

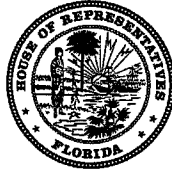


Energy & Utilities Subcommittee

**Wednesday, March 27, 2013
8:00 AM
Webster Hall (212 Knott)**

**Will Weatherford
Speaker**

**Jose Diaz
Chair**



The Florida House of Representatives

Regulatory Affairs Committee

Energy & Utilities Subcommittee

Will Weatherford
Speaker

Jose Diaz
Chair

AGENDA

March 27, 2013

8:00 a.m. – 10:00 a.m.

212 Knott Building (Webster Hall)

Opening Remarks by Chair Diaz

Consideration of the following Proposed Committee Substitute:

PCS for HB 1357 by *Rep. Cummings*

Guaranteed Energy, Water, and Wastewater Performance Savings Contracting Act

Discussion relating to the Use of Nuclear Power in Florida: How it is Planned, Financed, and Constructed

Mark Futrell, Director, Industry Development & Market Analysis
Florida Public Service Commission

Peter A. Bradford, former member of the U.S. Nuclear Regulatory Commission and
Adjunct Professor, Vermont Law School

Steven Scroggs, Senior Director, Nuclear Development
Florida Power & Light Company

Alex Glenn, State President
Progress Energy Florida, a subsidiary of Duke Energy

PANEL DISCUSSION

Closing Remarks by Chair Diaz

Adjournment

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: PCS for HB 1357 Guaranteed Energy, Water, and Wastewater Performance Savings Contracting Act
SPONSOR(S): Energy & Utilities Subcommittee
TIED BILLS: None. **IDEN./SIM. BILLS:** SB 1594

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Orig. Comm.: Energy & Utilities Subcommittee		Whittier <i>smw</i>	Collins <i>BC</i>

SUMMARY ANALYSIS

The Guaranteed Energy, Water, and Wastewater Performance Savings Contracting Act (Act) encourages agencies to “invest in energy, water, and wastewater efficiency and conservation measures to minimize energy and water consumption and wastewater production and maximize energy, water, and wastewater savings” and to reinvest any savings resulting from those measures in additional energy, water, and wastewater efficiency and conservation measures.¹

The Act provides for contracts that are required to produce immediate and long-term energy cost savings through Energy Savings Contracting (ESCO). A state agency may pursue an ESCO project if it finds that the amount the agency would spend on energy conservation measures would not likely exceed the amount of the cost savings for up to 20 years from the date of installation. ESCO projects are typically financed through a third-party financial institution. The bill clarifies that in a guaranteed energy, water, and wastewater performance savings contract between an ESCO and an agency, the contract may provide for repayment to the lender of the installation construction loan through installment payments.

Currently, state agencies, municipalities, and political subdivisions are authorized to utilize the provisions of the Act. The bill expands the Act to include a county school district or an institution of higher education, including all state universities, colleges, and technical colleges.

ESCO projects are required to produce a net cost savings to the state in every year of the contract. Agencies may use the recurring cost savings to repay the third-party loans, but they are required to gain the spending authority through an annual legislative budget request process.

All ESCO projects must be approved by the Department of Financial Services (DFS) and the Department of Management Services (DMS). Proponents of the bill state that the length of time between an audit and approval by the Department of Management Services and DFS is so long that the audit may become outdated. The bill requires DFS to complete its review and approval of the guaranteed energy, water, and wastewater performance savings contract within 10 business days of receiving it.

The bill also adds to contract requirements that a contract must include an investment-grade audit, certified by DMS, which states that the cost savings are appropriate and sufficient for the term of the contract.

The bill has not been reviewed by the Revenue Estimating Conference, therefore the fiscal impact on the state and local governments has not been determined.

¹ Section 489.145(2), F.S.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Present Situation

Guaranteed Energy, Water, and Wastewater Performance Savings Contracting Act

The Guaranteed Energy, Water, and Wastewater Performance Savings Contracting Act (Act) encourages agencies to “invest in energy, water, and wastewater efficiency and conservation measures to minimize energy and water consumption and wastewater production and maximize energy, water, and wastewater savings” and to reinvest any savings resulting from those measures in additional energy, water, and wastewater efficiency and conservation measures.²

The Act provides for contracts that are required to produce immediate and long-term energy cost savings through Energy Savings Contracting (ESCO). A state agency may pursue an ESCO project if it finds that the amount the agency would spend on energy conservation measures would not likely exceed the amount of the cost savings for up to 20 years from the date of installation. ESCO projects are typically financed through a third-party financial institution. Currently, state agencies, municipalities, and political subdivisions are authorized to utilize the provisions of the Act.

ESCO projects are required to produce a net cost savings to the state in every year of the contract. Agencies may use the recurring cost savings to repay the third-party loans, but they are required to gain the spending authority through annual legislative budget request process.

“Energy, water, or wastewater cost savings” means a measured reduction in the cost of fuel, energy or water consumption, wastewater production, and stipulated operation and maintenance created from the implementation of one or more energy, water, or wastewater efficiency or conservation measures when compared with an established baseline for the previous cost of fuel, energy or water consumption, wastewater production, and stipulated operation and maintenance.

A proposed contract or lease must include the following information:

- Supporting information required by statutes pertaining to legislative budget requests, deferred-payment commodity contracts, and consolidated financing of deferred-payment purchases.³ For contracts approved under this section, the criteria may, at a minimum, include the specification of a benchmark cost of capital and minimum real rate of return on energy, water, or wastewater savings against which proposals shall be evaluated.
- Documentation supporting recurring funds requirements in statutes pertaining to deferred-payment commodity contracts, and consolidated financing of deferred-payment purchases.⁴
- Approval by the head of the agency or his or her designee.
- An agency measurement and verification plan to monitor cost savings.

² Section 489.145(2), F.S.

³ See ss. 216.023(4)(a)9., 287.063(5), and 287.064(11), F.S.

⁴ See ss. 287.063(5) and 287.064(11), F.S.

Section 489.145(6), F.S., requires the Department of Management Services (DMS) to verify that the cost savings of all proposed ESCO projects are sufficient for the term of the contract. DMS is also required to provide technical assistance to the agencies regarding these projects. According to DMS, "In order to verify that ESCO-related cost savings are sufficient for the term of the contract, DMS first evaluates the technical merits of the energy audit. This process includes evaluating the assumptions made for the baseline and the proposed savings models, and the calculation methods used to generate the proposed savings."⁵ DMS then attempts to determine if the proposed energy savings are achievable.

Once ESCO projects are approved by the DMS, the Department of Financial Services (DFS) must review the financial terms of the contract. Proponents of the bill state that the length of time between an audit and approval by the DMS and DFS is so long that the audit may become outdated.

Effects of Proposed Changes

The term "agency" means the state, a municipality, or a political subdivision. The bill expands this list of entities to include a county or city school district or an institution of higher education, including all state universities, colleges, and technical colleges.

The bill amends the definition of "energy, water, and wastewater efficiency and conservation measure," to mean a "training program incidental to the contract, facility alteration, or equipment purchase to be used in a building retrofit, addition, or renovation, or in new construction, including an addition to existing facilities or infrastructure, which reduces energy or water consumption, wastewater production, or energy-related operating costs." The definition includes, but is not limited to, the following measures:

1. Installing or modifying:
 - Insulation of the facility structure and systems within the facility.
 - Window and door systems that reduce energy consumption or operating costs, such as storm windows and doors, caulking or weatherstripping, multiglazed windows and doors, heat-absorbing or heat-reflective glazed and coated window and door systems, additional glazing, and reductions in glass area.
 - Automatic energy control systems.
 - Energy recovery systems.
 - Cogeneration systems that produce steam or forms of energy such as heat, as well as electricity, for use primarily within a facility or complex of facilities.
 - Renewable energy systems.
 - Devices that reduce water consumption or sewer charges.
 - Energy storage systems, such as fuel cells and thermal storage.
 - Energy-generating technologies.
 - Automated, electronic, or remotely controlled technologies, systems, or measures that reduce utility or operating costs.
 - Software-based systems that reduce facility management or other facility operating costs.
 - Energy information and control systems that monitor consumption, redirect systems to optimal energy sources, and manage energy-using equipment.
2. Replacing or modifying:
 - Heating, ventilating, or air-conditioning systems.
 - Lighting fixtures to increase the energy efficiency of the lighting system without increasing the overall illumination of a building, unless the increase in illumination is necessary to conform to the applicable state or local building code.
3. Implementing a program to reduce energy costs through rate adjustments, load shifting to reduce peak demand, or the use of alternative energy suppliers, including, but not limited to,

⁵ *The ESCO Program: Challenges & Recommendations*, Department of Management Services' Division of Real Estate Development & Management, October 4, 2011, p. 9.

demand response programs, changes to more favorable rate schedules, negotiation of lower rates using new suppliers, or auditing utility billing and metering.

4. An improvement that reduces solid waste and associated removal costs.
5. Meter replacement, installation of an automated meter reading system, or other construction, modification, installation, or remodeling of water, electric, gas, fuel, communication, or other supplied utility system.
6. Any other energy conservation measure that reduces British thermal units (Btu), kilowatts (kW), or kilowatt hours (kWh); reduces fuel or water consumption in the building or waste water production; or reduces an operating cost or provides long-term cost reductions.
7. Any other repair, replacement, or upgrade of existing equipment that produces measurable savings, or any other construction, modification, installation, or remodeling that is approved by an agency and that is within the legislative authority granted the agency, such as an energy conservation measure.
8. Any other measure not otherwise defined in this chapter which is designed to reduce utility consumption, revenue enhancements, wastewater cost savings, avoided capital costs, or similar efficiency gains to a governmental unit.

The bill amends the definition of "energy, water, or wastewater cost savings" to include "identified avoided capital savings" when determining the difference between costs associated with implementation of the new measures and an established baseline for the previous costs of fuel, energy, water consumption, wastewater production, stipulated operation and maintenance, and identified avoided capital costs.

The bill clarifies that in a guaranteed energy, water, and wastewater performance savings contract between an ESCO and an agency, the contract may provide for repayment to the lender of the installation construction loan through installment payments. The period may not exceed 20 years. The bill provides that a facility alteration that includes expenditures that are required to properly implement other energy conservation measures may be included as part of the performance contract. In these instances, the installation of those measures may be supervised by the performance savings contractor.

The bill also adds to contract requirements that a contract must include an investment-grade audit, certified by DMS, which states that the cost savings are appropriate and sufficient for the term of the contract.

The bill requires DFS to complete its review and approval of the guaranteed energy, water, and wastewater performance savings contract within 10 business days of receiving it.

B. SECTION DIRECTORY:

Section 1. Amends s. 489.145, F.S., relating to the Guaranteed Energy, Water, and Wastewater Performance Savings Contracting Act; revises the terms "agency," "energy, water, and wastewater efficiency and conservation measure," and "energy, water, or wastewater cost savings"; provides that a contract may provide for repayments to a lender of an installation construction loan in installments for a period not to exceed 20 years; requires a contract to provide that repayments to a lender of an installation construction loan may be made over time, not to exceed 20 years from a certain date; requires a contract to provide for a certain amount of repayment to the lender of the installation construction loan within 2 years of a specified date; authorizes certain facility alterations to be included in a performance contract and to be supervised by the performance savings contractor; limits the time allotted to the Office of the Chief Financial Officer to review and approve an agency's guaranteed energy, water, and wastewater performance savings contract; requires that a proposed contract include

an investment-grade audit certified by the Department of Management Services which states that the cost savings are appropriate and sufficient for the term of the contract; clarifies that for funding purposes of consolidated financing of deferred payment commodity contracts an agency means a state agency; conforms language.

Section 2. Provides an effective date of July 1, 2013.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

See Fiscal Comments.

2. Expenditures:

See Fiscal Comments.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill may have a positive effect on the Energy Savings Contracting industry if more agencies enter into guaranteed energy, water, and wastewater performance savings contracts.

D. FISCAL COMMENTS:

The bill has not been reviewed by the Revenue Estimating Conference, therefore the fiscal impact on the state and local governments has not been determined.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not Applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditures of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

The bill defines "energy, water, and wastewater efficiency and conservation measure" to include, among other things, implementing a program to reduce energy costs through the use of alternative energy suppliers, including "negotiation of lower rates using new suppliers." This provision appears to imply that electrical power can be purchased at retail from more than one supplier. Under current law, however, there is no competitive marketplace for the retail sale of electricity in Florida. Each electric utility is the exclusive provider of service to all retail customers in its defined territory, as approved by the Public Service Commission (PSC).⁶ Further, a non-utility entity that develops an electrical generation project and sells power at retail to the public is considered under Florida law to be a "public utility" subject to regulation by the PSC.⁷ Thus, it appears that the provision of the bill that contemplates "negotiation of lower rates using new suppliers" is inconsistent with the current legal framework for the provision of retail electric service in Florida. **An amendment is being offered by the sponsor to resolve this issue.**

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

⁶ Section 366.04(2)(d-e), F.S.

⁷ PW Ventures, Inc. v. Nichols, 533 So. 2d 281 (Fla. 1988).

1 A bill to be entitled
2 An act relating to the Guaranteed Energy, Water, and
3 Wastewater Performance Savings Contracting Act;
4 amending s. 489.145, F.S.; revising the terms
5 "agency," "energy, water, and wastewater efficiency
6 and conservation measure," and "energy, water, or
7 wastewater cost savings"; providing that a contract
8 may provide for repayments to a lender of an
9 installation construction loan in installments for a
10 period not to exceed 20 years; requiring a contract to
11 provide that repayments to a lender of an installation
12 construction loan may be made over time, not to exceed
13 20 years from a certain date; requiring a contract to
14 provide for a certain amount of repayment to the
15 lender of the installation construction loan within 2
16 years of a specified date; authorizing certain
17 facility alterations to be included in a performance
18 contract and to be supervised by the performance
19 savings contractor; limiting the time allotted to the
20 Office of the Chief Financial Officer to review and
21 approve an agency's guaranteed energy, water, and
22 wastewater performance savings contract; requiring
23 that a proposed contract include an investment grade
24 audit certified by the Department of Management
25 Services which states that the cost savings are
26 appropriate and sufficient for the term of the
27 contract; clarifying that for funding purposes of
28 consolidated financing of deferred payment commodity

29 contracts an agency means a state agency; conforming
 30 language; providing an effective date.

31

32 Be It Enacted by the Legislature of the State of Florida:

33

34 Section 1. Paragraphs (a) through (c) of subsection (3),
 35 paragraphs (c) and (j) of subsection (4), and subsections (5)
 36 through (7) of section 489.145, Florida Statutes, are amended to
 37 read:

38 489.145 Guaranteed energy, water, and wastewater
 39 performance savings contracting.—

40 (3) DEFINITIONS.—As used in this section, the term:

41 (a) "Agency" means the state, a municipality, ~~or a~~
 42 political subdivision, a county or city school district, or an
 43 institution of higher education, including all state
 44 universities, colleges, and technical colleges.

45 (b) "Energy, water, and wastewater efficiency and
 46 conservation measure" means a training program incidental to the
 47 contract, facility alteration, or equipment purchase to be used
 48 in a building retrofit, addition, or renovation, or in new
 49 ~~construction, including an addition to existing facilities or~~
 50 ~~infrastructure,~~ which reduces energy or water consumption,
 51 wastewater production, or energy-related operating costs and
 52 includes, but is not limited to:

53 1. Installing or modifying:

54 a. Insulation of the facility structure and systems within
 55 the facility.

56 b.2. Window and door systems that reduce energy

57 consumption or operating costs, such as storm windows and doors,
 58 caulking or weatherstripping, multiglazed windows and doors,
 59 heat-absorbing~~7~~ or heat-reflective~~7~~ glazed and coated window and
 60 door systems, additional glazing, and reductions in glass area~~7~~
 61 ~~and other window and door system modifications that reduce~~
 62 ~~energy consumption.~~

63 c.3. Automatic energy control systems.

64 ~~4. Heating, ventilating, or air conditioning system~~
 65 ~~modifications or replacements.~~

66 ~~5. Replacement or modifications of lighting fixtures to~~
 67 ~~increase the energy efficiency of the lighting system, which, at~~
 68 ~~a minimum, must conform to the applicable state or local~~
 69 ~~building code.~~

70 d.6. Energy recovery systems.

71 e.7. Cogeneration systems that produce steam or forms of
 72 energy such as heat, as well as electricity, for use primarily
 73 within a facility or complex of facilities.

74 ~~8. Energy conservation measures that reduce British~~
 75 ~~thermal units (Btu), kilowatts (kW), or kilowatt hours (kWh)~~
 76 ~~consumed or provide long term operating cost reductions.~~

77 f.9. Renewable energy systems, ~~such as solar, biomass, or~~
 78 ~~wind systems.~~

79 g.10. Devices that reduce water consumption or sewer
 80 charges.

81 h.11. Energy storage systems, such as fuel cells and
 82 thermal storage.

83 i.12. Energy-generating technologies, ~~such as~~
 84 ~~microturbines.~~

- 85 j. Automated, electronic, or remotely controlled
 86 technologies, systems, or measures that reduce utility or
 87 operating costs.
- 88 k. Software-based systems that reduce facility management
 89 or other facility operating costs.
- 90 1. Energy information and control systems that monitor
 91 consumption, redirect systems to optimal energy sources, and
 92 manage energy-using equipment.
- 93 2. Replacing or modifying:
- 94 a. Heating, ventilating, or air-conditioning systems.
- 95 b. Lighting fixtures to increase the energy efficiency of
 96 the lighting system without increasing the overall illumination
 97 of a building, unless the increase in illumination is necessary
 98 to conform to the applicable state or local building code.
- 99 3. Implementing a program to reduce energy costs through
 100 rate adjustments, load shifting to reduce peak demand, or the
 101 use of alternative energy suppliers, including, but not limited
 102 to, demand response programs, changes to more favorable rate
 103 schedules, negotiation of lower rates using new suppliers, or
 104 auditing utility billing and metering.
- 105 4. An improvement that reduces solid waste and associated
 106 removal costs.
- 107 5. Meter replacement, installation of an automated meter
 108 reading system, or other construction, modification,
 109 installation, or remodeling of water, electric, gas, fuel,
 110 communication, or other supplied utility system.
- 111 6. Any other energy conservation measure that reduces
 112 British thermal units (Btu), kilowatts (kW), or kilowatt hours

113 (kWh); reduces fuel or water consumption in the building or
 114 waste water production; or reduces an operating cost or provides
 115 long-term cost reductions.

116 7.13. Any other repair, replacement, or upgrade of
 117 existing equipment that produces measurable savings, or any
 118 other construction, modification, installation, or remodeling
 119 that is approved by an agency and that is within the legislative
 120 authority granted the agency, such as an energy conservation
 121 measure.

122 8. Any other measure not otherwise defined in this chapter
 123 which is designed to reduce utility consumption, revenue
 124 enhancements, wastewater cost savings, avoided capital costs, or
 125 similar efficiency gains to a governmental unit.

