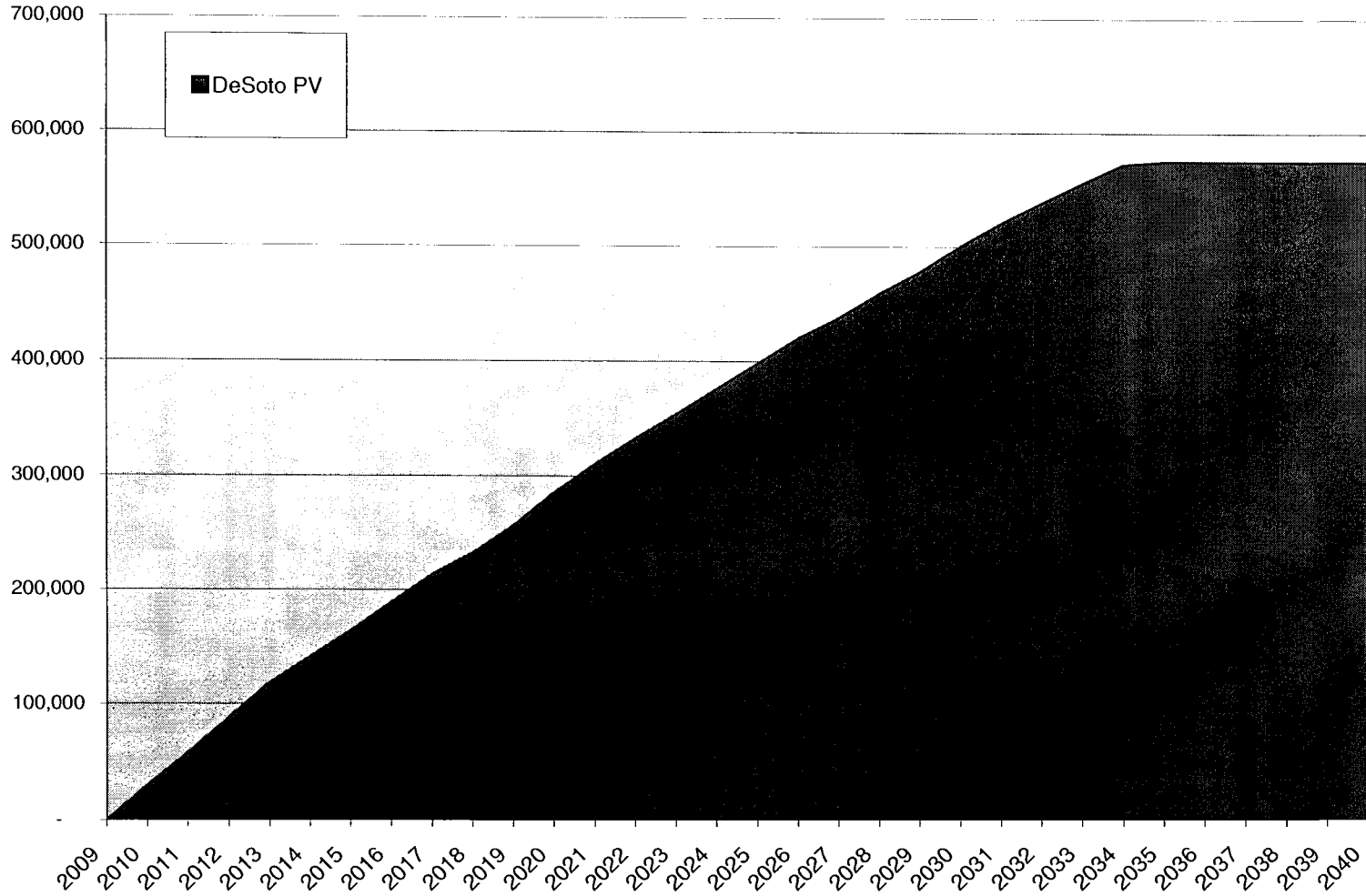
<table border="1"> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHKD BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		DATE	DESCRIPTION	BY	CHKD BY					<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DATE	DESCRIPTION				<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DATE	DESCRIPTION				<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DATE	DESCRIPTION			
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<p>CLIENT: FLORIDA POWER AND LIGHT</p> <p>PROJECT: DESOTO REZONE AND SE APPLICATION</p>				<p>TITLE: CONCEPTUAL MASTER SITE PLAN</p>																													
<p>DATE: 5/8/2008 11:19:58 AM BY: RACH PLOT: 5/8/2008 11:18:54 AM BY: RACH X:\PLA\0240\001-FL-Desoto\REV00_CAD-Depto\EP-06240-001001.dwg\Layout1</p>				<p>06240-001-000 1 of 1</p>																													



YEAR	DeSoto Solar		
	Residual Oil Barrels	Distillate Oil Barrels	Natural Gas MMBtu
2008	0	0	0
2009	0	0	0
2010	38,000	3,000	113,000
2011	21,000	1,000	272,000
2012	26,000	0	262,000
2013	17,000	0	347,000
2014	19,000	0	218,000
2015	6,000	0	345,000
2016	6,000	1,000	355,000
2017	15,000	0	281,000
2018	20,000	0	348,000
2019	14,000	2,000	279,000
2020	24,000	2,000	255,000
2021	15,000	2,000	265,000
2022	9,000	0	309,000
2023	6,000	0	295,000
2024	8,000	0	299,000
2025	5,000	0	329,000
2026	4,000	0	290,000
2027	2,000	0	292,000
2028	1,000	0	280,000
2029	0	0	319,000
2030	1,000	0	296,000
2031	3,000	0	276,000
2032	1,000	0	298,000
2033	2,000	0	268,000
2034	3,000	0	269,000
2035	0	0	54,000
2036	0	0	0
2037	0	0	0
2038	0	0	0
2039	0	0	0
2040	0	0	0
TOTAL	266,000	11,000	7,214,000