126 (c) "Energy, water, or wastewater cost savings" means a
 127 measured reduction in the cost of fuel, energy or water
 128 consumption, wastewater production, ~~and~~ stipulated operation and
 129 maintenance, and identified avoided capital savings created from
 130 the implementation of one or more energy, water, or wastewater
 131 efficiency or conservation measures when compared with an
 132 established baseline for the previous cost of fuel, energy or
 133 water consumption, wastewater production, ~~and~~ stipulated
 134 operation and maintenance, and identified avoided capital costs.

135 (4) PROCEDURES.—

136 (c) An ~~The~~ agency may enter into a guaranteed energy,
 137 water, and wastewater performance savings contract with a
 138 guaranteed energy, water, and wastewater performance savings
 139 contractor if the agency finds that the amount the agency would
 140 spend on an ~~the~~ energy, water, and wastewater efficiency and

141 conservation measure is unlikely to ~~measures will not likely~~
 142 exceed the amount of the cost savings for up to 20 years after
 143 ~~from~~ the date of installation, based on the life cycle cost
 144 calculations provided in s. 255.255, if the recommendations in
 145 the report were followed and if the qualified provider or
 146 providers give a written guarantee that the cost savings will
 147 meet or exceed the costs of the system. However, actual computed
 148 cost savings must meet or exceed the estimated cost savings
 149 provided in each agency's program approval. Baseline adjustments
 150 used in calculations must be specified in the contract. The
 151 contract may provide for repayment to the lender of the
 152 installation construction loan through installment payments for
 153 a period not to exceed 20 years.

154 (j) In determining the amount the agency will finance to
 155 acquire the energy, water, and wastewater efficiency and
 156 conservation measures, the agency may reduce such amount by the
 157 application of ~~any~~ grant moneys, rebates, or capital funding
 158 available to the agency for the purpose of buying down the cost
 159 of the guaranteed energy, water, and wastewater performance
 160 savings contract. However, in calculating the life cycle cost as
 161 required in paragraph (c), the agency shall not apply any
 162 grants, rebates, or capital funding.

163 (5) CONTRACT PROVISIONS.—

164 (a) A guaranteed energy, water, and wastewater performance
 165 savings contract must include a written guarantee that may
 166 include, but is not limited to the form of, a letter of credit,
 167 insurance policy, or corporate guarantee by the guaranteed
 168 energy, water, and wastewater performance savings contractor

169 that annual cost savings will meet or exceed the amortized cost
 170 of energy, water, and wastewater efficiency and conservation
 171 measures.

172 (b) The guaranteed energy, water, and wastewater
 173 performance savings contract must provide that all repayments
 174 ~~payments~~ to the lender of the installation construction loan,
 175 except obligations on termination of the contract before its
 176 expiration, may be made over time, but may not ~~to~~ exceed 20
 177 years from the date of complete installation and acceptance by
 178 the agency, and that the annual savings are guaranteed to the
 179 extent necessary to make annual payments to satisfy the
 180 guaranteed energy, water, and wastewater performance savings
 181 contract.

182 (c) The guaranteed energy, water, and wastewater
 183 performance savings contract must require that the guaranteed
 184 energy, water, and wastewater performance savings contractor to
 185 whom the contract is awarded provide a 100-percent public
 186 construction bond to the agency for its faithful performance, as
 187 required by s. 255.05.

188 (d) The guaranteed energy, water, and wastewater
 189 performance savings contract may contain a provision allocating
 190 to the parties to the contract ~~any~~ annual cost savings that
 191 exceed the amount of the cost savings guaranteed in the
 192 contract.

193 (e) The guaranteed energy, water, and wastewater
 194 performance savings contract must ~~shall~~ require the guaranteed
 195 energy, water, and wastewater performance savings contractor to
 196 provide to the agency an annual reconciliation of the guaranteed

197 energy or associated cost savings. If the reconciliation reveals
 198 a shortfall in annual energy or associated cost savings, the
 199 guaranteed energy, water, and wastewater performance savings
 200 contractor is liable for such shortfall. If the reconciliation
 201 reveals an excess in annual cost savings, the excess savings may
 202 be allocated under paragraph (d) but may not be used to cover
 203 potential energy or associated cost savings shortages in
 204 subsequent contract years.

205 (f) The guaranteed energy, water, and wastewater
 206 performance savings contract must provide for repayment ~~payments~~
 207 to the lender of the installation construction loan of not less
 208 than one-twentieth of the price to be paid within 2 years from
 209 the date of the complete installation and acceptance by the
 210 agency using straight-line amortization for the term of the
 211 loan, and the remaining costs to be paid at least quarterly, not
 212 to exceed a 20-year term, based on life cycle cost calculations.

213 (g) The guaranteed energy, water, and wastewater
 214 performance savings contract may extend beyond the fiscal year
 215 in which it becomes effective; however, the term of a ~~any~~
 216 contract expires at the end of each fiscal year and may be
 217 automatically renewed annually for up to 20 years, subject to
 218 the agency making sufficient annual appropriations based upon
 219 continued realized energy, water, and wastewater savings.

220 (h) The guaranteed energy, water, and wastewater
 221 performance savings contract must stipulate that it does not
 222 constitute a debt, liability, or obligation of the state.

223 (i) A facility alteration that includes expenditures that
 224 are required to properly implement other energy conservation

225 measures may be included as part of a performance contract. In
 226 such case, notwithstanding any provision of law, the
 227 installation of these additional measures may be supervised by
 228 the performance savings contractor.

229 (6) PROGRAM ADMINISTRATION AND CONTRACT REVIEW.—The
 230 Department of Management Services, with the assistance of the
 231 Office of the Chief Financial Officer, shall, within available
 232 resources, provide technical content assistance to state
 233 agencies contracting for energy, water, and wastewater
 234 efficiency and conservation measures and engage in other
 235 activities considered appropriate by the department for
 236 promoting and facilitating guaranteed energy, water, and
 237 wastewater performance contracting by state agencies. The
 238 Department of Management Services shall review the investment-
 239 grade audit for each proposed project and certify that the cost
 240 savings are appropriate and sufficient for the term of the
 241 contract. The Office of the Chief Financial Officer, with the
 242 assistance of the Department of Management Services, shall,
 243 within available resources, develop model contractual and
 244 related documents for use by state agencies. Before ~~Prior to~~
 245 entering into a guaranteed energy, water, and wastewater
 246 performance savings contract, a ~~any~~ contract or lease for third-
 247 party financing, or any combination of such contracts, a state
 248 agency shall submit such proposed contract or lease to the
 249 Office of the Chief Financial Officer for review and approval.
 250 The Office of the Chief Financial Officer shall complete its
 251 review and approval within 10 business days after receiving the
 252 proposed contract or lease. A proposed contract or lease must

253 ~~shall~~ include:

254 (a) Supporting information required by s. 216.023(4)(a)9.
 255 in ss. 287.063(5) and 287.064(11). For contracts approved under
 256 this section, the criteria may, at a minimum, include the
 257 specification of a benchmark cost of capital and minimum real
 258 rate of return on energy, water, or wastewater savings against
 259 which proposals shall be evaluated.

260 (b) Documentation supporting recurring funds requirements
 261 in ss. 287.063(5) and 287.064(11).

262 (c) Approval by the head of the agency or his or her
 263 designee.

264 (d) An agency measurement and verification plan to monitor
 265 cost savings.

266 (e) An investment-grade audit, certified by the Department
 267 of Management Services, which states that the cost savings are
 268 appropriate and sufficient for the term of the contract.

269 (7) FUNDING SUPPORT.—For purposes of consolidated
 270 financing of deferred payment commodity contracts under this
 271 section by a state ~~an~~ agency, any such contract must be
 272 supported from available funds appropriated to the state agency
 273 in an appropriation category, as defined in chapter 216, that
 274 the Chief Financial Officer has determined is appropriate or
 275 that the Legislature has designated for payment of the
 276 obligation incurred under this section.

277
 278 The Office of the Chief Financial Officer shall not approve any
 279 contract submitted under this section from a state agency that
 280 does not meet the requirements of this section.

PCS for HB 1357

ORIGINAL

2013

281

Section 2. This act shall take effect July 1, 2013.



Amendment No. 1

COMMITTEE/SUBCOMMITTEE ACTION

ADOPTED	___	(Y/N)
ADOPTED AS AMENDED	___	(Y/N)
ADOPTED W/O OBJECTION	___	(Y/N)
FAILED TO ADOPT	___	(Y/N)
WITHDRAWN	___	(Y/N)
OTHER	_____	

1 Committee/Subcommittee hearing PCB: Energy & Utilities

2 Subcommittee

3 Representative Cummings offered the following:

4
5 **Amendment**

6 Remove lines 99-104 and insert:

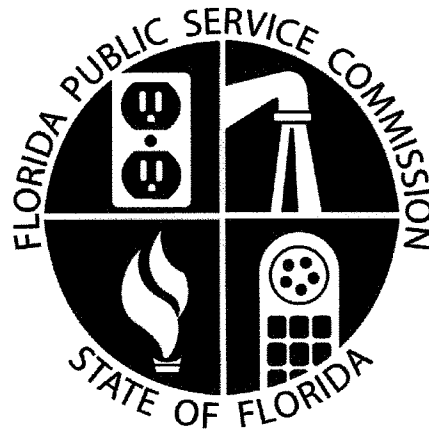
7 3. Implementing a program to reduce energy costs through
8 rate adjustments, load shifting to reduce peak demand, demand
9 response programs, changes to more favorable rate schedules, or
10 auditing utility billing and metering.

Mark Futrell
FL Public Service Commission

Overview of the Need Determination and Cost Recovery Processes for Nuclear and Integrated Gasification Combined Cycle (IGCC) Facilities

Presentation to the

House of Representatives Energy and Utilities Subcommittee



Mark Futrell

Director, Office of Industry Development and Market Analysis

Florida Public Service Commission

March 27, 2012

Need Determination Process

- The Florida Department of Environmental Protection coordinates a multi-agency evaluation of the environmental and land-use impacts of proposed power plants subject to Chapter 403, F.S.
- The Florida Public Service Commission (FPSC) must determine the need for a proposed power plant pursuant to Section 403.519, F.S.
- Following hearings before an Administrative Law Judge, the Governor and Cabinet, sitting as the Power Plant Siting Board, makes a final certification decision.



Need Determination Process for Nuclear and IGCC Facilities

Section 403.519 (4), F.S.

- The FPSC shall consider the need for:
 - Electric system reliability and integrity, including fuel diversity;
 - Base-load generating capacity;
 - Adequate electricity at reasonable cost; and
 - Whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available.

- In making its determination of need, the FPSC shall take into account whether the facility will:
 - Provide needed base-load capacity;
 - Enhance the reliability of electricity production by improving fuel diversity and reducing dependence on fuel oil and natural gas; and
 - Provide the most cost-effective source of power.



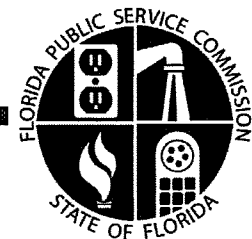
Need Determination Petitions Granted for Nuclear Facilities

- New nuclear facilities:
 - Levy Units 1 & 2 - Progress Energy Florida, Inc.
 - Need granted – 2008
 - Estimated fuel savings - \$900 million/year
 - Certification by Siting Board – approved 2009
 - 2,184 MW; estimated in-service 2024/25
 - Turkey Point Units 6 & 7 – Florida Power and Light Company
 - Need granted – 2008
 - Estimated fuel savings - \$1 billion/year
 - Certification by Siting Board – under review
 - 2,200 MW; estimated in-service 2022/23
- Capacity uprates at existing nuclear facilities:
 - Crystal River Unit 3 – PEF
 - Cancelled due to retirement of facility announced February 2013
 - Turkey Point Units 3 & 4; St. Lucie Units 1 & 2 – FPL
 - Additional 450 MW to be completed in 2013



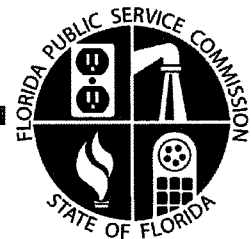
Alternative Cost Recovery Process for Nuclear and IGCC Facilities

- Section 403.519(4)(e), F.S. - If the FPSC grants a determination of need, a utility is given the right to recover prudently incurred costs prior to commercial operation for nuclear, IGCC, or associated facilities.
- Section 366.93, F.S. - Requires the FPSC to adopt rules for annual reviews, public hearings and recovery of prudently incurred costs.
- Rule 25-6.0423, F.A.C. – FPSC rule, adopted in April 2007, establishes the process for utilities to seek cost recovery pursuant to Section 366.93, F.S.



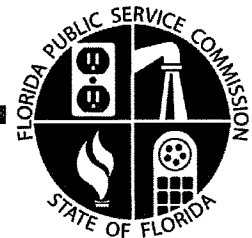
Alternative Cost Recovery Process for Nuclear and IGCC Facilities

- A utility may seek approval to recover from customers, through the capacity cost recovery clause, certain prudently incurred actual costs associated with the development of a nuclear or IGCC facility:
 - Site selection costs
 - Preconstruction costs
 - Carrying costs associated with construction activities
 - Known as the cost funding project development activities.
- Once a facility becomes commercially operational, a utility may seek approval to recover remaining prudently incurred construction costs through an increase to base rates.



Alternative Cost Recovery Process for Nuclear and IGCC Facilities

- Annual FPSC hearing process examines utility plans, activities, and costs
- Project management decisions, actions, and resultant costs over a moving three-year period:
 - Previous year – true-up of actual costs versus projected;
 - Current year – actual and projected costs;
 - Following year - projected costs
- Feasibility of completing the project
 - Quantitative and qualitative review of economic, engineering, and regulatory factors



Alternative Cost Recovery Process for Nuclear and IGCC Facilities

- Adjustments in cost recovery may be made as a result of the FPSC's annual review and hearing process.
- Standard of review to determine prudence of utility decisions and costs:
 - Competent, substantial record evidence;
 - Consideration of what a reasonable utility manager would have done, in light of the conditions and circumstances which were known, or should have been known, at the time the decision was made.



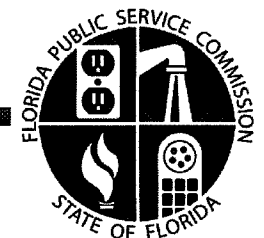
Questions?

Mark Futrell

Director, Office of Industry Development and Market Analysis

Florida Public Service Commission

mfutrell@psc.state.fl.us



Peter A. Bradford
Vermont Law School

Nuclear Power in Florida: A Review of Early Cost Recovery for Nuclear Reactor Construction

Peter A. Bradford

Adjunct Professor, Vermont Law School

Energy & Utilities Subcommittee

Florida House of Representatives,

March 27, 2013

Paying for Power Plants in the 20th Century

- Customers were not expected to pay for any utility property until it was completed and put into service.
- Utility construction was done with borrowed funds and with investment from stockholders.
- The cost of financing construction became part of the amount put into “rate base” when the plant went into service.
- Investors took the risks and were paid by the profits.

The History of Early Cost Recovery

- In the 1970s and 1980s, nuclear construction costs vastly exceeded forecasts, creating financial stress for utilities building reactors and creating rate shock when the plants went into service.
- Some states allowed utilities to collect construction costs before plant completion (CWIP).
- These CWIP laws contained safeguards.

Some Typical CWIP Safeguards

- Less than 100% of costs were eligible;
- Only allowed when construction was well underway;
- Commission discretion as to whether CWIP was needed (and how much);
- Requirement that customers only pay for “prudent” investment and plant that was “used and useful”

CWIP, Like ECR, Works Like a Tax

- The power of government is used to take money from citizens in a way and for a purpose that a free market economy would not.
 - Customers start paying years before a reactor generates any power (other industrial facilities in a market economy must sell their output to recover costs).
 - Makes it easier for a utility to finance capital intensive plants that take a long time to build, whether or not the plants are likely to be economically productive.
 - Creates incentives to build large power plants rather than conserve or purchase power from more efficient producers.

Florida's 2006 Law Shifted More Risks to Customers Than Historic CWIP

- None of the traditional safeguards were included;
- Customers took all of the risk of plant cancellation as well as cost overruns;
- The historic prudence review process was limited in ways that sharply favored the utilities at the expense of their customers.

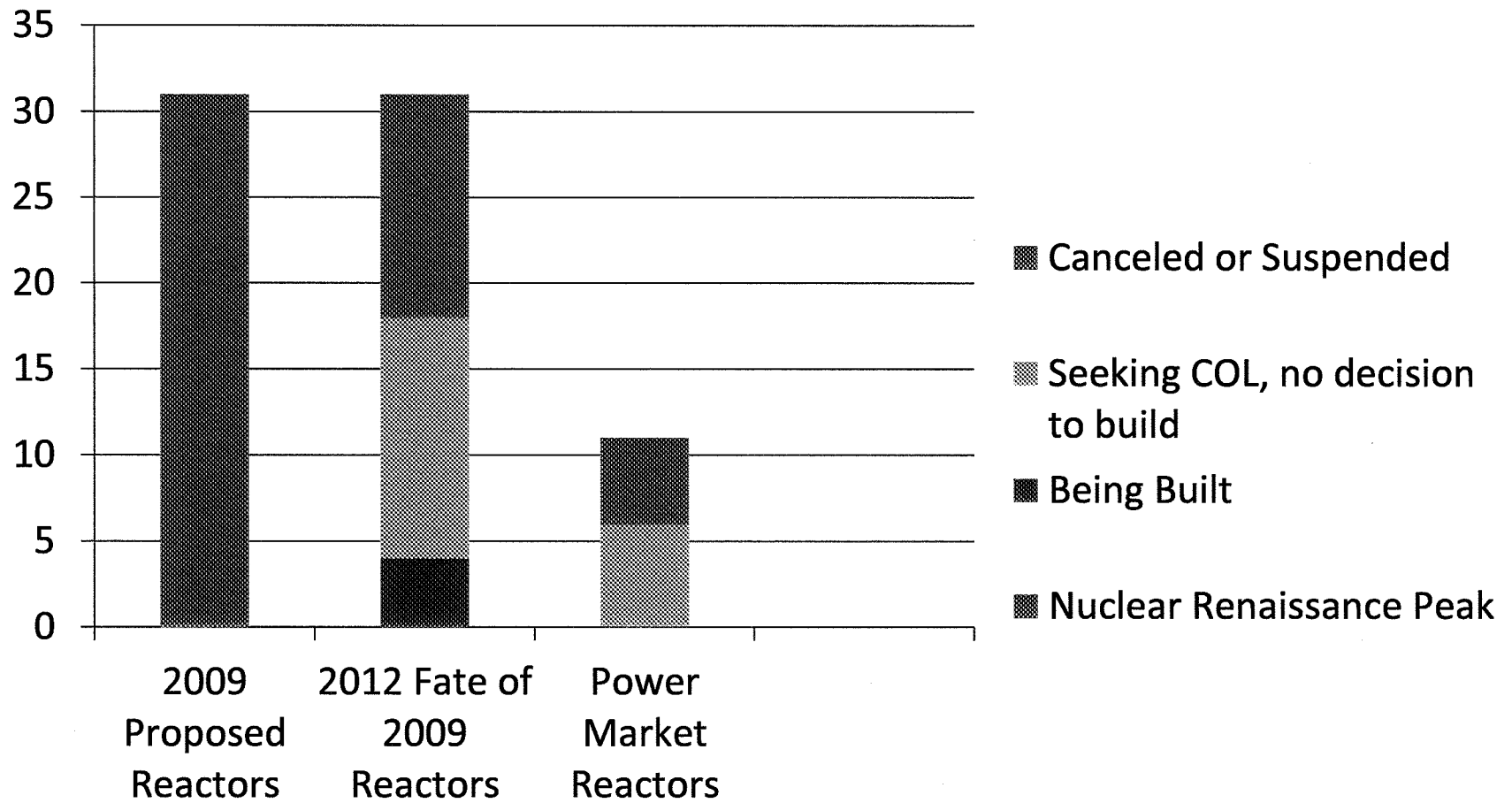
Interpretation of the 2006 Law

- The Florida PSC has interpreted the law in a way that shifts additional risk to Florida customers and consuming industries:
 - No serious consideration has been given to putting cap on the amount of money chargeable to customers;
 - Utilities have not been held to their original commitments to find other buyers for significant shares of the proposed reactors;
 - The utilities have not been required to conduct a rigorous ongoing analysis of whether the planned nuclear units remain the best way of meeting customer needs.
 - In particular, demand has been overestimated as have costs of alternatives

Why Was the 2006 Law Needed

- Because new nuclear reactors were more expensive than other ways of providing electricity and investors would not finance new reactors.
 - New nuclear electricity is expected to cost at least 12 cents/kWh
 - Natural gas prices in 2006 were relatively high but still much cheaper than new nuclear
 - Substantial energy efficiency was available at 4 cents/kWh or less
- The financial risks (cancellation, cost overruns, as well as cheaper alternatives) were too great for the private sector and had to be transferred to customers if new reactors were to be built.