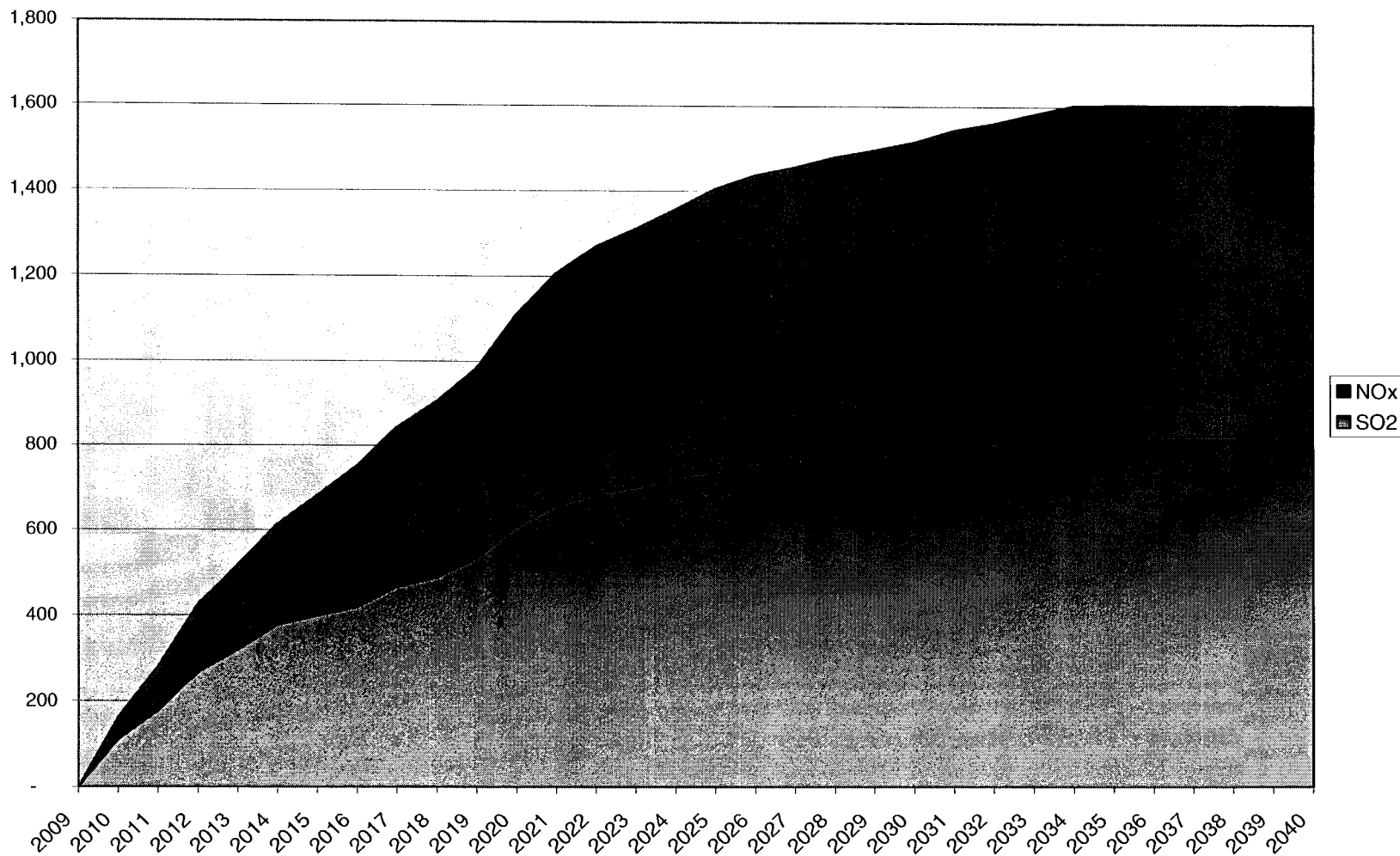
Avoided CO2
Tons

FPL DeSoto Energy Center - System CO2 Reductions 2009-2040



FPL DeSoto Energy Center - Cumulative System SO2 and NOx Reductions 2009-2040

Tons



Desoto Property page 1 of 2



FPL Property Information

Created by Tim Corson on 09/11/2002 at 09:02:06 AM

Site Code (New):	1-12-027-001
Property Name:	<input checked="" type="checkbox"/> Desoto Plant
Map Name:	Desoto Plant
Site Type:	Vacant - on hold
Site Type Code:	VOH
Site Code (Old):	1-04-27-001
Site Rights:	1 - Fee Owned <input checked="" type="checkbox"/>
Purchase Information:	Consists of 11 individual purchase(s) totaling 20228.08 original acres
Title Owner:	FPL
Links to Site Images:	>> No images currently available <<

General Information:		Property Information:	
Address 1:		Total Original Acres:	20,228.0800
Address 2:		Sold Acres:	6,712.4480
City:		Remaining Acres:	13515.6320
County/FIRS:	Desoto / 027	101 - In Service:	0.0000
State/FIRS:	FL / 12	105 - Future Use <input checked="" type="checkbox"/>	13,515.6320
Zip Code:		121 - Non Utility:	0.0000
Area Code:	West / WD	Total Purchase Price:	\$13,339,966.00
Primary Status / Code (Single Value) (i.e. In Use, Planned Use):	Future Use / PU	Balance Capitalized:	\$9,101,553.20
Primary Land Use / Code (Single Value) (i.e. Office, Substation):	Vacant - On Hold / VOH	Average Price/Acre:	\$659.48
Surplus Acres:	13,515.6320	Total Taxes Paid (Annual Amount):	\$30,731.04
Based on Tax Year:	2005		
Current Assessed Value (Annual Amount):	\$1,777,212.00		

Purchases/Land Use:		License(s):	
Total Purchases:	11	Total Licenses:	1
Dates Acquired:	8/19/1974 - 12/18/1998	Total Acres Licensed:	13,515.632
Status (Multi-Value) (i.e. In Use, Planned Use, Surplus, Non Utility, Sold):	Surplus Planned Use	Total License Payments (Annual Revenue):	\$291,747.52
Land Use (Multi-Value) (i.e. Office, Substation):	Vacant - on hold	License Reference(s) #:	0075-WD-2002

Conveyance(s):		Easement(s):	
Total Conveyances:	5	Total Easements:	2
Conv. Acres by Deed:	6,712.448	Acres Encumbered:	0.041
Total Conv. Sale Price:	\$4,112,265.71	Total Easement Price:	\$0.00
Total Acres Conveyed:	6,712.448	Total Acres Granted:	0.041
Total Acres Compensated:		Average Price/Acre:	

	6,712.328		\$0.00
Status (Multi-Valued)	105	Status (Multi-Valued)	105
104 - In Use		101 - In Use	101
105 - Future Use		105 - Future Use	
121 - Non Utility		121 - Non Utility	

# of Vertical Improvements	0
Vertical Improvements:	

Folios:	
	27-36-25-0000-0040-0000
	28-36-25-0000-0020-0000
	01-37-25-0000-0010-0000
	02-37-25-0000-0020-0000
	04-37-26-0000-0010-0000
	05-37-26-0000-0010-0000
	06-37-26-0000-0010-0000
	07-37-26-0000-0010-0000
	08-37-26-0000-0010-0000
	12-37-25-0000-0010-0000
	19-36-26-0000-0010-0000
	20-36-26-0000-0010-0000
	21-36-26-0000-0010-0000
	23-36-25-0000-0020-0000
	24-36-25-0000-0010-0000
	25-36-25-0000-0010-0000
	26-36-25-0000-0010-0000
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	29-36-26-0000-0010-0000
	30-36-26-0000-0010-0000
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	35-36-25-0000-0010-0000
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	04-37-26-0000-0021-0000
	21-36-26-0000-0021-0000
	28-36-26-0000-0021-0000
	33-36-26-0000-0021-0000

S-T-R (Section-Township-Range)	
	27 36 25
	28 36 25
	01 37 25
	02 37 25
	04 37 26
	05 37 26
	06 37 26
	07 37 26
	08 37 26
	12 37 25
	19 36 26
	20 36 26
	21 36 26
	23 36 25
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	25 36 25
	26 36 25
	28 36 26
	29 36 26
	30 36 26
	31 36 26
	32 36 26
	33 36 26
	36 36 25

Transmission Reservation Detail 72157158 CONFIRMED

Seller	Source Sink	POR POD	Request Type	Start	Stop	MW Req	MW Grant	Bid Price	Offer Price	Ceiling Price	Price Unit
FPL	FPLNWR FPLNWL	FPLRES FPLLD	ORIGINAL	2009-10-01 00:00 ES	2039-10-01 00:00 ES	25/ 100	25/ 100 *	0.00	0.00	0.00	\$/MW
Path: F/FPL/FPLRES-FPLLD/											
Service Code				Increment	Class	Type	Period	Window	Subclass		
MONTH-NETWORK RESOURCE				MONTHLY	FIRM	NETWORK	FULL PERIOD	FIXED			
Preconfirmed: No			Competing: No			Negotiated: No		Nerc Priority:		Affiliate: Yes	
Reservation Profile											
Start Date		Stop Date		MW Req	MW Grant	MWH	Bid Price	Offer Price			
2009-10-01 00:00 ES		2010-10-01 00:00 ES		25	25	219000.00	0.00	0.00			
2010-10-01 00:00 ES		2039-10-01 00:00 ES		100	100	25420800.00	0.00	0.00			
Profile Total:							25639800.00				
Times						References					
Queued		2008-05-09 15:15:07 ES				Deal					
Updated		2008-05-13 15:27:12 ES				Sale					
Response						Posting					
Impacted		0				Reassigned					
Last Customer Action		2008-05-13 16:27:12 ED				Seller					
Last Seller Action		2008-05-13 14:57:43 ED				Related					
Comments											
Status											
Seller											
Provider											
Customer		Replaces TSR 72155573. FPL PV at DeSoto.									
Status Notification											
Anc-Service-Link											
Customer: FPL						Seller: FPL					
Name	fpl rp					Name	fpl ts				
Phone	305 442-5059					Phone					
Fax	305 442-5142					Fax					
E-mail	armando_garcia@fpl.com					E-mail					



DESOTO COUNTY
County Development Department

FINAL ORDER-APPROVED 5-8-08 UNANIMOUS
Special Exception 2008-05

APPLICANT: Florida Power and Light Co
700 Universe Blvd
Juno Beach, FL 33408

AGENT: James Paulmann, Wilson Miller, Inc
6900 Professional Pkwy.E
Sarasota, FL 34240

PROPERTY TAX ID #: numbers 27-36-25-0000-0060-0000, 35-36-25-0000-0010-0000, 02-37-25-0000-0020-0000, 27-36-25-0000-0050-0000 and a portion of 26-36-25-0000-0010-0000 and 27-36-25-0000-0040-0000

ZONING DISTRICT: Agricultural Ten

EXISTING LAND USE Rural Agricultural

LEGISLATIVE AUTHORITY: Comprehensive Plan Policy L6.8: Rural Agricultural Future Land use, Policy L6.20 and L6.21 Utility Facilities... (essential services), Policy L6.3 Buffering, and LDR Section 11304 Special Exception criteria

FLOOD ZONE X (free of any flood hazard), portions zoned A

REQUEST

Florida Power and Light Company, Wilson Miller-agent for owner, requests approval of a Special Exception for Photovoltaic Power Generation Facility (Solar power Plant) on 1,525+- acres zoned Agricultural Ten. The property identified as tax id numbers 27-36-25-0000-0060-0000, 35-36-25-0000-0010-0000, 02-37-25-0000-0020-0000, 27-36-25-0000-0050-0000 and a portion of 26-36-25-0000-0010-0000 and 27-36-25-0000-0040-0000 (more particularly described in the legal description provided herein), is located East of US17, approximately 1 mile south of the DeSoto/Hardee County line in Sections 26, 27 and 35 of Township 36, Range 25 and Section 2 of Township 37, Range 25.

LEGAL DESCRIPTION:

A tract of land located in Desoto County and more particularly described as follows: The northwest quarter and the west half of the northeast quarter and the north half of the southwest quarter and the southeast quarter of Section 27,

Township 36 South, Range 25 East; And the south half of the northeast quarter and the west half of the southwest quarter and the southeast quarter of Section 26, Township 36 South, Range 25 East; And Section 35, Township 36 South, Range 25 East; And the west half of the northeast quarter of Section 2, Township 37 South, Range 25 East.

PLANNING COMMISSION RECOMMENDATION

At a special-and properly advertised and noticed-meeting on April 28, 2008, the Planning Commission unanimously recommended approval with the listed conditions in this staff report. Mr. Presilla asked FPL representative, Buck Martinez if they would be willing to make improvements to Karson road should those improvements become necessary during construction due to the road being a partially unpaved/non County maintained. Mr. Martinez stated he was not prepared at this meeting to make such a commitment, however if the Commissioners requested the same, they would be willing to discuss it.

Changes to this staff report post-Planning Commission, are shown in larger, bold font and refer to the operations area increased size.

NOTIFICATIONS

The property was posted with signs notifying time, date, and location of proposed case hearing. Notification postcards were mailed to property owners within 1500 feet of the subject parcel notifying in general the requested action, time, date, and location of the case hearing and information on how interested parties may obtain more detailed information or visit the Planning Department to view all records and reports of requested case action. The case was advertised in the newspaper 15 days prior to the first hearing date as required stating the same data as the postcards.

DISCUSSION OF SUBMITTAL

The site plan and narrative provided, explains the first phase of development to be located in the Northwest corner of the Special Exception area on approximately 180 acres. This is in the area closest to Karson and US17. It will include the 40,000 square foot Operations-Maintenance-Research-Security Facility (Operations Facility). **Directly prior to the Planning Commission on April 28, the applicant advised staff that the 40,000 square foot Operations Facility would more accurately be 90,000 square feet and clarified that the area would include a parking area, security fence, interconnection substation and distribution center, and storage buildings.** (References in the original submittal, to potential observation tower, have been removed as this was deemed unnecessary to the development.) Access for this first phase is proposed to be provided via Karson.

Each panel is approximately 300 feet by 400 feet in size. The layout proposes a grid layout of solar panels, with a 10-15 foot separation. The structures

maximum height is 8 feet. The request is that the applicant, FPL, be allowed to re-arrange the structures within the Phase 1 area should the need arise due to environmental factors, on-site conditions, access, or layout requirements, so long as setbacks, buffers, and internal development requirements of parking, etc. are met. This is included as part of the conditions at the end of this staff report.

The Operations Facility will include a parking area, security fence, storage building, and enclosures for supportive electrical equipment. The maximum height of structures will not exceed 20 feet.

Future phases of development will be subject to future energy demand and other factors and will be submitted for site plan approval, but are generally referenced to be located in the remainder of the Special Exception area.

COMPREHENSIVE PLAN FUTURE LAND USE DESIGNATION REVIEW

The existing Future Land Use designation for the subject site is Rural Agricultural.

Comprehensive Plan Policy L6.8:

Policy L6.8: The primary functions of Rural/Agricultural areas, as designated on the Future Land Use Map, shall be to protect and encourage agricultural activities, while providing for low density residential use, and to protect unique native habitats and maintain open space. [9J-5.006(3)(c)(7)]

Staff Finding: Consistent

The type of proposed development for this property will utilize a currently vacant property, which has been in FPL ownership for 35+/- years, and will allow for natural and existing buffering due to its size.

Because the build-out will be only approximately 10% of the total owned acreage (Special Exception on 1,525 acres within an 11,000+ acre area owned by FPL), there will be considerable area on which to maintain native habitats and undeveloped open space.

Comprehensive Plan Policy L6.8(a):

Residential development in a Rural/Agricultural area shall not exceed a maximum density of one dwelling unit per ten gross acres.

Staff Finding: Consistent

The request is for an Industrial Heavy Photovoltaic Power Generating Facility (solar power generating plant). There will be no residential development if this Special Exception is approved.

Comprehensive Plan Policy L6.8(b):

In a Rural/Agricultural area, the lowest order of commercial goods and services which serve the daily needs of nearby residents may be permitted only on arterial or collector roadways. Commercial areas in a Rural/Agricultural area shall be appropriately buffered, shall not exceed 3 acres in size, shall not exceed impervious surface lot coverage of 70 percent, and shall be no less than 2 miles from other commercial development in a Rural/Agricultural area or in other future land use categories.

Staff Finding: Consistent

The request is for a Photovoltaic Power Generating Facility (solar power generating plant). There is no current request for commercial development. Any future wish to operate any other type of business than the Power Generating Facility will require new or amended Special Exception or Development Plan approval and possibly platting.

Comprehensive Plan Policy L6.8(c):

Industrial uses within a Rural/Agricultural area may be permitted only when such activity is related to the extraction or processing of minerals; or when related to agriculture; or is of a scale and nature that would not be acceptable in a Town Center. Other industrial uses, such as power plants or manufactured or processing facilities may be permitted, and shall have access to a collector or arterial roadway, shall meet all local regulations, and shall be appropriately buffered from surrounding land uses, including agricultural uses.

Staff Finding: Consistent

This property is located approximately .2 to .5 miles off North US17, which is the closest arterial roadway. The use proposed, a Photovoltaic Power Generation Facility (Solar power generating plant), requires large acreage. The nature of these facilities is such that once installation is complete, and because they are unmanned sites, minimal traffic is generated to/within the site. The only traffic generated will be by company personnel and maintenance crews. Karson is a partially paved/County maintained and partially unpaved, non-County-maintained dirt road. Due to the minimal traffic to this site after construction, as well as the low risk nature of solar power capturing equipment, upgrades to Karson likely would not be required.

Comprehensive Plan Policy L6.8(d):

Within a Rural/Agricultural area, the approval of residential development shall acknowledge that the protection of agricultural lands is a primary function of a Rural/Agricultural area, and that land management activities associated with agricultural uses may be incompatible with residential development. However, such management activities are considered to be an essential element of the protection of successful operations on agricultural lands and the continuation of such activities shall take precedence.

Staff Finding: Consistent

This land currently is vacant land leased for grazing animals. With the large surrounding acreage owned by FPL, which will remain undeveloped land zoned A10, continuation of this agricultural activity may continue, thus satisfying the requirement above.

Comprehensive Plan Policy L6.20 and L6.21

Policy L6.20: The development of institutional, governmental, educational, transportation, recreational, cultural, communication and utility facilities may be permitted by special exception in any future land use classification, as designated on the Future Land Use Map, subject to all applicable local regulations. [9J-5.006(3)(c)(2,7)]

Policy L6.21: The provisions of Policy L6.20 and Policies L6.2(c), L6.3(c), L6.4(c), L6.5(c), L6.6(c), L6.7(c) and L6.8(c), notwithstanding, may be deemed to be in the best interest of public health, safety and welfare to provide facilities in locations which are potentially incompatible with adjacent land uses. In such cases, the provisions of Policy L3.3 will be applied. [9J-5.006(3)(c)(2)]
(Policy L3.3: The County shall continue to require buffering of land uses which are potentially incompatible, either due to type of use or intensity of use, from one another through the provision of open space, landscaping, berms, alternative site design or other suitable means.

Staff Finding: Consistent

Policy L6.20 discusses the Florida Administrative Code's rule, 9J5, which states that a utility facility may be located within any Future Land Use category and approved by Special Exception Process. This reference to ANY Future Land Use Category supersedes zoning uses listed in the LDR. Therefore, a rezoning of this land is not required.

Policy L6.21 provides that within all the Future Land Use districts (references to policies L6.2, L6.3, L6.4, L6.5, L6.6, L6.7, and L6.8) essential services such as public utility facilities may be located in areas which would otherwise be considered incompatible with zoning or with adjacent land uses so long as buffering (reference to Policy L3.3), or alternative site design can be accomplished.