The Status of the U.S. Reactor Renaissance



Four ECR Myths

1. ECR makes new power plants cheaper in the long run.
2. Customers will be protected by effective reviews of prudence of expenditures.
3. ECR will create jobs.
4. Florida has to have ECR in order to have nuclear power to combat climate change.

Myth #1:

ECR Will Make Electricity Cheaper

- ECR is a zero sum game: Utility financing costs are lower, but
 - Customers supply capital earlier
 - Risks (especially risk of paying cancelled plant costs) are shifted from investors and lenders to customers
- Little or no net savings to customers. They may get lower price later in return for paying sooner and taking more risk.
- Utility may take risks that it otherwise would not.
- Cheaper alternatives – especially efficiency - are de-emphasized and crowded out to make room for nuclear.
- Customer costs of borrowing are higher than utility costs.

Myth #1 Cont'd...

Nothing Is Actually Made Cheaper

- ECR doesn't reduce costs of steel, concrete or labor
- ECR doesn't make any actual risks (such as cancellation, delay or cost overruns) disappear
- ECR does reallocate risks without reducing them

Myth #2: *Customers will be protected by frequent reviews of prudence*

- Provisions of the 2006 law undercut regulatory oversight of imprudence;
- Prudence reviews must detect imprudence in the year it occurs, which will rarely happen;
- The PSC has no discretion as to whether ECR is necessary, or how much.

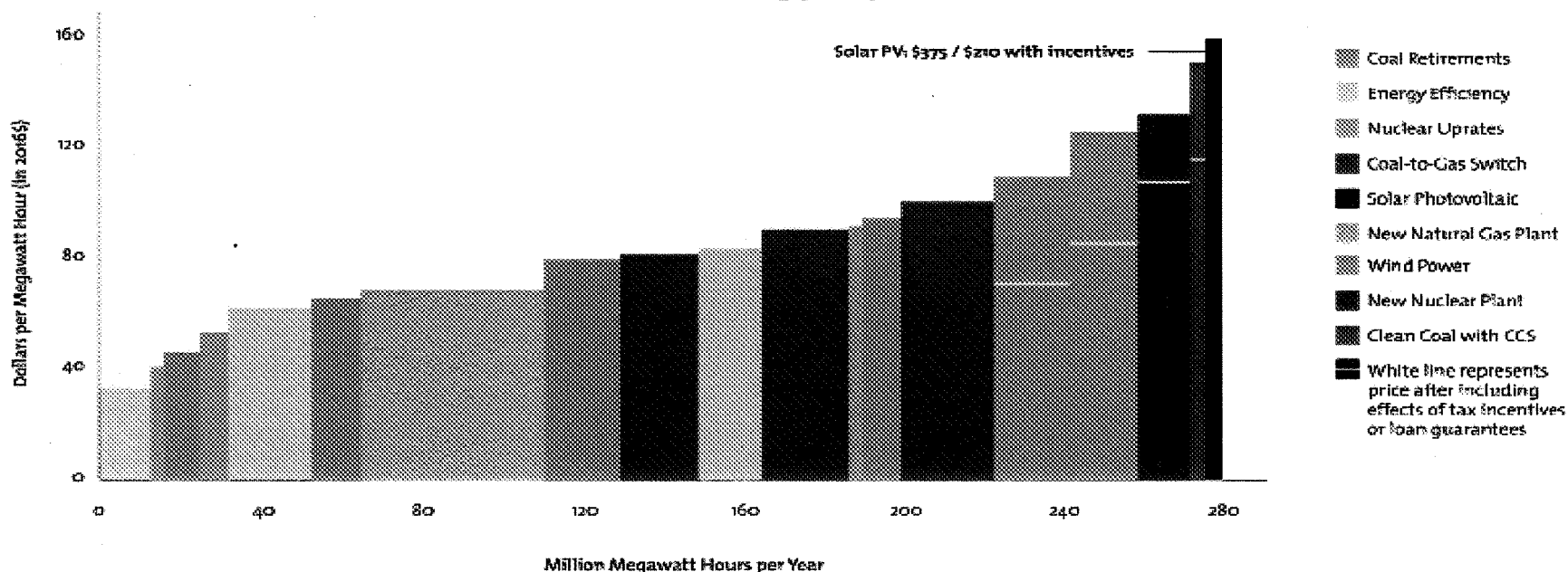
Myth #3: *ECR Creates Jobs*

- No state ever improved its economic prospects by raising its electric rates higher than they need to be.
- With ECR, jobs are actually lost immediately in the industrial and commercial sectors due to higher electric bills and production shifts to plants in other states.
- Immediate jobs are also lost in energy efficiency and cogeneration.
- Nuclear jobs, if they ever come, are 10+ years in the future.

Myth # 4 – Only New Nuclear Can Respond to Climate Change

There are Cheap Ways and Costly Ways to Clean the Generation Fleet

Levelized Cost of Clean Energy Options in PJM



Note: Adjusts for the market value of the generation's reliability and production profits.

Technology cost assumptions (in 2016 \$/MWh):
 Combined-cycle gas turbine: \$1,300 - \$1,700
 Wind: \$2,000 - \$3,500
 Nuclear: \$5,000 - \$6,000
 Clean coal with CCS: \$5,500 - \$6,500
 Solar photovoltaic: \$3,000 - \$4,000

Events Suggesting Need to Reevaluate the 2006 Law

- Reactor cost estimates have more than tripled;
- The “nuclear renaissance” has evaporated;
 - Only four (of 31) reactors are under construction
- Completion dates are a decade or more away, if ever;
- Cost of alternatives, especially natural gas, has declined sharply;
- We do not have a national policy to limit carbon emissions;
- Customers have paid more than \$1 billion for reactors that may well never be built;
- Cost implications of Fukushima;
- No new states have enacted similar laws; several have rejected them.

Ways to Improve the 2006 Law Short of Repealing It Outright

- Require that the PSC conduct an independent economic analysis of the maximum reasonable amount for Floridians to pay for new reactors, and update this review every two years;
 - Require that competitive bidding – including both supply and efficiency resources - be used to test the conclusions of this review
- Require that the PSC limit future early cost recovery to a time when the reactors are well along in construction and to an amount that the commission determines to be the minimum necessary to avoid unacceptable financial stress;
- Lock in asserted benefits as firmly as rate increases to guard against cost overruns, sale of plant or poor operation.
- Mitigate rate shock by using a five year phase-in beginning two years before likely startup and ending two years after, instead of CWIP.
- Avoid punishing a decision to cancel one or more of the pending units if that is the most cost effective decision for Florida customers.



FPL

Nuclear Investments

***Presentation for Florida House of Representatives
Energy & Utilities Subcommittee***

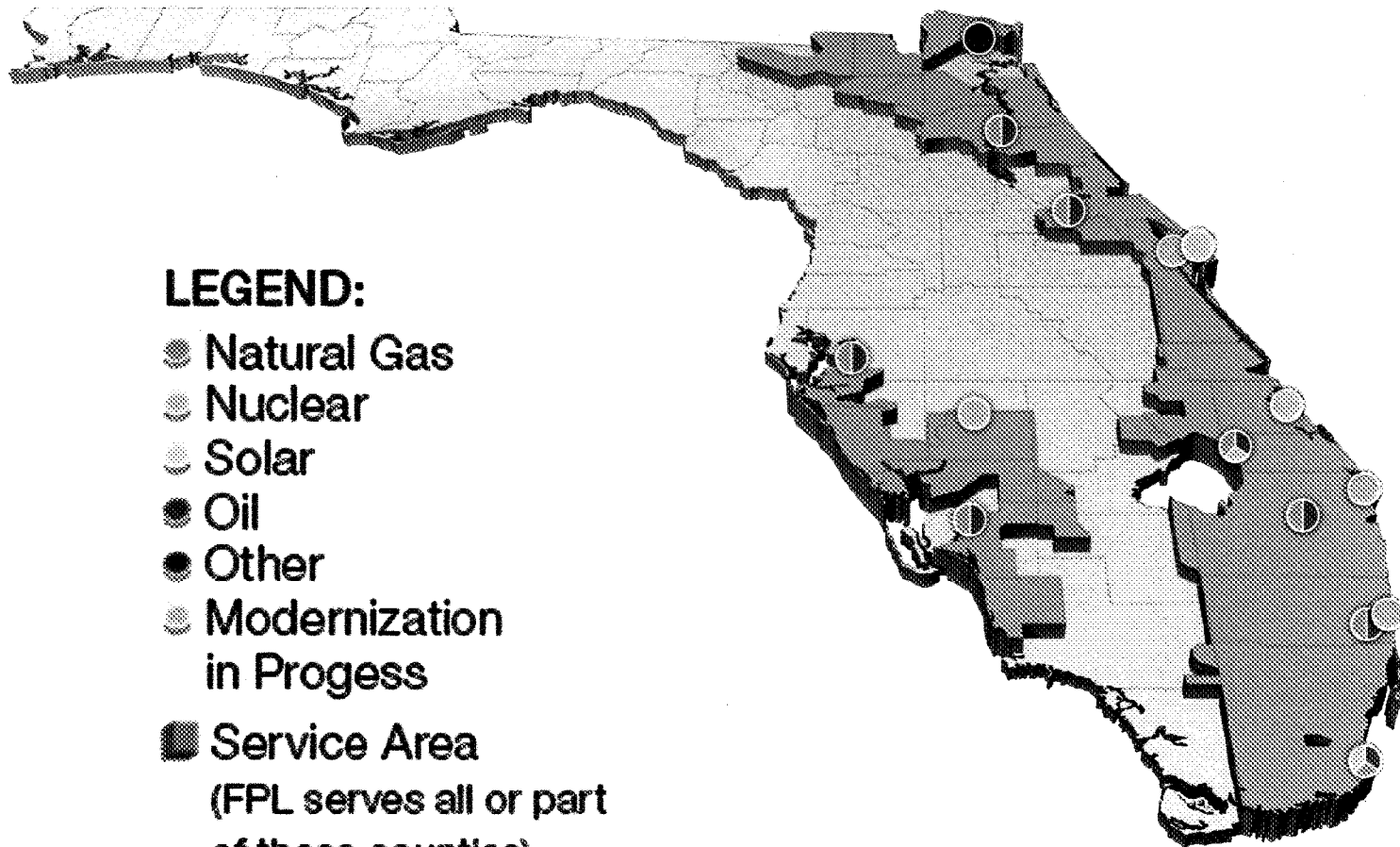
March 27, 2013

Steven Scroggs

Senior Director, Nuclear Development

Florida Power & Light Company

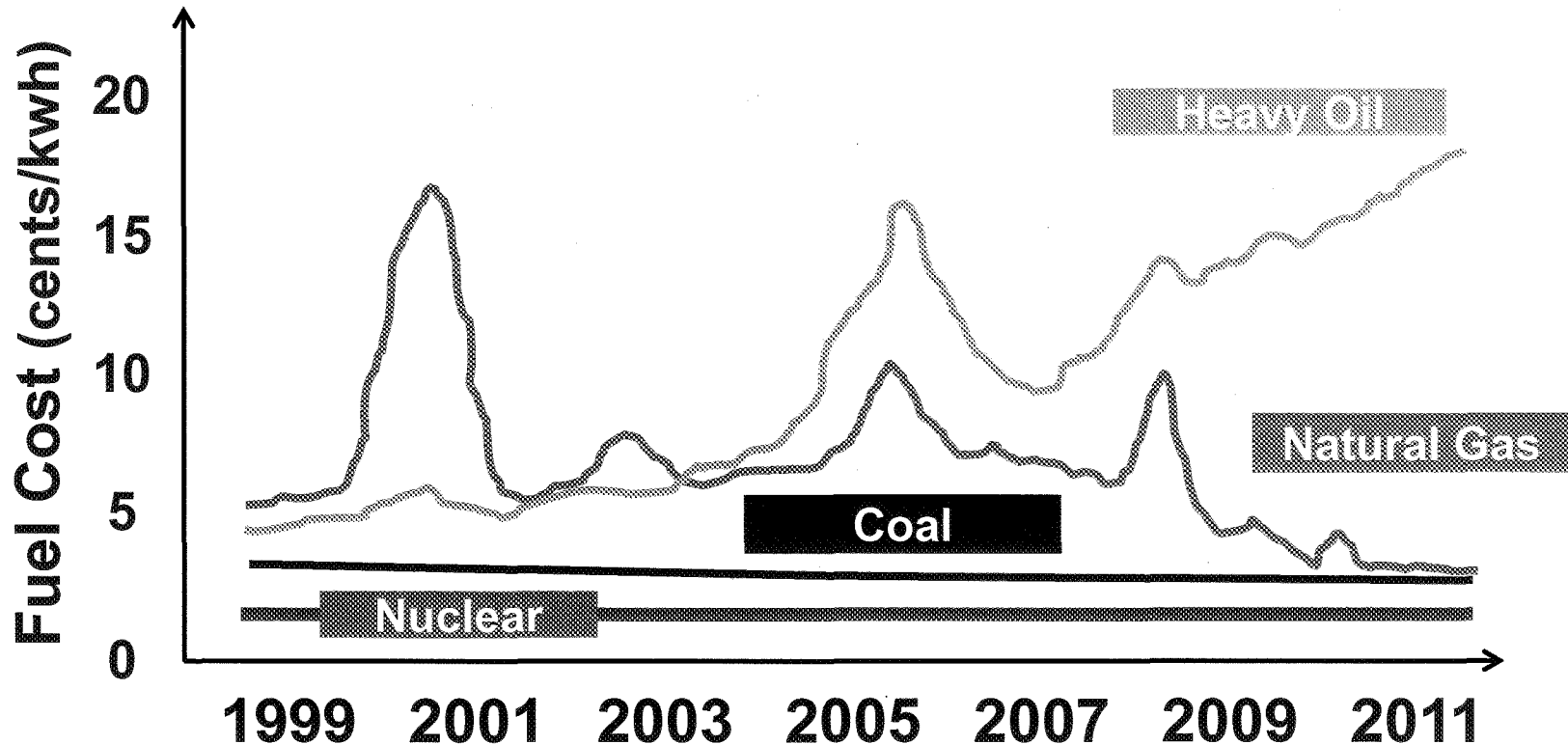
FPL's System



LEGEND:

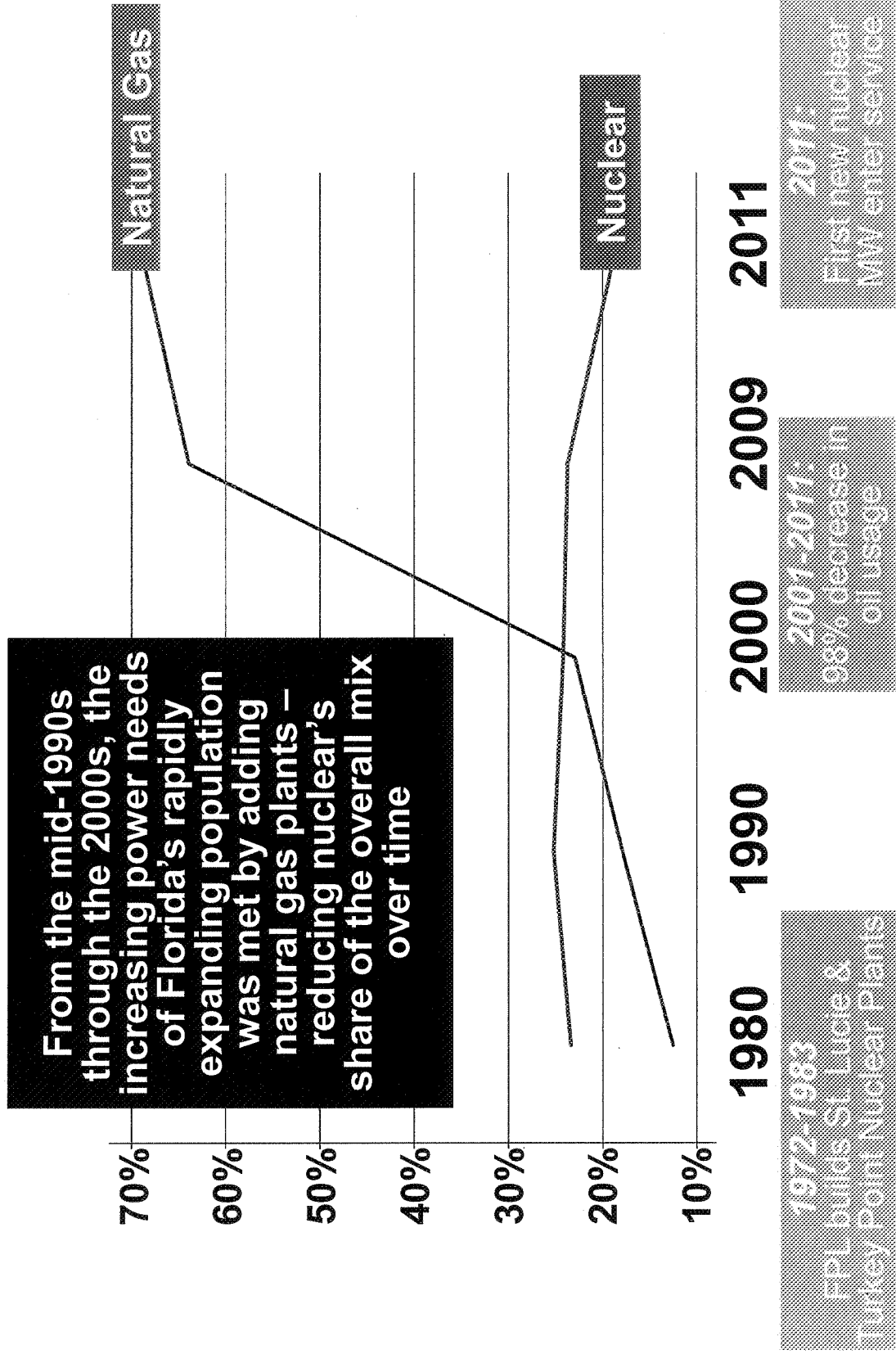
- Natural Gas
- Nuclear
- Solar
- Oil
- Other
- Modernization in Progress
- Service Area
(FPL serves all or part of these counties)

The Cost of Fuel for Electric Power (U.S.)