LAND DEVELOPMENT REGULATIONS REVIEW

LDR Section 11304 Special Exceptions

A Special Exception is a use that would not be appropriate generally or without restriction throughout a particular zoning district or classification, but which, if controlled as to number, area, location or relation to the neighborhood, would promote the public health, safety, welfare, morals, order, comfort, convenience, appearance, prosperity or the general welfare. Such uses may be permissible in a zoning district or classification as a Special Exception, if specific provision for such Special Exception is made in this LDR. All petitions for special Exceptions shall be considered first by the Planning Commission in the manner herein set out.

LDR Section 11304(C)(1).

Compliance with all elements of the Comprehensive Plan.

Staff Finding: Consistent

As shown above, this request is consistent with the Comprehensive Plan. Particular emphasis is placed upon the Florida Administrative Code Rule 9J5 and the corresponding Comprehensive Plan Policies listed above, which relate to essential public services and services (utilities) deemed to be in the best interest of public health (clean energy), safety and welfare. The Special Exception process provides for site protection through buffering and layout policies for such an essential service when it is located in an area which, without these protective measures, might otherwise be deemed inappropriate.

The requested use and accompanying site plan show the intent to construct phase 1 on approximately 180 acres of a 1,525 acre site. The photovoltaic power plant is proposed to be started on the Northwestern portion of the 1,525 acre Special Exception site. This site is located within 11,000+ acres of property owned by the same entity, FPL. The power plant, a solar collection and power distribution facility of solar panels is a quiet, low traffic-generating, non emissions creating facility, which requires large development area, while still promoting open space and maintaining low impervious surface. There will be minimal impacts to surface water flow and groundwater storage. Those impacts, should they occur, can be easily mitigated due to the size of the property and will be reviewed and addressed as part of the construction drawing/improvement plan submittal phase following approval of this Special Exception.

LDR Section 11304(C)(2).

Ingress and egress to property and proposed structures thereon with particular reference to automotive and pedestrian safety and convenience, traffic flow and control and access in case of fire or catastrophe.

Staff Finding: Consistent

Ingress/Egress to the facility is proposed to be provided via Karson Road from US 17 for the first phase. Karson is a partially open grade/partially dirt road.

LDR Section 11304(C)(3).

Off-street parking and loading areas, where required, with particular attention to the items in 2. above and economic, noise, glare or odor effects of the Special Exception on adjoining properties and properties generally in the district.

Staff Finding: Consistent

The applicant has stated they will comply with parking requirements according to the DeSoto County Land Development Regulations. The area on which the applicant proposes construction of the "Operations

Facility" is ~~40,000~~ **90,000** (as amended prior to Planning Commission meeting on April 28, 2008) square feet. The resulting building and parking/required infrastructure will be determined during construction drawing phase, but will be limited to the ~~40,000~~ **90,000** square foot maximum area located within the Phase I area of the Special Exception acreage..

The parking and loading space regulations are calculated on size and use of the building square footage. Industrial use requires 1 regular parking space per every 1,000 sf, of building, (1 loading space per every 5,000 square feet of building). Because the final layout and size of the building and parking has not yet been determined, the parking ratios will be verified and layout approved as part of the Improvement Plan/Construction Drawings. LDR requirements will be enforced and verified as part of the review of this submittal.

LDR Section 11304(C)(4).

Utilities, with reference to locations, availability and compatibility.

Staff Finding: Consistent

No water/sewer is available in this area. The request states no utilities will be required. Per Florida Building code, an unmanned/non habited structure does not require public sanitary (bathroom) facilities or building permits. The applicant has stated in the application that the operations facility will be non-habited.

LDR Section 11304(C)(5).

Screening and buffering with reference to type, dimensions and character.

Staff Finding: Consistent

The Land Development Regulations stipulate that Industrial type Uses adjacent to Agricultural uses require a Type D buffer. FPL has proposed an alternate buffer strategy:

- Where significant existing vegetation, no buffer (indicated as beige colored border on site plan)
- Along FPL owned parcels, no buffer (indicated as red colored border on site plan)
- Along existing groves, no buffer (indicated as yellow colored border on site plan)
- Along residential or open areas, a buffer of 6 trees and 24 shrubs located within the first 20 feet of the 50 foot setback (indicated as blue colored border on site plan)

Staff finds that this strategy does provide appropriate buffering for the

surrounding parcels/area. This is also consistent with Comprehensive Plan Policy L3.3.

LDR Section 11304(C)(6).

Signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effects, and compatibility and harmony with properties in the district.

Staff Finding: Consistent

No signs or exterior lighting is proposed. Safety and security signs are not restricted nor need development plan approval.

LDR Section 11304(C)(7).

Required yards and other open space.

Staff Finding: Consistent

The 50 foot setback on the perimeter of the Special Exception area has been proposed on the site plan. This meets the LDR requirements. Impervious surface/open space requirements have been met with the Phase I Special Exception request. Future phases of Development will require monitoring of total impervious surface/open space.

LDR Section 11304(C)(8).

General compatibility with adjacent properties and other property in the district.

Staff Finding: Consistent

Due to the large development area needed for a project of this type, agricultural zoning is the logical choice. Large tracts of unimproved, vacant land abutting other large tracts provide natural separation of uses, adequate space on which to place large photovoltaic panels. The use is non intrusive: no noise or emissions are created, the height of structures is minimal, and there is virtually no traffic created once installation is complete, except for the maintenance workers and company personnel. The majority of the abutting properties owned by others have existing dense natural vegetation, providing a buffer which will be supplemented up to LDR standards where necessary.

LDR Section 11304(C)(9).

Any special requirements set out in the Schedule of District Regulations for the particular use involved.

Staff Finding: Consistent

Comprehensive Plan Policy L6.8: Rural Agricultural Future Land use, Policy L6.20 and L6.21 Utility Facilities... (essential services), Policy L6.3 Buffering, and LDR Section 7300-Off Street Parking have been addressed above.

LDR Section 11304(C)(10).

Public and private utilities, structures, or uses required for public or private utilities, including but not limited to wastewater, gas, electric, and telephone utilities, sanitary landfills, and radio and television stations and towers may be permitted only as a special exception unless determined by the Board to be essential service.

Staff Finding: Consistent

This request is a public utility company proposing a solar power capturing and transmission facility. The property is owned by FPL and is an appropriate size and location for this type of development. The applicant is willing and prepared to adhere to all local, state and federal regulations, such as the County's Land Development Regulations, Comprehensive Plan, SWFWMD regulations and building code. Only the request for final layout within the Phase I area, and the alternative buffer strategy have been requested to be considered outside the normal Special Exception site plan review procedures. Staff feels these items are consistent with the intent of the Land Development Regulations and the Comprehensive Plan.

SPECIAL EXCEPTION EXPIRATION:

Special exceptions shall expire one (1) year from the date granted if the use for which the special exception was granted has not commenced or one (1) year following the discontinuance of the use for which the special exception was granted. (See condition below).

STAFF REVIEW

Staff review has determined that this application, SE 2008-05, as submitted, is consistent with the Comprehensive Plan and Land Development Regulations contingent upon the following conditions:

RECOMMENDED CONDITIONS FOR APPROVAL

1. An alternative buffer along properties abutting non-FPL owned property, as identified on the plan, shall be installed (or existing vegetation supplemented to the degree of the alternative buffer specified on the plan). Detailed buffer plan for these areas shall be required as part of the Improvement Plan/Construction Drawing submittal and approval phase following approval of this Special Exception.
2. Buffer installation may be approved in phases by administrative approval based upon the final layout of Phase I development and future phases. Installation of the buffer shall be concurrent with construction of photovoltaic equipment.
3. Required parking shall be approved as part of the Improvement Plan/Construction Drawing approval. The ratios are calculated based upon building square footage, which will be required to be submitted during the Improvement Plan submittal, and will be approved administratively with those drawings.

4. The final site layout, allowed to be re-arranged within the Special Exception boundary, is contingent upon adherence to buffers and setbacks. Final location shall be approved administratively at time of Improvement Plan approval.
5. Future phases of construction or expansion beyond the Special Exception boundary will be required to be approved via an amendment to the Special Exception. Height is limited to 20 feet for a maintenance building and 10 feet for other facilities and structures.
6. Following this approval, the applicant must receive a "notice to proceed" from County staff. The notice will be issued after the review and approval of a complete Improvement Plan (Construction Drawings) package that will address these conditions. The Improvement Plan will implement in detail all the items necessary to carry out the construction of the project, to include but not limited to, all applicable outside agency permits such as FDOH (water and wastewater related), SWFWMD (storm-water and storm-water calculations), FDOT (roadway access), etc. Final site layout, building square footage, parking, buffering plan, and buffer phasing plan shall be included in this submittal and approved prior to Notice to Proceed being issued.
7. Per the DeSoto County LDR, Section 11304(D), "Special exceptions shall expire one (1) year from the date granted if the use for which the special exception was granted has not commenced or one (1) year following the discontinuance of the use for which the special exception was granted." Therefore, a complete Improvement Plan application for Phase I must be submitted within 6 months of approval (**November 8, 2008**), the applicant must receive a Notice to Proceed from County Staff within 12 months of approval of the Special Exception (**May 8, 2009**), and must have Phase I, or a portion, of the facility operational within 18 months of approval (**November 8, 2009**) or this Special Exception becomes Null and Void. Extensions to operational timeline may be administratively extended up to 12 months, based on permitting by other agencies.

PUBLIC HEARING SCHEDULE

DeSoto County Planning Commission

Monday, April 28, 2008

Planning Commission

Recommendation

*Recommended Approval,
unanimous*

Board of County Commissioners

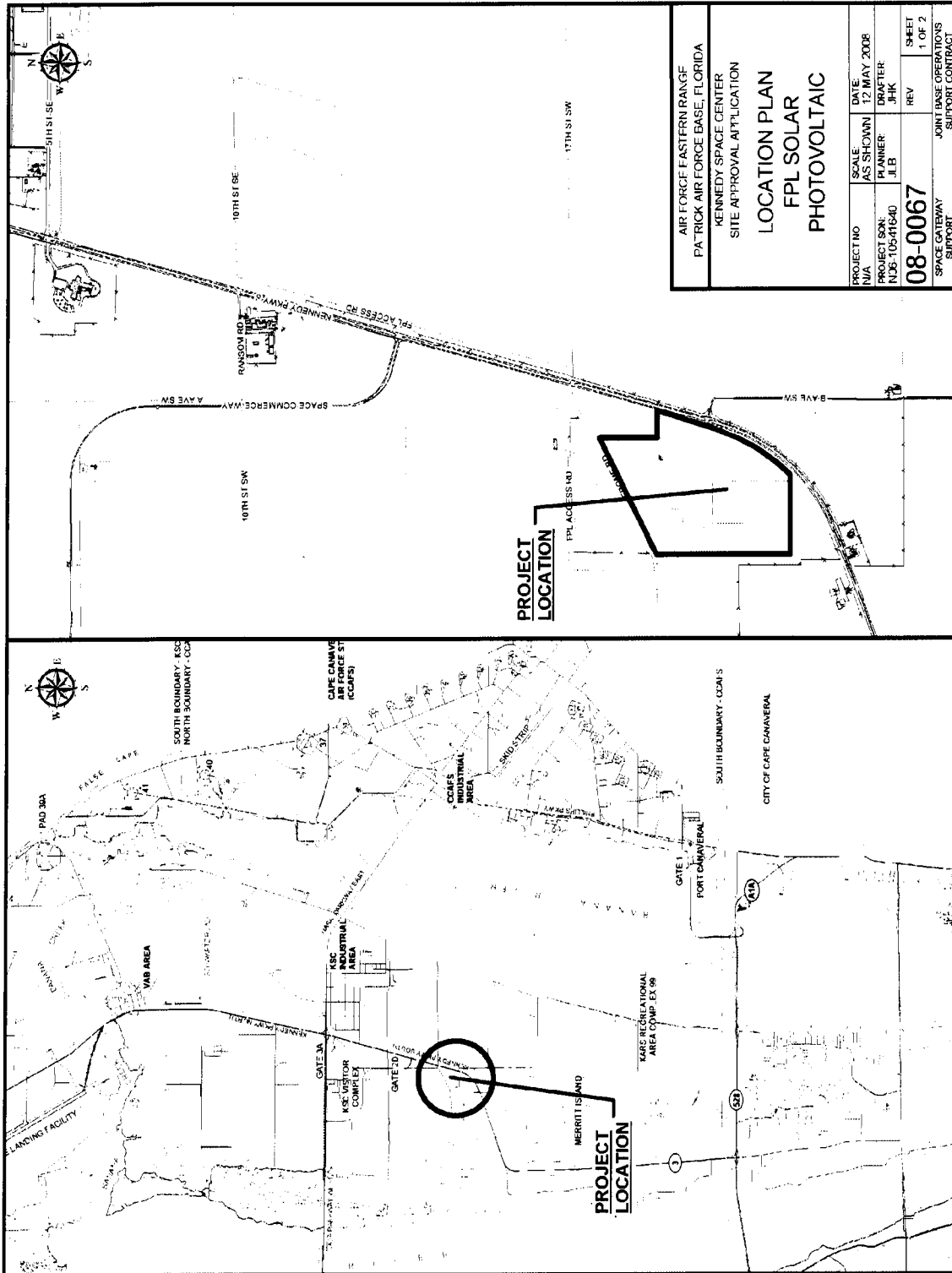
Thursday, May 8, 2008

Final Disposition

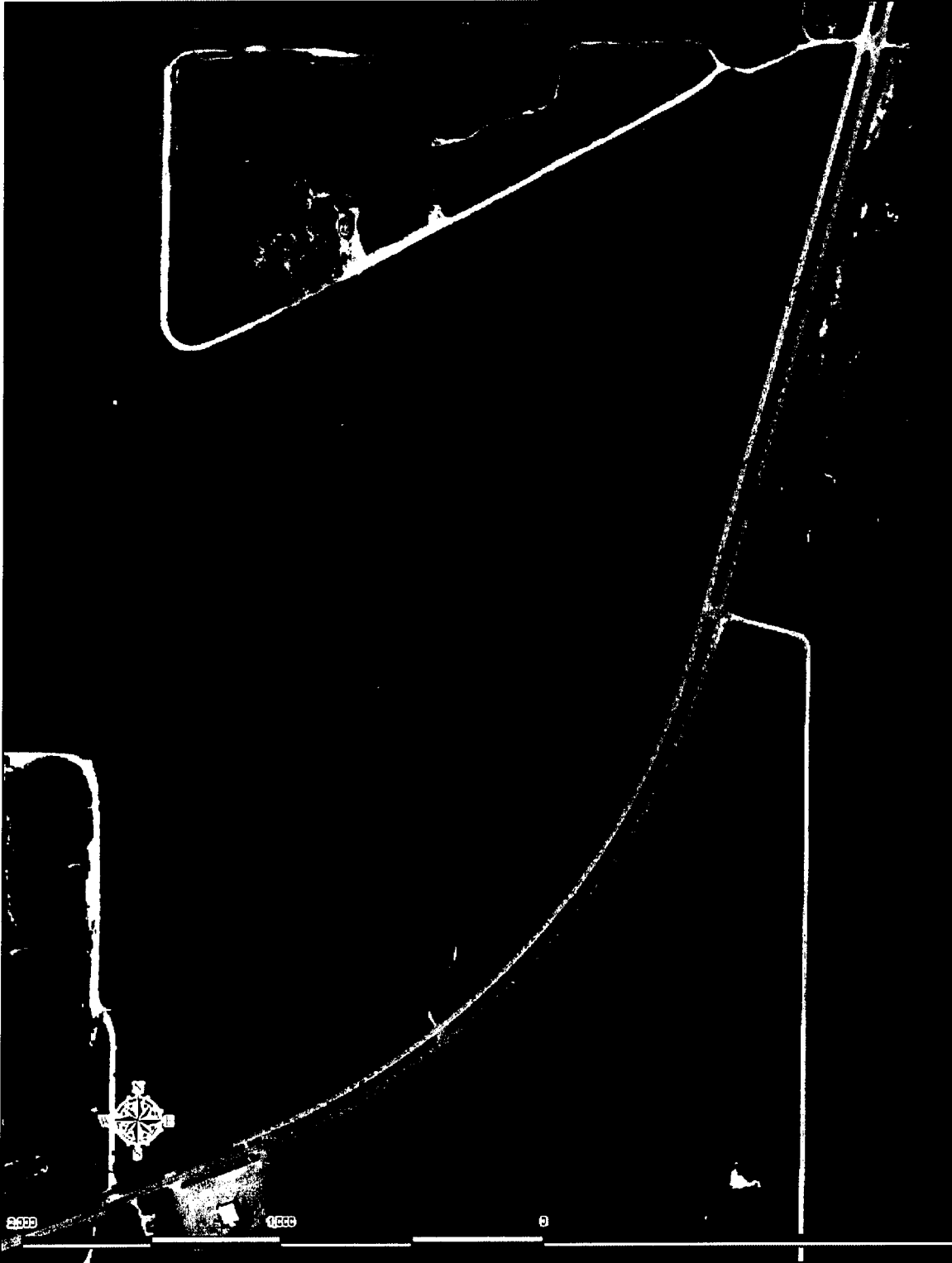
Approved, Unanimous

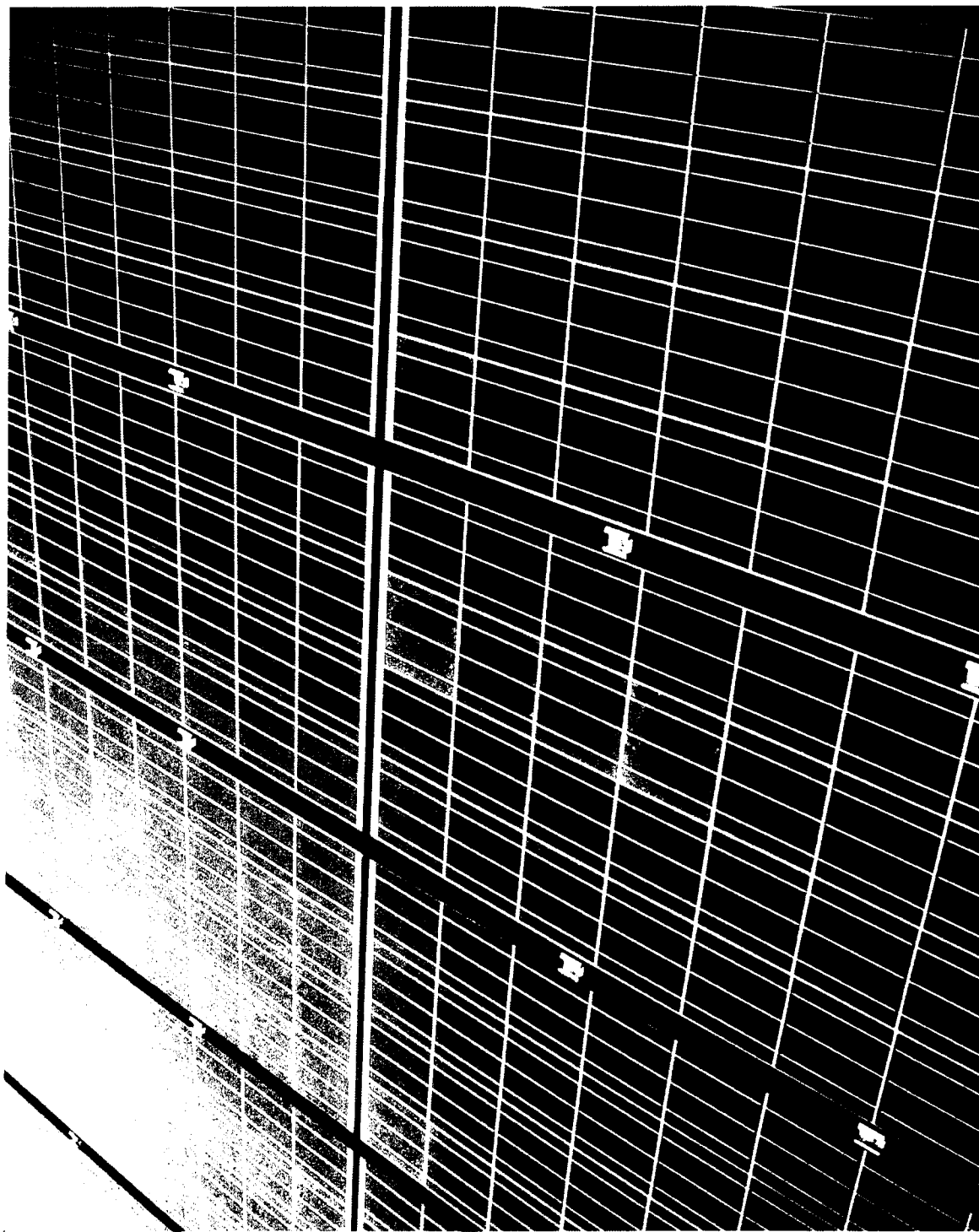