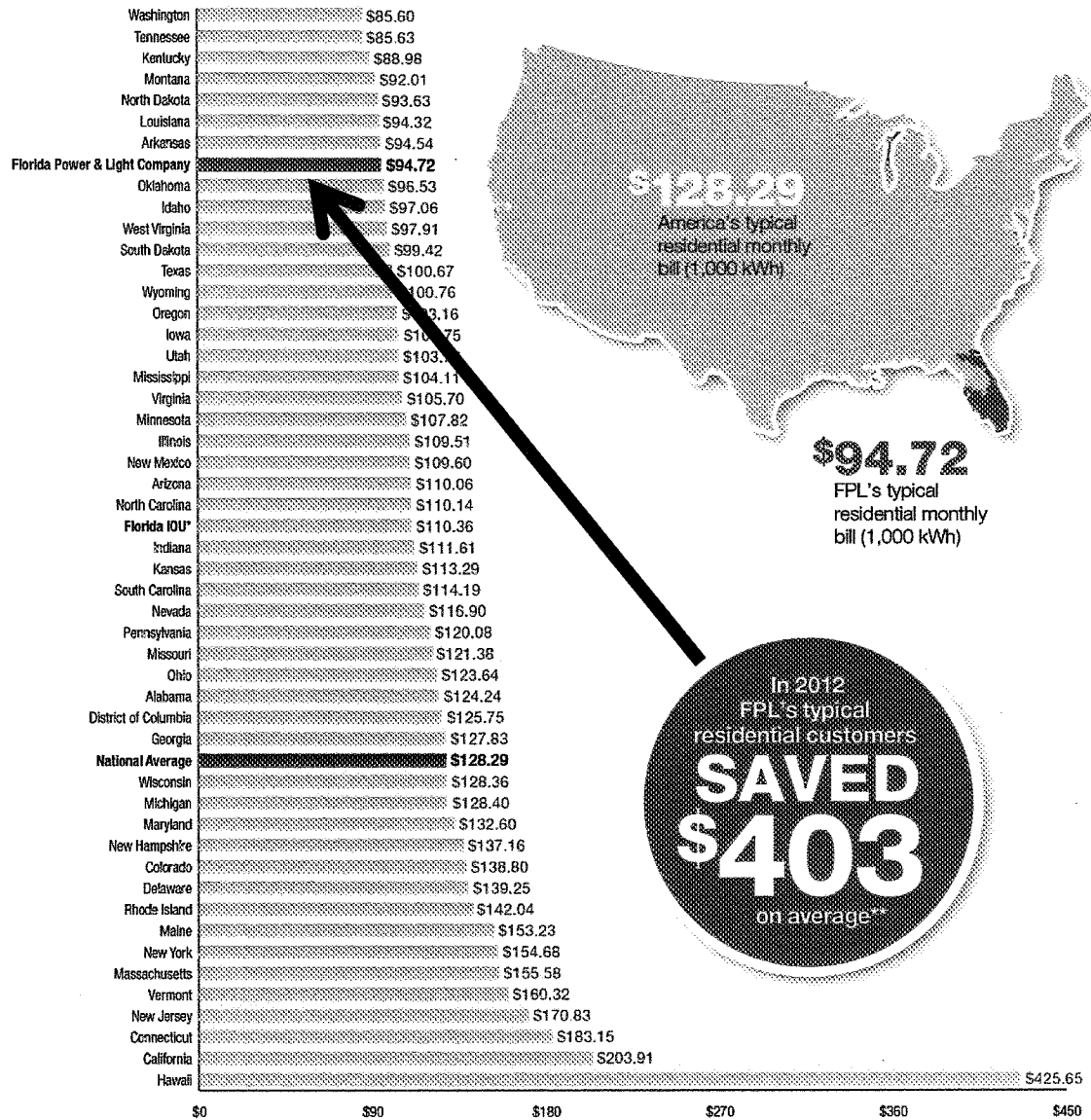


Nuclear is a stably priced, low-cost source of power generation

Percentage of Fuel Mix (FPL System)



Nuclear Saves Florida Money



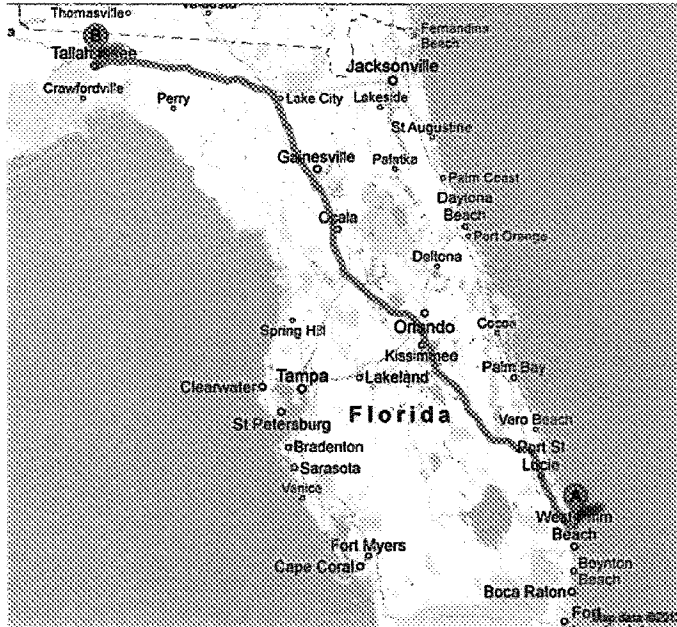
Nuclear power is one of the reasons why FPL's bill is 26% below the national average

In 2012 FPL's typical residential customers **SAVED \$403** on average*

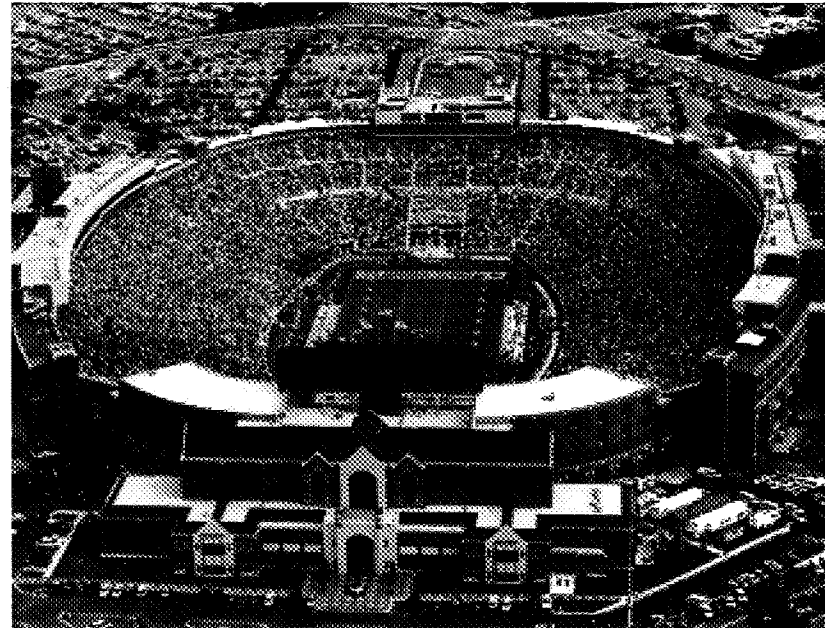
Comparison of a typical, 1,000-kWh customer bill based on July 2012 rates



Nuclear Takes Years & Requires Investment



**Cables and wires
would stretch from
here to Palm Beach
County and back**



**Enough gravel to fill
FSU's Doak S.
Campbell Stadium**

Nuclear Cost Recovery enables concurrent recovery of some costs, but the majority are not recovered until operation

Project Timeline and Cost Recovery

Project Phase	Costs Recovered	% of Project Cost Recovered*	Example Costs Incurred during phase
Licensing	Site Selection, licensing, permitting via NCR	1%	<ul style="list-style-type: none"> • Application preparation • Groundwater modeling • Legal costs
Pre-Construction	Engineering design, Execution planning, Contract development and negotiation via NCR	2 - 5%	<ul style="list-style-type: none"> • Detailed civil design and layout • Detailed equipment fabrication schedule • Detailed construction sequence and schedule
Construction	Interest only during Construction via NCR	8 -10%	<ul style="list-style-type: none"> • Major equipment • Materials • Labor • Construction Management
Operation	Construction and Operational costs via standard methods	-	<ul style="list-style-type: none"> • Construction Costs via Base Rates • O & M via Base Rates • Fuel via Fuel Clause

* Estimated amounts will vary by project size and duration

Costs recovered are spent concurrently on the activities and expenses approved by the PSC in the annual review

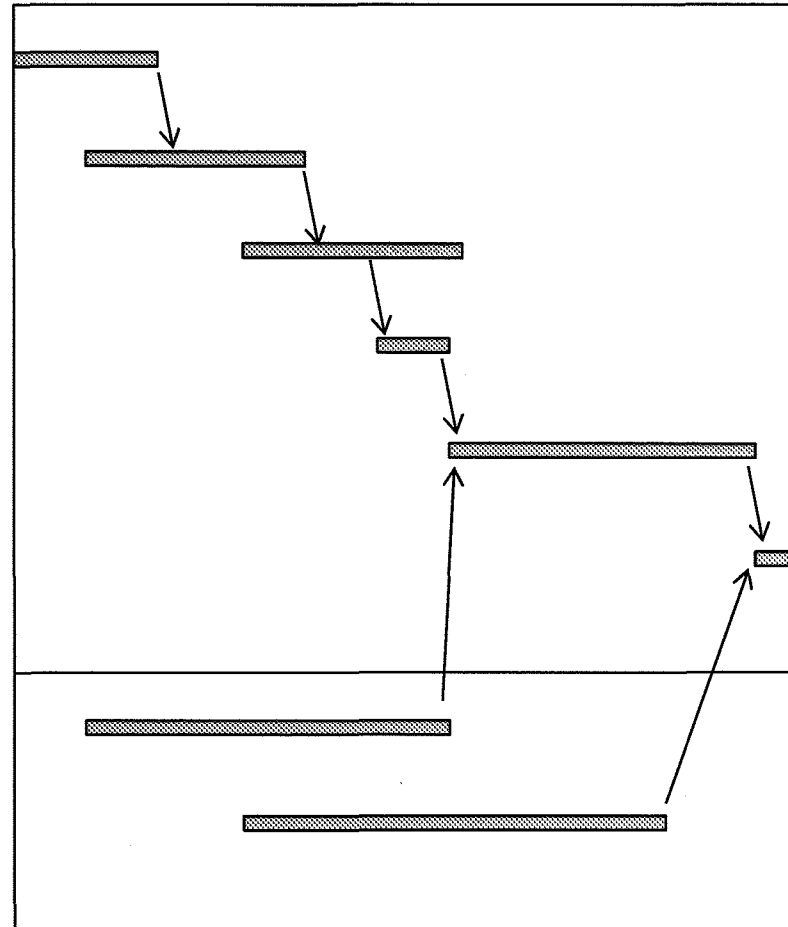
Nuclear construction involves coordination of huge numbers of workers, materials, and engineering talent over 9 years

Major Construction Activities

- Site Design 2 years
- Roads/Clearing 3 years
- Fill to Grade 3 years
- Deep Excavation 1 year
- Standard Plant Construct 4 years
- Fueling & Testing 0.5 years

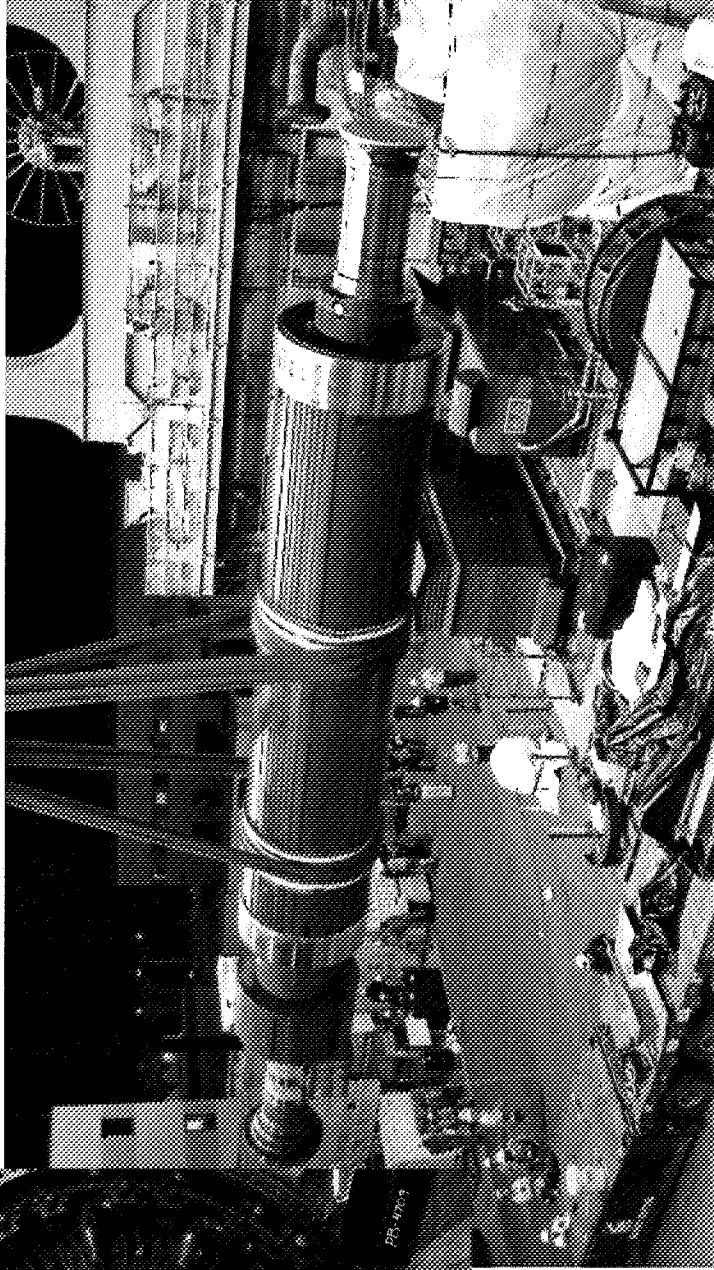
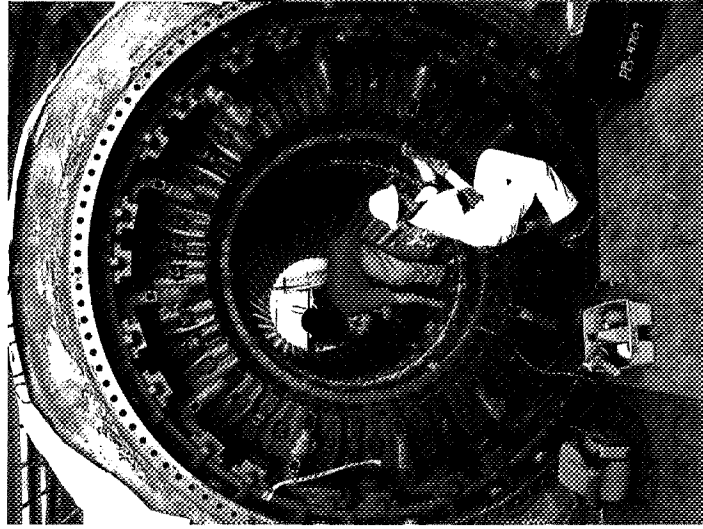
Concurrent Activities

- Equipment Fabrication 5 years
- Simulator/Training 6 years



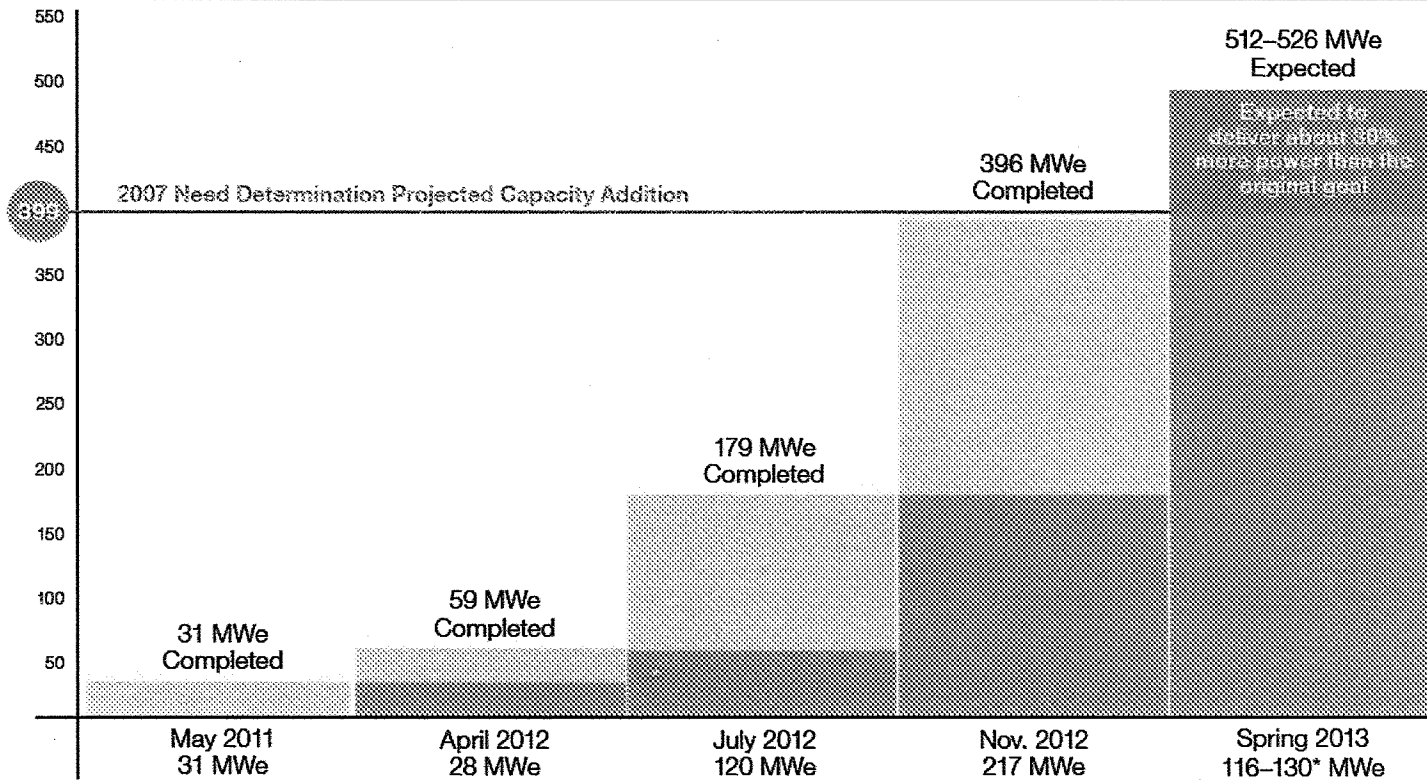
Cost recovery and regulatory stability are necessary to successfully add new nuclear capacity

Nuclear Cost Recovery = Pay-As-You-Go



500 New Nuclear Megawatts Nearly Done

**24-7, emissions-free electricity
for more than 300,000 Floridians**



**UPRATE FOSSIL FUEL SAVINGS
~\$10 million a month in 2013 alone
Billions of dollars over operational life**

Nuclear Investment = Community Economic Boost



The Miami Herald

Tuesday, June 26, 2012 11:00 AM MiamiHerald.com



POWER BOOST

U.S. sign Iran, sen new forc to the Gi

Iran's effect in...
 The U.S. has...
 The U.S. has...
 The U.S. has...

Two weeks and 7,200 miles later, a plant transformer arrives at its new home

ST. LUCIE
 The...
 The...
 The...

part of the...
 The...
 The...

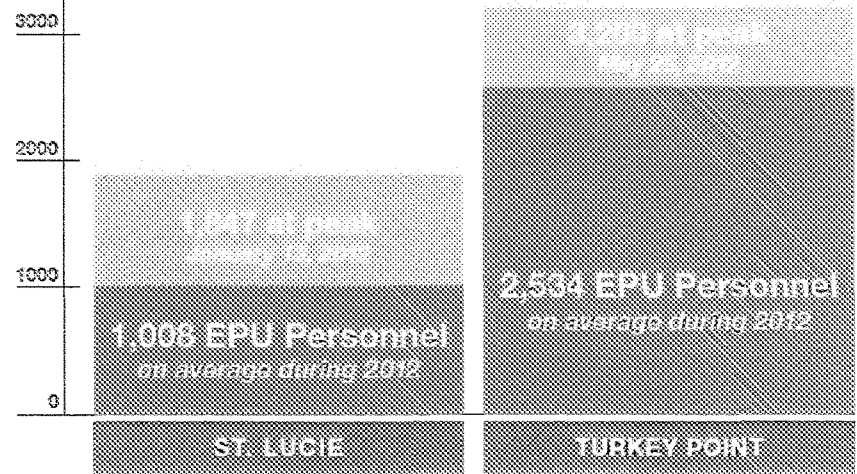
TCPALM
 FLORIDA'S TREASURE COAST AND PALM BEACHES

FPL bringing in 4,000 workers to increase St. Lucie Nuclear Power Plant capacity
 By Ed Bierschenk
 Posted July 5, 2012 at 4 a.m., updated July 5, 2012 at 11:03 a.m.

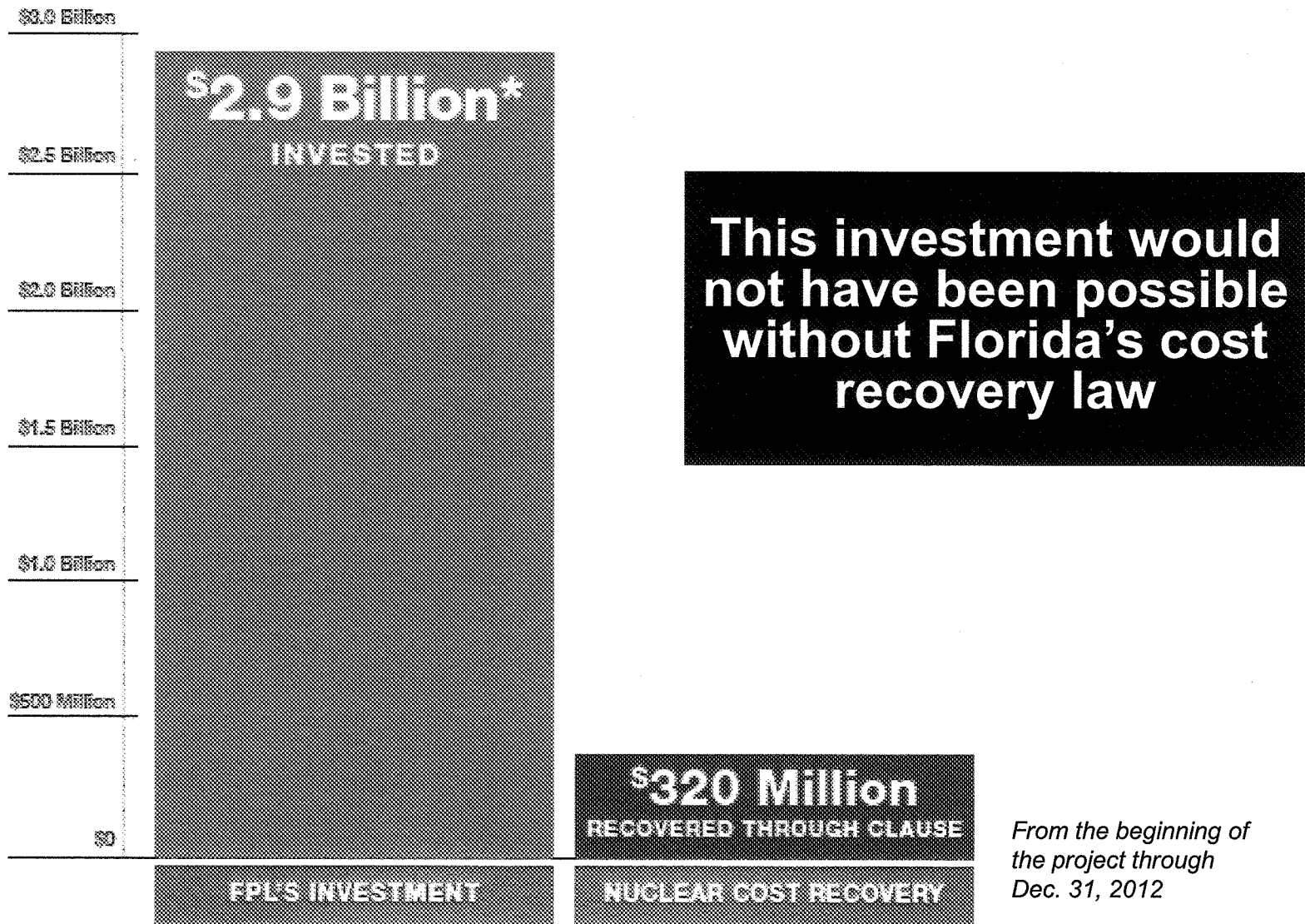
JOBS

Influx of specialized workers and job creation “helps the whole community keep going and keep growing.”

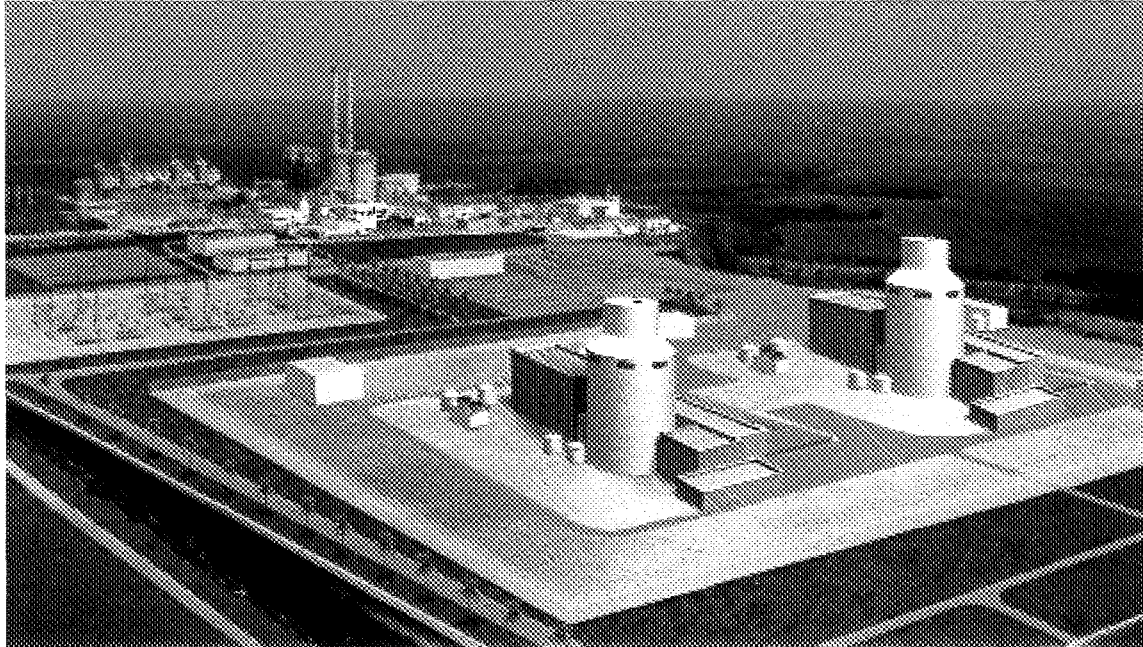
– Tom Vokoun, Stuart/Martin County Chamber Chairman



FPL's Uprate Investment & Clause Recovery



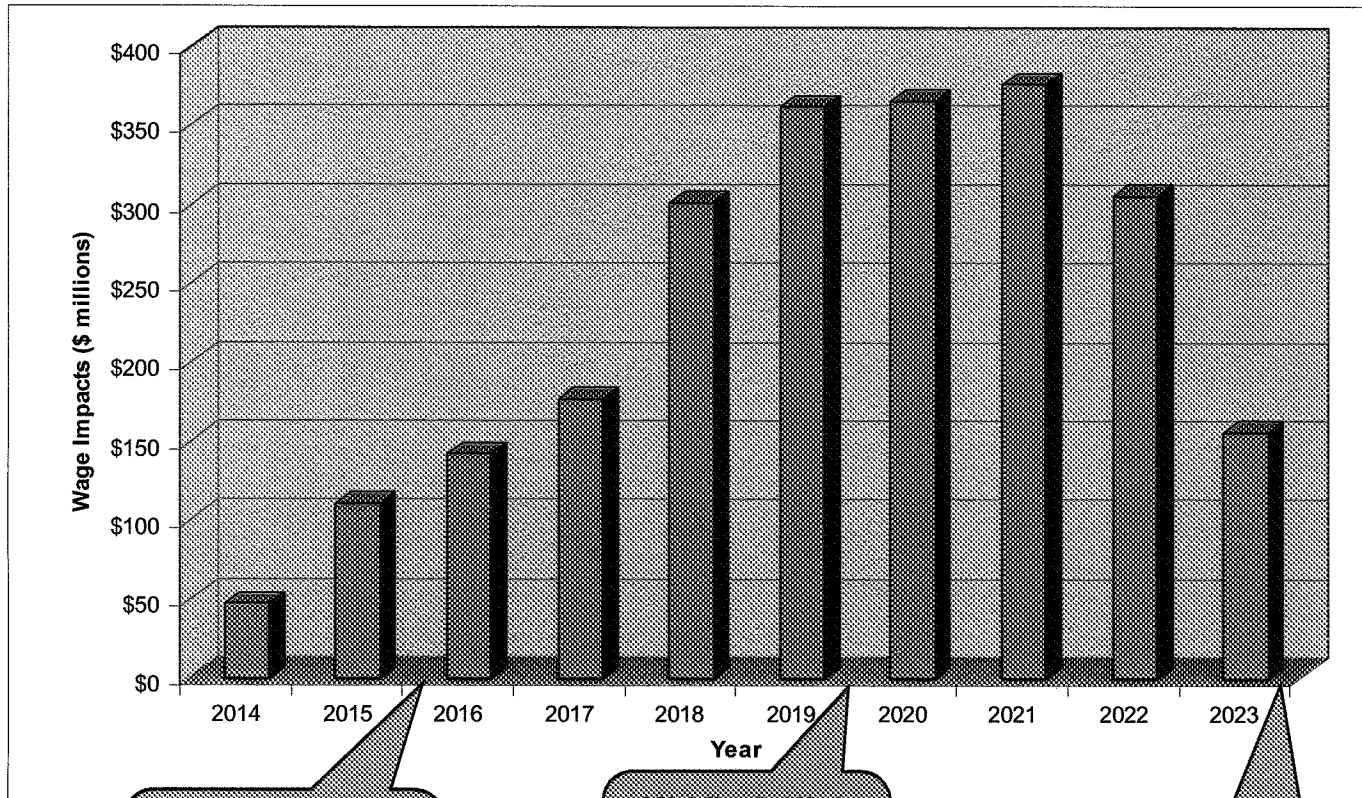
Planning for the Future is Essential



- **\$58 billion in fuel savings**
- **2,200 MW**
- **277 million tons of CO2 avoided**


Law enables FPL to plan for fuel diversity and reliable service while keeping customer bills low

Turkey Point 6 & 7 Estimated Wage Curve




The construction of two additional nuclear reactors will result in unprecedented job creation and economic impact on the regional economy


College-age students



Middle & High school students



Grade school students



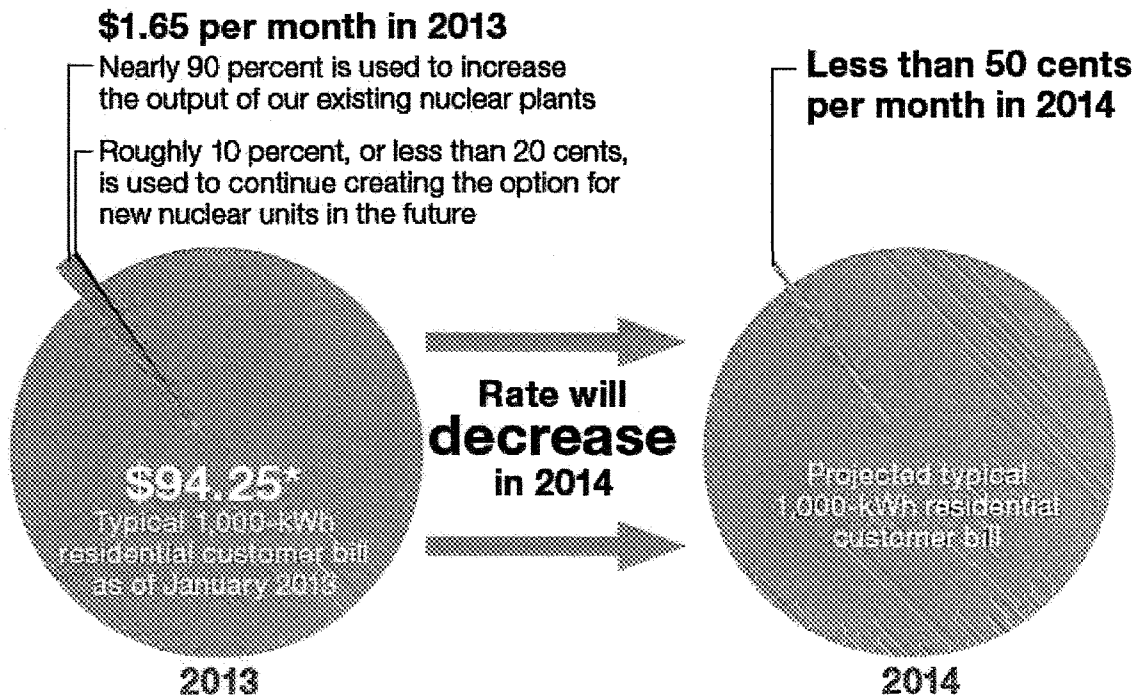
FPL's Nuclear Cost Recovery Clause Rate

Nuclear Cost Recovery Clause for a 1,000-kWh FPL Customer

FPL's 1,000-kWh residential customer bill is the lowest of Florida's 55 electric utilities, and the Nuclear Cost Recovery Clause accounts for less than 2 percent of the total bill in 2013.

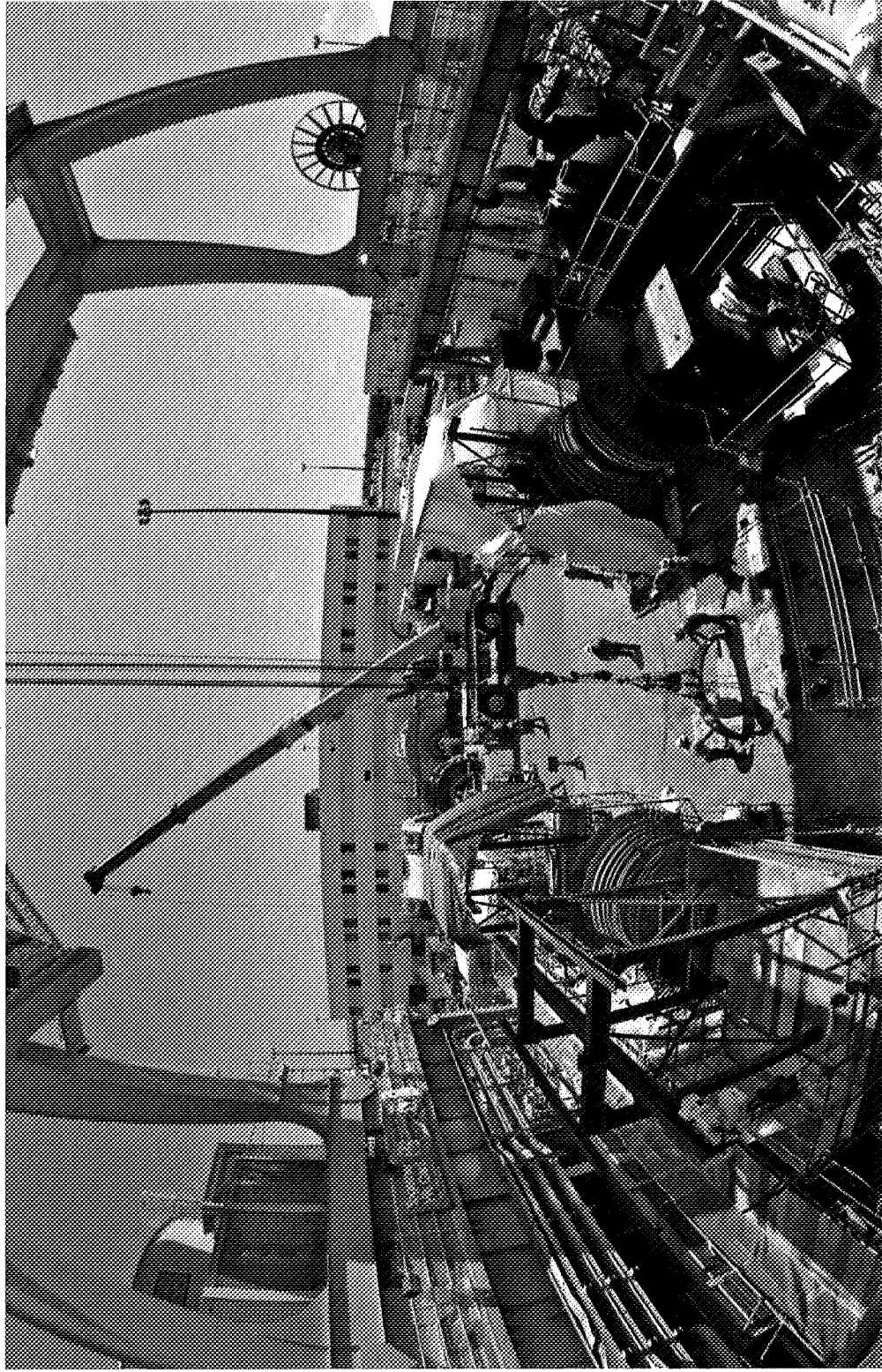
* Based on preliminary estimates. Formal projection to be filed later this year for Florida Public Service Commission review.