Presented by Penelope Nelson, Planner

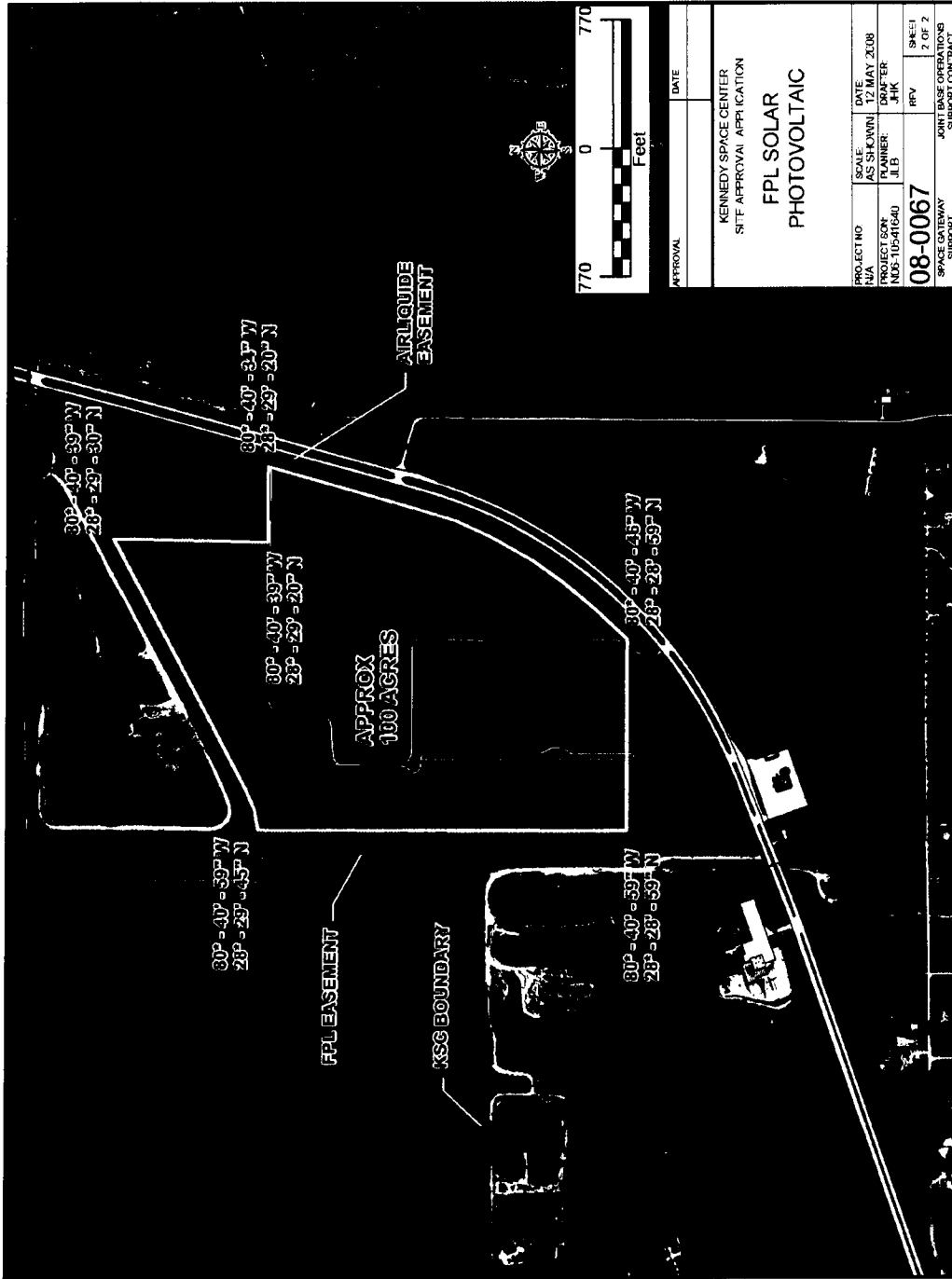
DATE



AIR FORCE EASTERN RANGE PATRICK AIR FORCE BASE, FLORIDA KENNEDY SPACE CENTER SITE APPROVAL APPLICATION	
LOCATION PLAN FPL SOLAR PHOTOVOLTAIC	
PROJECT NO. N/A	SCALE AS SHOWN
PROJECT SON. N36-10541640	DRAWN BY JHK
08-0067	REV 1 OF 2
SPACE GATEWAY SUPPORT	JOINT BASE OPERATIONS SUPPORT CONTRACT