* Rates subject to change



In 2013, the vast majority of nuclear cost recovery clause funds are going toward the final stage of the uprate project – which is already benefiting customers

Thank You



Florida's nuclear cost recovery law is working for
FPL customers





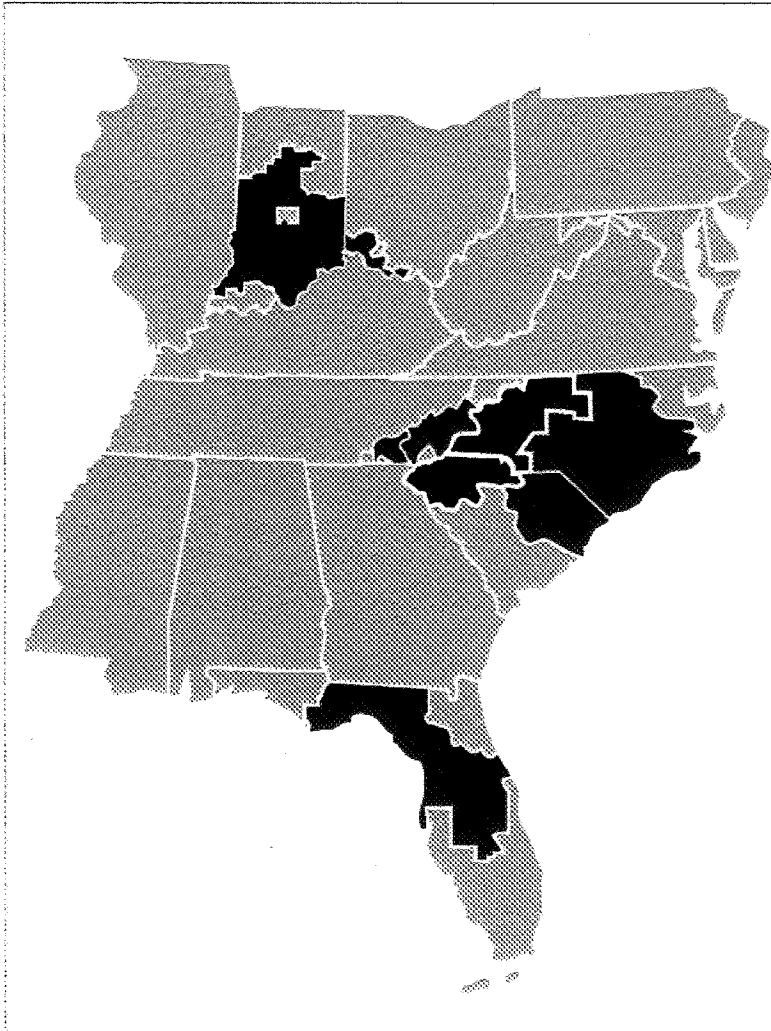
Creating a Sustainable Energy Future



House Energy & Utilities Subcommittee – March 27, 2013

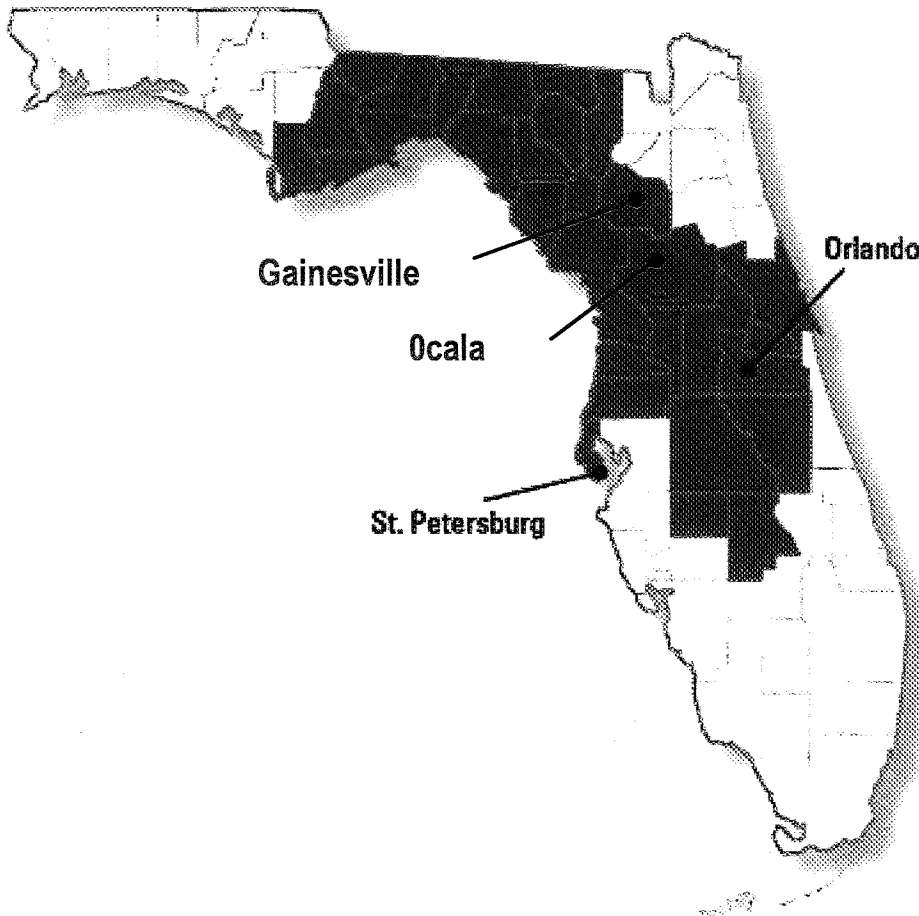
Alex Glenn
State President
Progress Energy Florida,
a subsidiary of Duke Energy

Who We Are



The largest U.S. utility with greater financial strength to meet our customers' energy needs in a reliable, affordable and environmentally responsible manner.

Progress Energy Florida



- More than 1.6 million customers in 35 counties
- More than 4,000 employees
- Over 100 years of service
- 5,000-mile transmission and 44,000-mile distribution network
- More than 10,000 megawatts of generation capacity
- 14 generating plant sites (64 units)



Merger Benefits

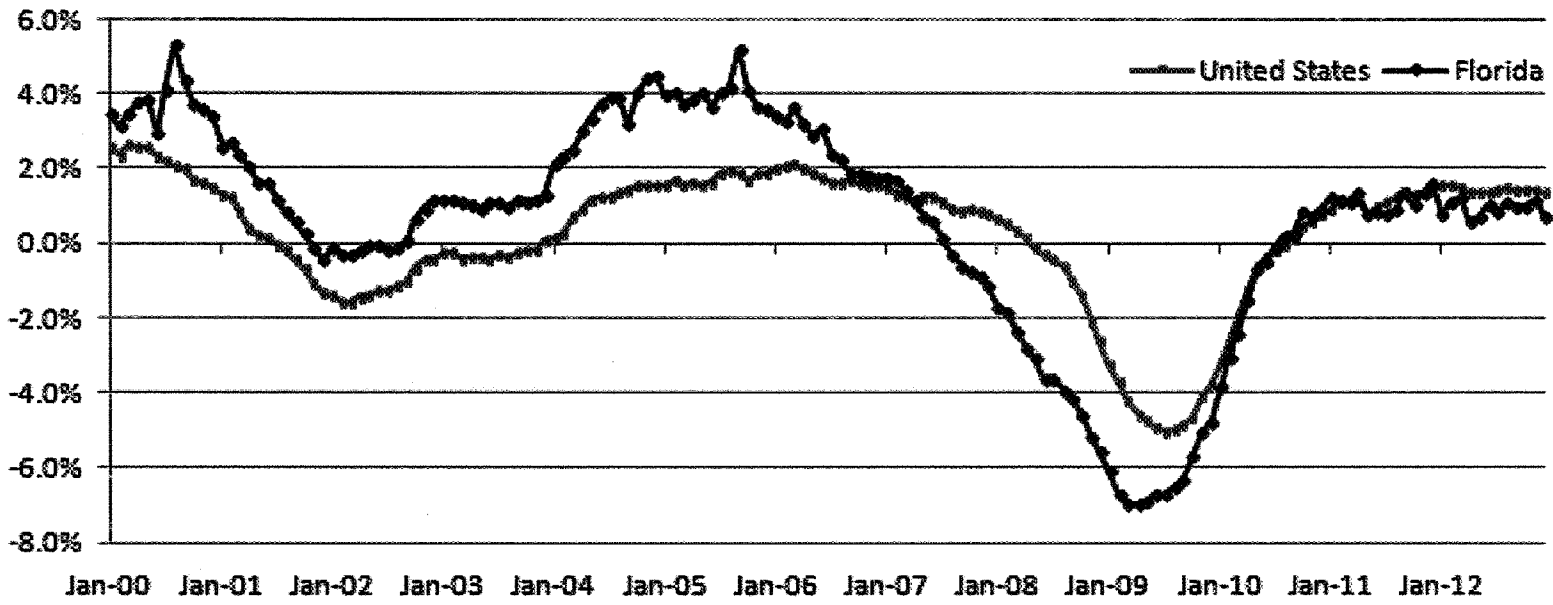
- Build on the operational improvements of our last merger
 - Safety – reduced injuries by 76%
 - Reliability – reduced outages by 40%
 - Emissions – reduced overall fleet emissions by 70%
 - Generation capacity – increased reserves from 15% to 20%
 - Customer service – increased share of customers “highly satisfied” with their recent service experience from 72% to 85%
 - Storm preparedness and restoration – became recognized leader
- Unmatched scale and scope
- Maintain and expand community support, investment and commitment



Florida Economy

Seasonally Adjusted Nonfarm Jobs

Percent Change from Same Month Prior Year

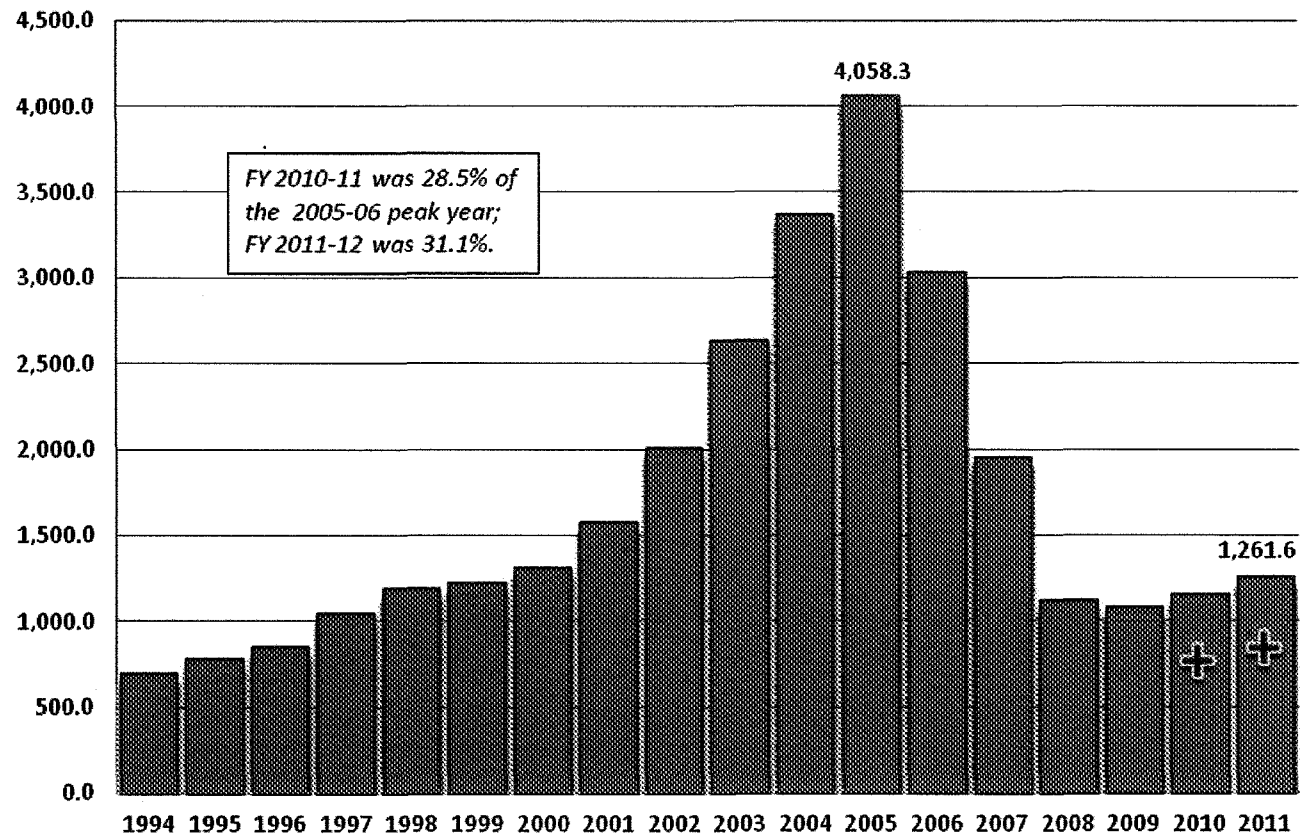


Source: Florida Department of Economic Opportunity, Labor Market Statistics Center, Current Employment Statistics Program in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, January 18, 2013.

Florida Economy

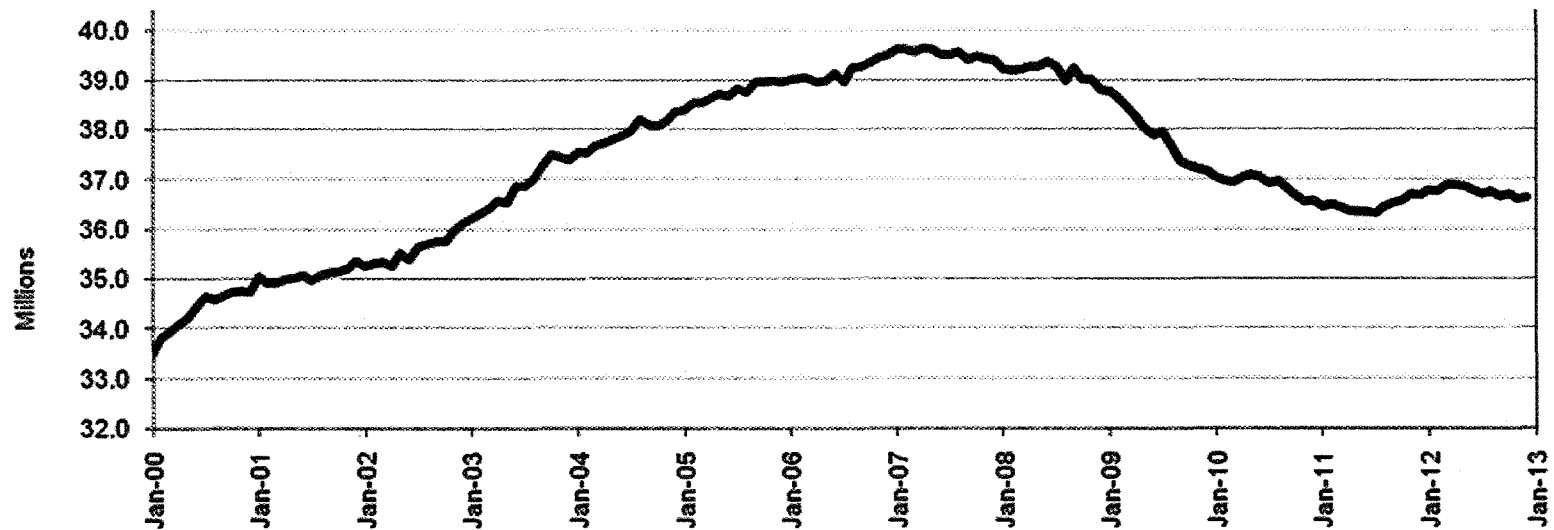
Florida Housing

Total Documentary Stamp Tax Collections (FY Beginning)



Florida Economy

Progress Energy Florida Retail Energy Sales (12 months ended)



Weather Adjusted



Growing Industry Challenges

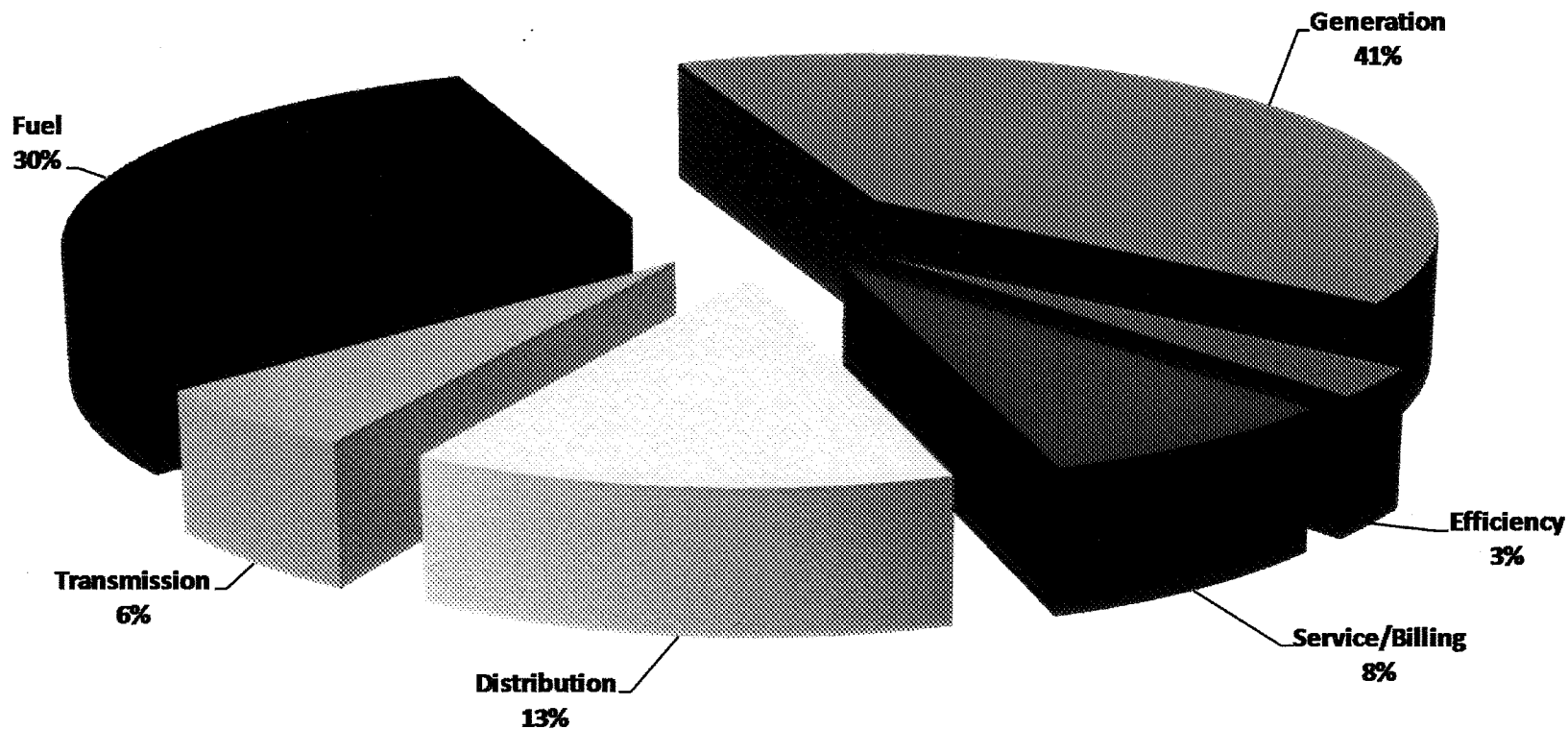
- Significant dependence on natural gas
- Tightening environmental regulations
- Aging Infrastructure