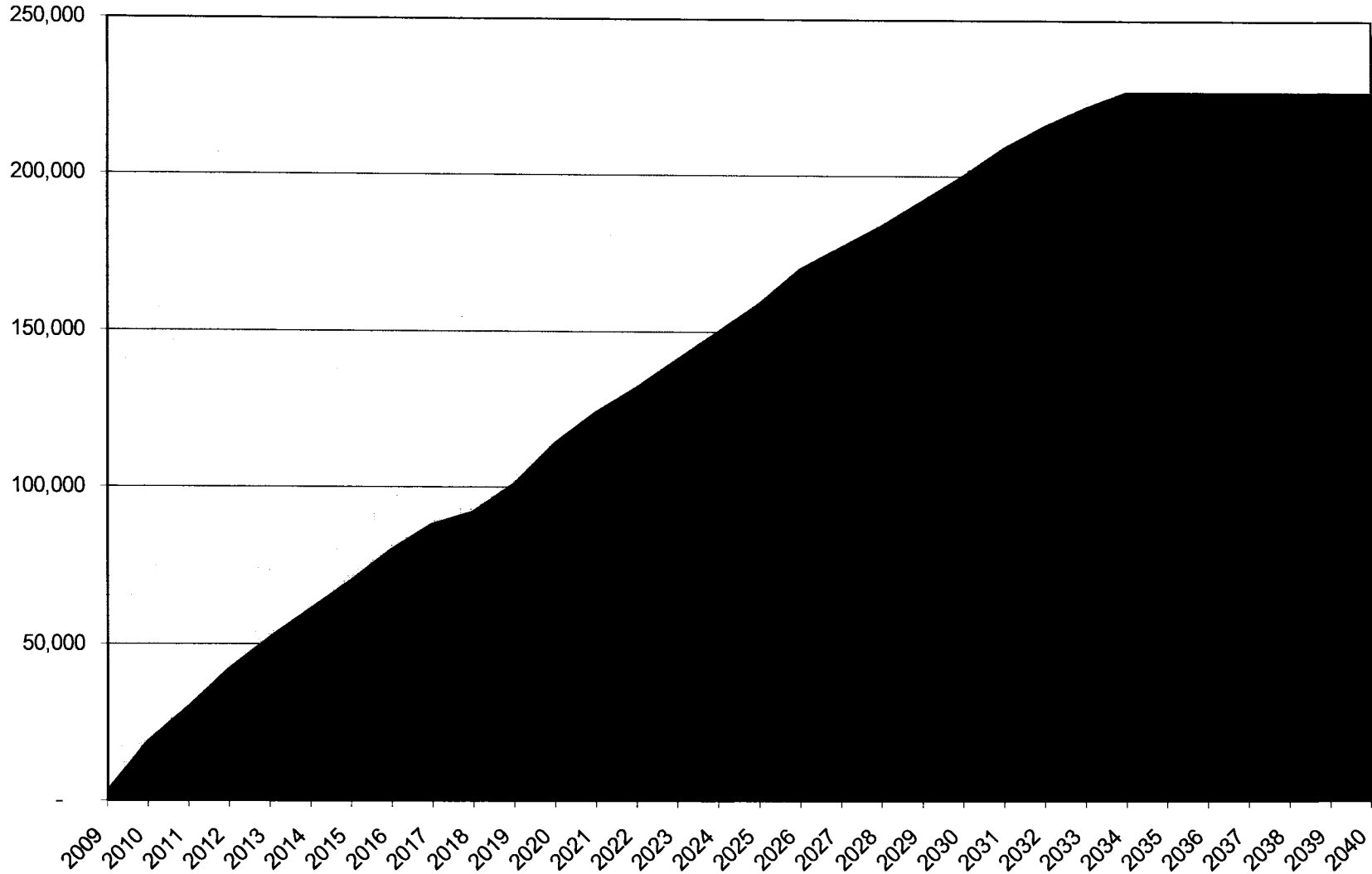


APPROVAL	DATE
KENNEDY SPACE CENTER SITE APPROVAL APPLICATION	
FPL SOLAR PHOTOVOLTAIC	
PROJECT NO	DATE
N/A	12/MAY/2008
SCALE	AS SHOWN
PROJECT SON	DRAWN
IND-105-41640	JHK
	REV
	SHEET
	2 OF 2
08-0067	
SPACE GATEWAY SUPPORT	
JOINT BASE OPERATIONS SUPPORT CONTRACT	

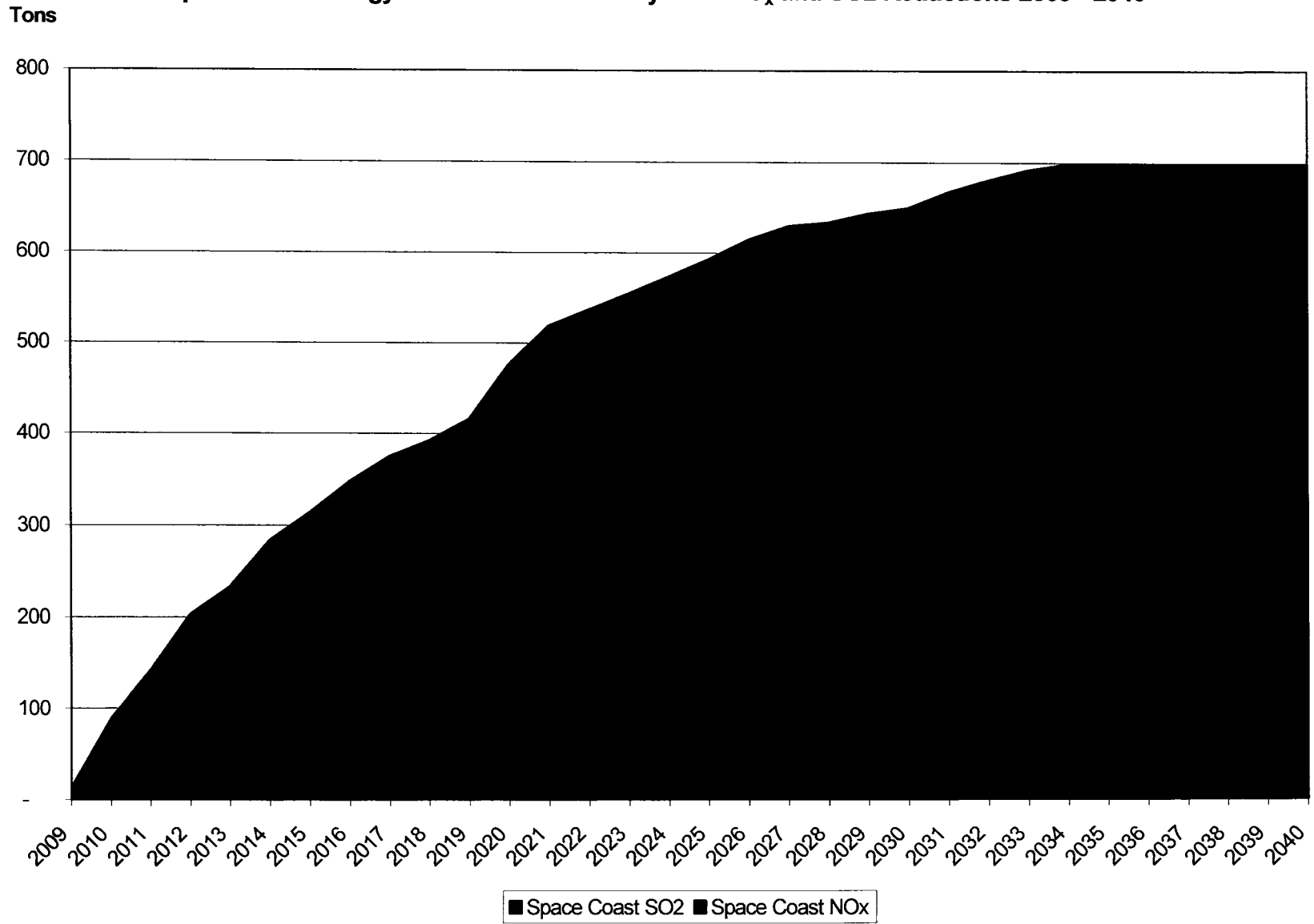
YEAR	Space Coast Solar		
	Residual Oil Barrels	Distillate Oil Barrels	Natural Gas MMBtu
2008	0	0	0
2009	2,000	0	30,000
2010	19,000	1,000	78,000
2011	10,000	0	96,000
2012	12,000	0	79,000
2013	4,000	0	143,000
2014	10,000	0	69,000
2015	4,000	0	123,000
2016	4,000	0	124,000
2017	3,000	0	116,000
2018	8,000	2,000	193,000
2019	4,000	1,000	110,000
2020	12,000	1,000	99,000
2021	6,000	0	115,000
2022	2,000	0	129,000
2023	2,000	0	127,000
2024	2,000	0	138,000
2025	2,000	0	135,000
2026	2,000	0	85,000
2027	3,000	0	94,000
2028	0	0	113,000
2029	0	0	145,000
2030	1,000	0	130,000
2031	1,000	0	80,000
2032	1,000	0	115,000
2033	2,000	0	93,000
2034	1,000	0	81,000
2035	0	0	0
2036	0	0	0
2037	0	0	0
2038	0	0	0
2039	0	0	0
2040	0	0	0
TOTAL	117,000	5,000	2,840,000

Space Coast Energy Center - System CO₂ Reductions 2009 - 2040

Avoided CO₂
Tons



Space Coast Energy Center - Cumulative System NO_x and SO₂ Reductions 2009 - 2040



ACCESS & INDEMNIFICATION AGREEMENT

THIS ACCESS & INDEMNIFICATION AGREEMENT is entered into this 13th day of May, 2008 ("Agreement"), by and between NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, an Agency of the United States, John F. Kennedy Space Center, Florida, ("NASA-KSC") and Florida Power & Light Company, a Florida corporation ("FPL").