Major Price Drivers:

How Generation Decisions Affect Energy Prices

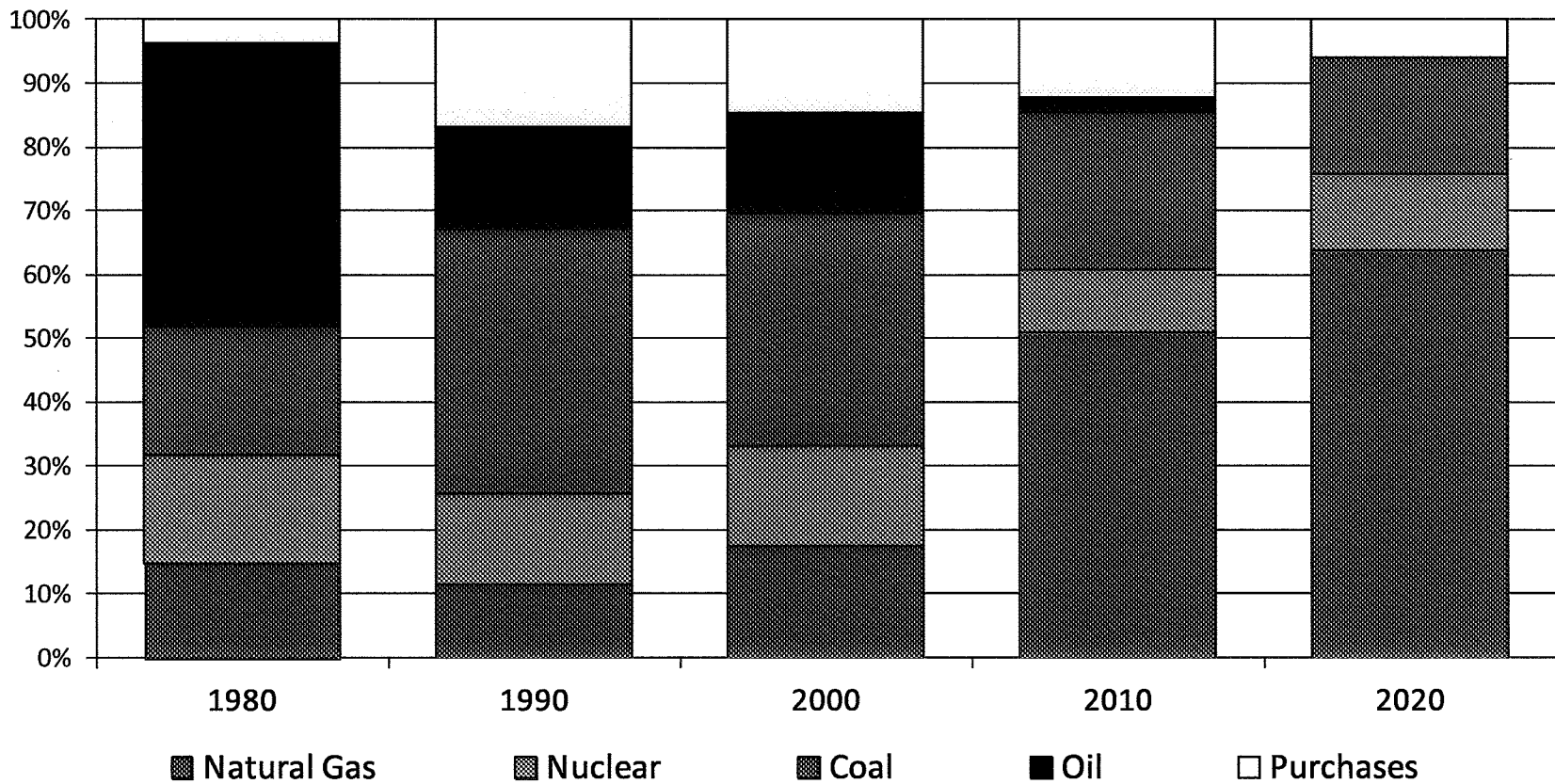
Progress Energy Florida

Bill Components, by Function



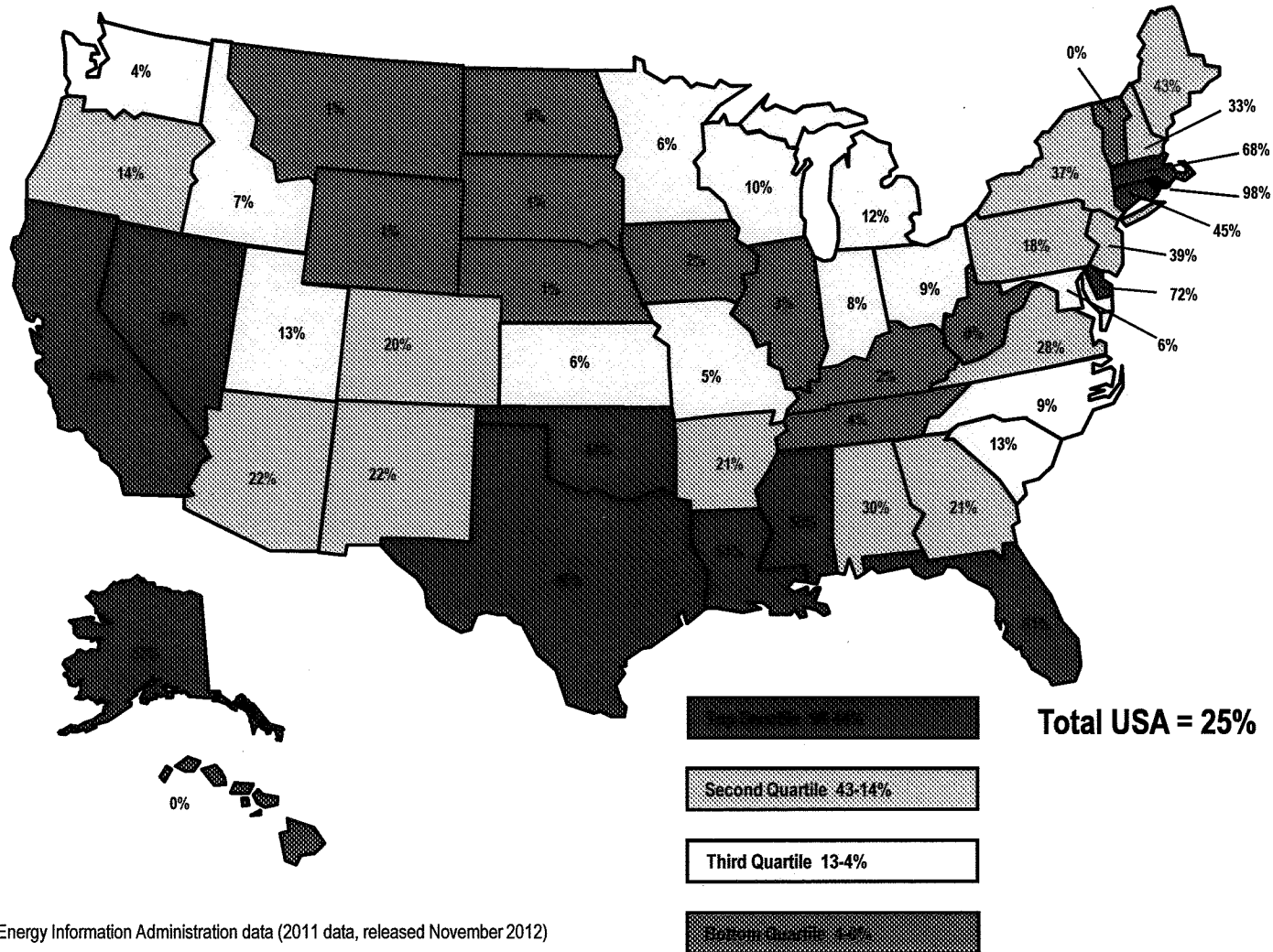
Florida Generation Trend: Increasing Reliance on Natural Gas

State of Florida: Energy Generation by Fuel Type (Percent of Total)



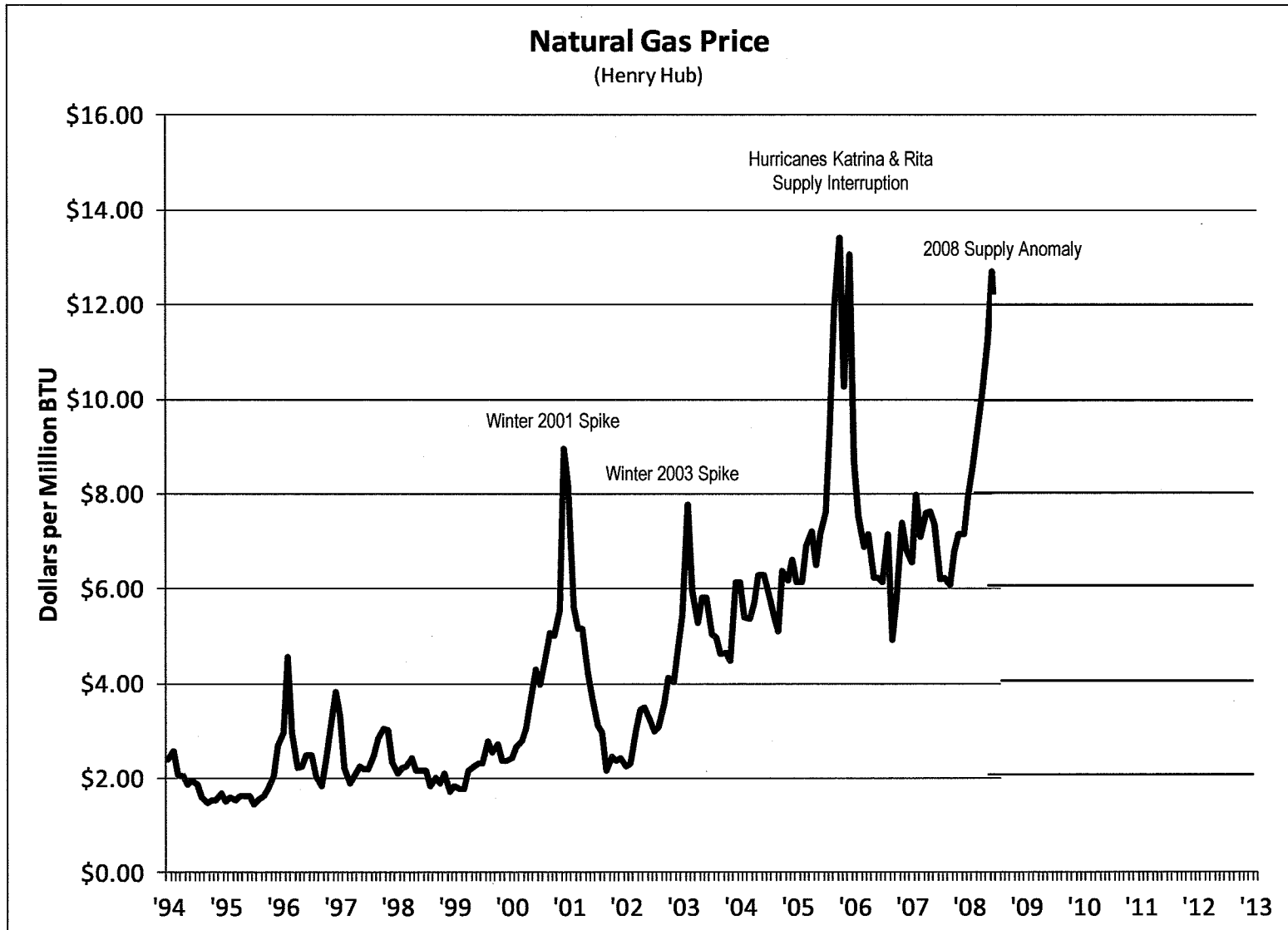
Source: 2012 Ten Year Site Plans, adjusted to reflect the retirement of Crystal River 1, 2, and 3 by 2020

Reliance on Natural Gas: Florida Among Highest in USA

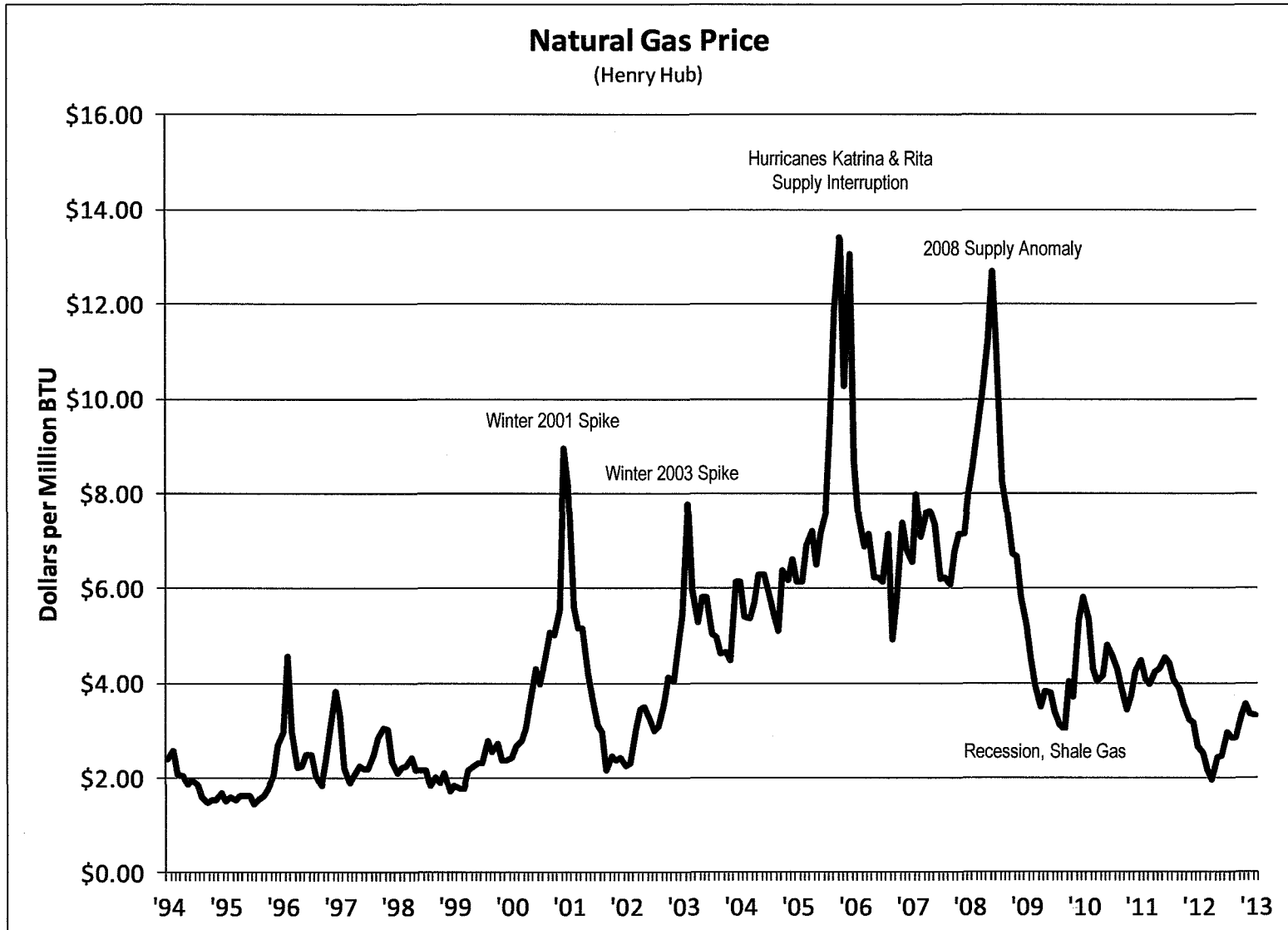


Adapted from US Energy Information Administration data (2011 data, released November 2012)