RECITALS:

WHEREAS, the Florida legislature recently granted cost recovery for renewable energy projects that have secured the components of land, zoning and transmission and FPL desires to construct a major photovoltaic power generation facility ("PV Facility") in the State of Florida.

WHEREAS, to secure the land component, NASA-KSC and FPL are negotiating an Enhanced Use Lease ("Lease") for the development of a PV Facility on real property owned by NASA-KSC and located in Brevard County, Florida which is more particularly depicted as Site 2 on the attached Exhibit "A" ("Property"), the first draft of which is attached as Exhibit "B" to this Agreement.

WHEREAS, NASA-KSC grants to FPL an option to lease the Property, contingent upon NASA-KSC and FPL reaching mutual agreement on the terms and conditions of the Lease, and a right of access to the Property to determine the suitability of constructing the PV Facility on the Property.

WHEREAS, NASA-KSC and FPL have secured the zoning component in that development on the Property is immune from the jurisdiction of the state and local governments, and not regulated by local zoning regulations pursuant to the Supremacy Clause (Article. VI, Clause 2 of the United States Constitution) and the doctrine of sovereign immunity.

WHEREAS, NASA-KSC and FPL have secured the transmission component in that FPL owns the substation and transmission lines that will interconnect with the PV Facility on the Property.

NOW THEREFORE, in consideration of the mutual covenants and conditions herein contained, NASA-KSC and FPL hereby agree as follows:

1. FPL shall have the option to lease the Property, contingent upon the parties reaching mutual agreement on the terms and conditions of the Lease.
2. NASA-KSC grants permission to FPL and its agents to enter the Property for the purpose of completing the suitability investigation. NASA-KSC acknowledges and agrees that FPL shall have the right to have the property tested for environmental conditions, soil conditions, and geotechnical conditions to determine if the option shall be exercised, provided, however, that NASA-KSC may reasonably restrict, define, or limit such access as necessary in order to prevent undue interference with NASA-KSC operations and to ensure security for NASA-KSC property. Provided, further, that this grant of access is expressly conditioned upon FPL and its agents

properly notifying NASA-KSC's designated representative, James E. Ball, (321) 266-4780, prior to entering any portion of the Property and receiving authorization to enter the Property. NASA-KSC reserves the unrestricted right to use the Property for any and all purposes whatsoever that do not directly or unreasonably interfere with FPL's rights under this Agreement. FPL acknowledges and agrees that NASA-KSC has not made any representations or warranties whatsoever regarding the condition of the Property. FPL and its agents shall use the Property for, and only for, the completion of the suitability investigation and shall not use the Property or permit any entry thereon for any other purpose.

3. FPL and its agents shall exercise due care to avoid injury or damage to any and all crops, buildings, structures, fences, and other real or personal property of NASA-KSC located upon the Property. FPL shall reimburse NASA-KSC for any disturbance or damage to the Property arising out of, or in connection with the completion of the suitability investigation by FPL and its agents, and for any costs of returning the Property to its original condition and grade.

4. For so long as this Agreement remains in full force and effect, FPL and its agents shall comply with all applicable governmental rules, regulations, laws, ordinances, statutes, and permitting requirements.

5. For so long as this Agreement remains in full force and effect, FPL agrees to maintain its self insurance during the term of this Agreement. FPL agrees to indemnify, defend, and hold harmless NASA-KSC, its directors, officers, employees, and agents from and against all claims, suits, liabilities and expenses (including reasonable attorney's fees and court costs at the trial level and in any appellate proceedings) on account of injury to or death of persons (including, but not limited to, employees or agents of NASA-KSC or FPL) or damage to property arising out of, or in connection with the completion of the suitability investigation by FPL and its agents. This indemnification shall be governed by and construed under the laws of the State of Florida.

6. All requests, approvals, consents, notices and other communications under this Agreement shall be properly given only if made in writing and either deposited in the United States mail, postage prepaid, certified with return receipt requested, or delivered by hand (which may be through a messenger or recognized delivery, courier or air express service), or sent via facsimile or electronic mail, and addressed to the applicable party as specified below (or such other personnel or place as a party may from time to time designate in a written notice to the other party). Such requests, approvals, consents, notices and other communications shall be effective on the date: of receipt (evidenced by the certified mail receipt) if delivered by United States mail; of hand delivery if hand delivered; or of transmission as evidenced by a machine-generated receipt or proof of transmission if sent via facsimile or electronic mail.

NASA-KSC: James E. Ball
Center Development Manager
John F. Kennedy Space Center, NASA
Mail Code: TA-E
Kennedy Space Center, FL 32899
321-867-2998 (voice)

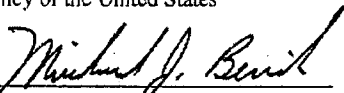
321-861-9191 (fax)
E-mail: James.E.Ball@nasa.gov

Orin Shakerdge
Florida Power & Light Company
700 Universe Blvd., LAW/JB
Juno Beach, FL 33408
561-694-4678 (voice)
561-691-7762 (fax)
Orin_shakerdge@fpl.com

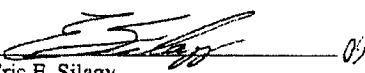
7. This Agreement shall take effect at the time of its execution and shall expire upon the earlier of: (a) ninety (90) days; or (b) the date FPL exercises the option to lease the Property, in accordance with the terms and conditions of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Access & Indemnification Agreement on the date set forth above.

NASA-KSC:
NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION
An Agency of the United States

By: 
Michael J. Benik
Director, Center Operations
John F. Kennedy Space Center

FPL:
Florida Power & Light Company,
A Florida corporation

By: 
Eric E. Silagy
Vice President of Development

J:\law\OSS\FPL\Access\NASA access.doc

Transmission Reservation Detail 72155576 CONFIRMED

Seller	Source Sink	POR POD	Request Type	Start	Stop	MW Req	MW Grant	Bid Price	Offer Price	Ceiling Price	Price Unit	
FPL	FPLNWR FPLNWL	FPLRES FPLLD	ORIGINAL	2009-08-31 23:00 ES	2029-09-01 23:00 ES	10	10	0.00	0.00	0.00	\$/MW	
Path: F/FPL/FPLRES-FPLLD//												
Service Code		Increment	Class	Type	Period	Window	Subclass					
MONTH-NETWORK RESOURCE		MONTHLY	FIRM	NETWORK	FULL PERIOD	FIXED						
Preconfirmed: No		Competing: No		Negotiated: No		Nerc Priority:		Affiliate: Yes				
Reservation Profile												
Start Date		Stop Date		MW Req	MW Grant	MWH	Bid Price	Offer Price				
2009-08-31 23:00 ES		2029-08-01 23:00 ES		10	10	1753440.00	0.00	0.00				
Profile Total:						1753440.00						
Times				References								
Queued	2008-05-08 07:50:35 ES										Deal	
Updated	2008-05-13 15:27:41 ES										Sale	
Response											Posting	
Impacted	0										Reassigned	
Last Customer Action	2008-05-13 16:27:41 ED										Seller	
Last Seller Action	2008-05-13 14:57:19 ED										Related	
Comments												
Status												
Seller												
Provider												
Customer	10 MW PV FPL installation at NASA											
Status Notification												
Anc-Service-Link												
Customer: FPL						Seller: FPL						
Name	fpl_rp					Name	fpl_ts					
Phone	305 442-5059					Phone						
Fax	305 442-5142					Fax						
E-mail	armando_garcia@fpl.com					E-mail						