Natural Gas Price Volatility

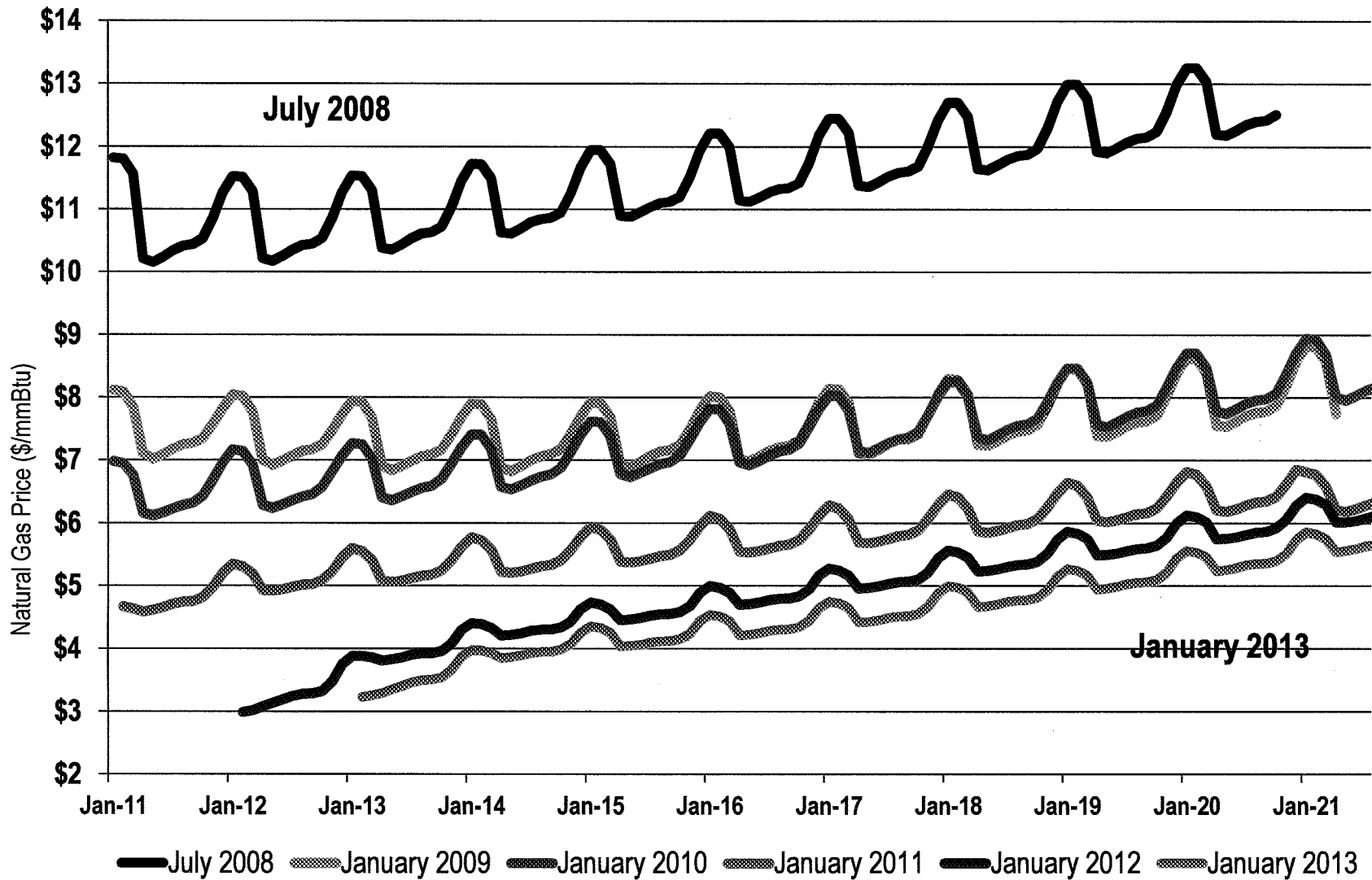


Natural Gas Price Volatility

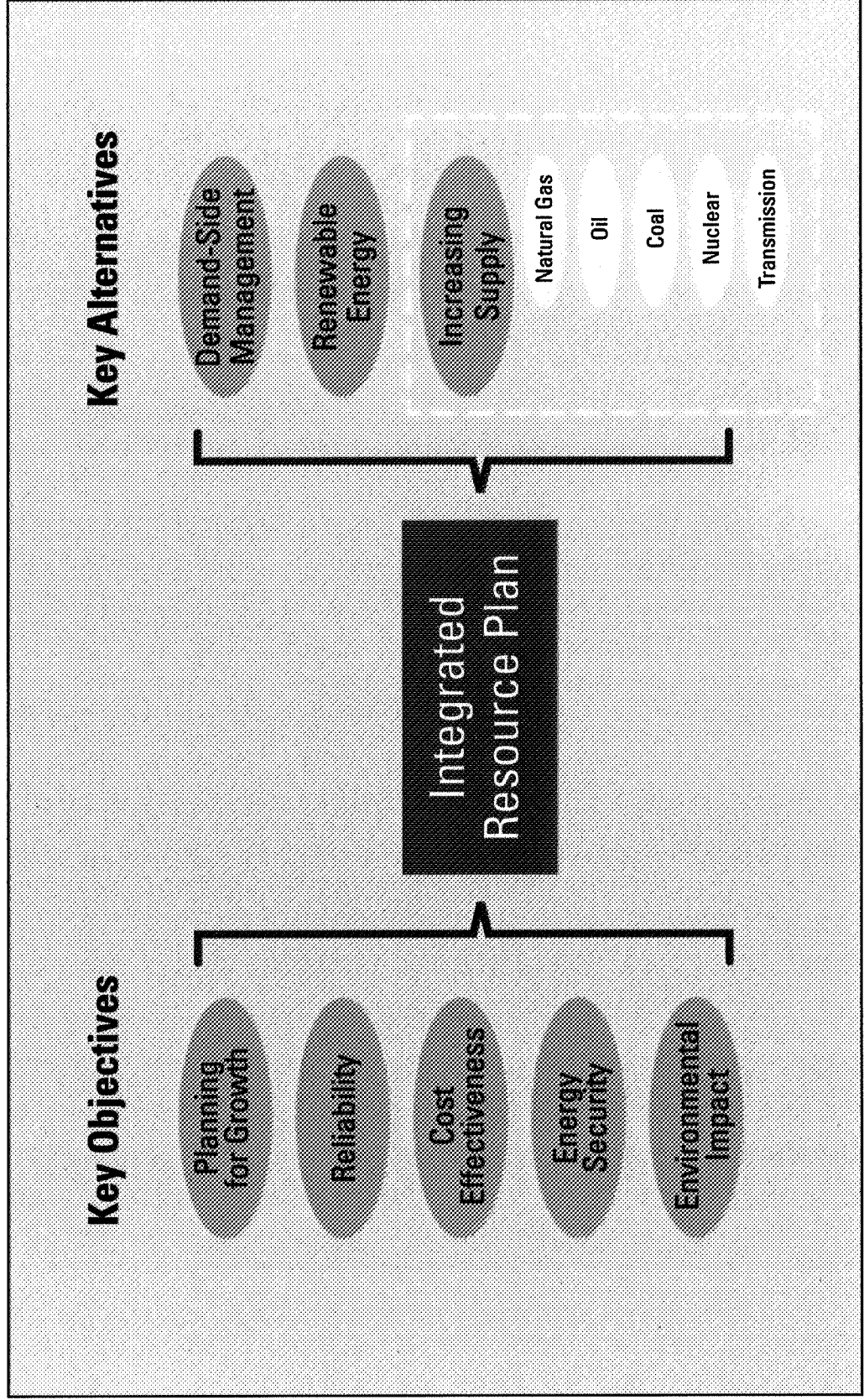


Change in Long-Term Natural Gas Prices

Natural Gas Future Prices Over Time



Planning to Meet Florida's Energy Needs



Major Resource Alternatives: No Silver Bullets

	Available 24 X 7	Low Cost to Build	Low Cost to Operate	Short Lead Time	Clean
Demand-Side Mgmt	Green	Green	Green	Green	Green
Solar	Red	Red	Yellow	Red	Green
Natural Gas	Yellow	Yellow	Green	Green	Green
Nuclear	Yellow	Red	Green	Red	Green
Coal	Yellow	Green	Green	Red	Red

Legend:

Green – yes

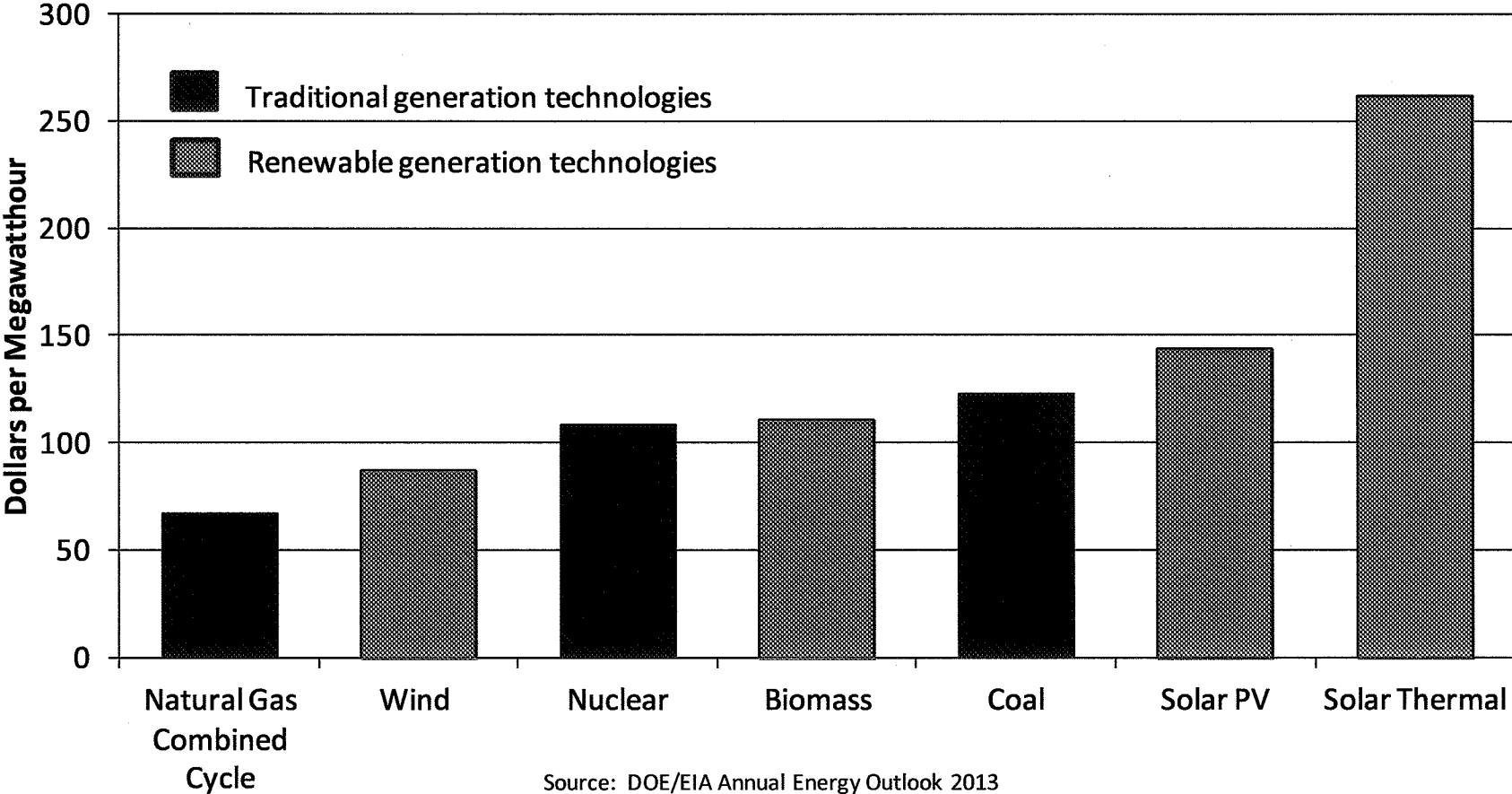
Red – no

Yellow – in-between



Renewable Alternatives Still Higher Cost

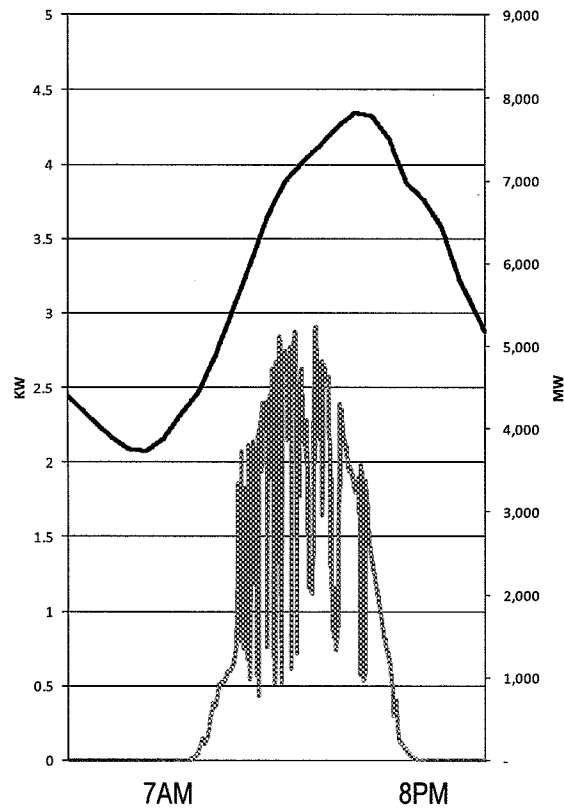
Estimated Levelized Cost of New Generation
Plants Entering Service in 2018



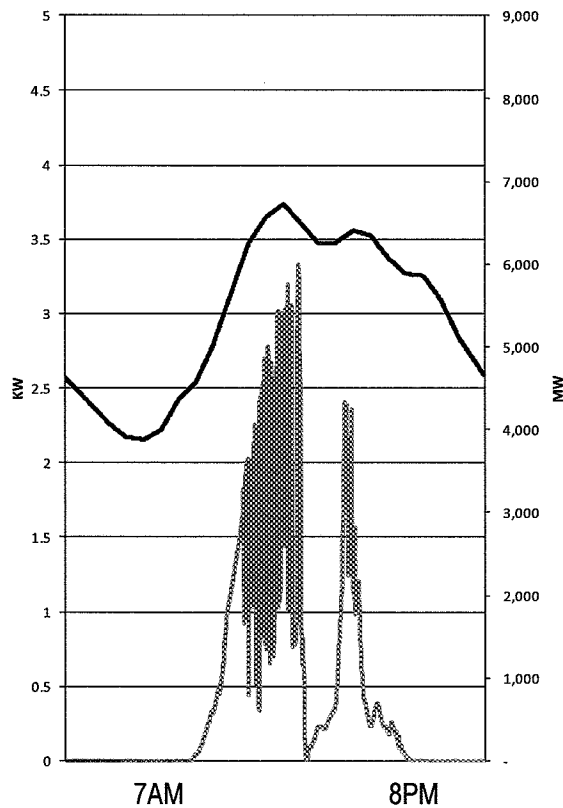
Source: DOE/EIA Annual Energy Outlook 2013

Econlockhatchee Solar Output vs. PEF System Load

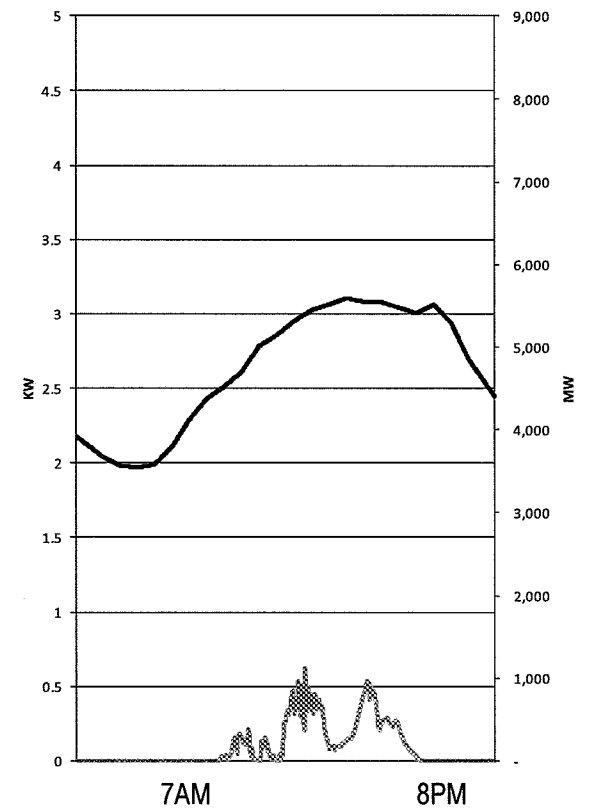
August 2, 2012



August 17, 2012



August 27, 2012



Mostly sunny, some clouds

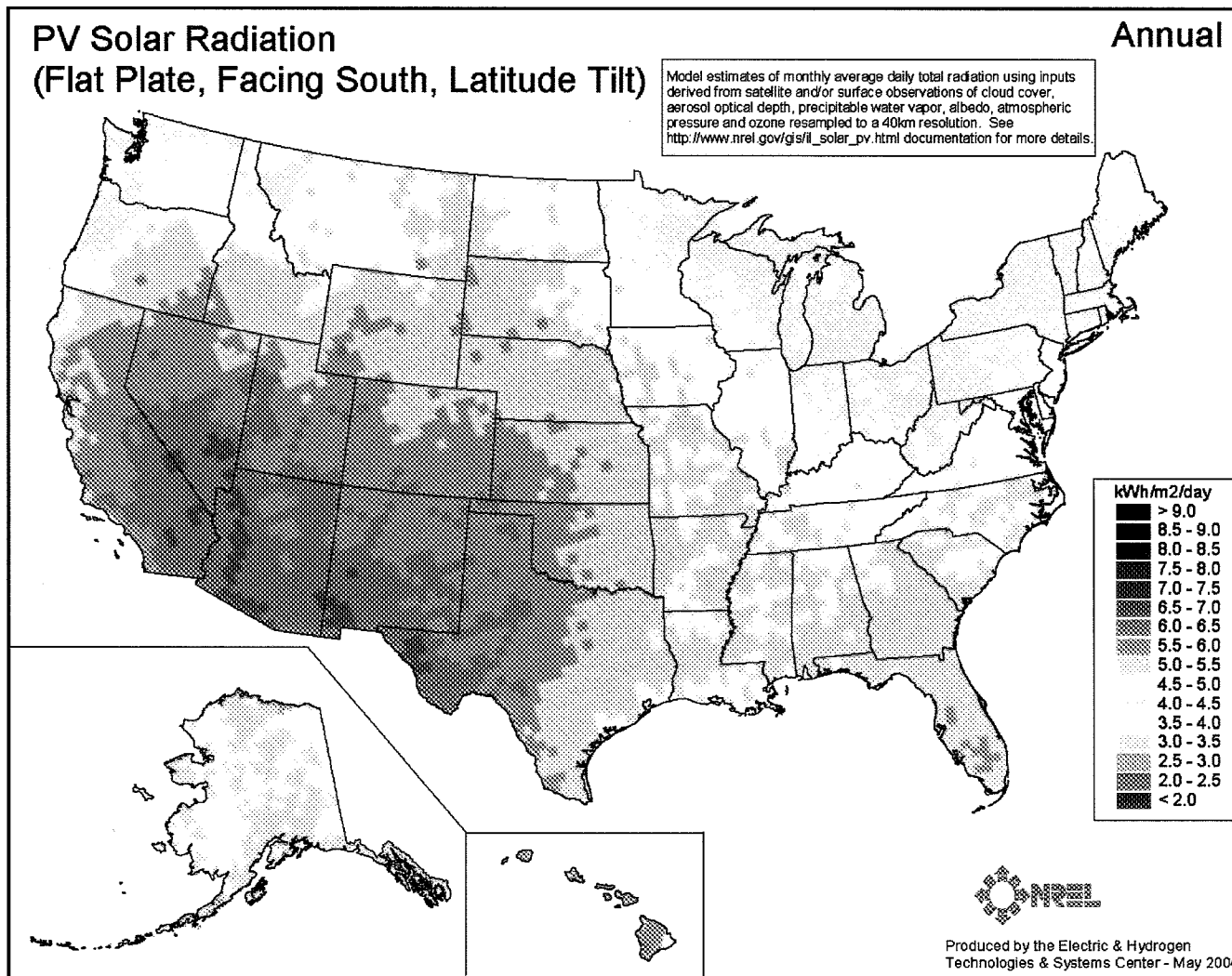
Partly sunny, afternoon storms

Overcast, rainy

Black: Progress Energy Florida System Load (MW)

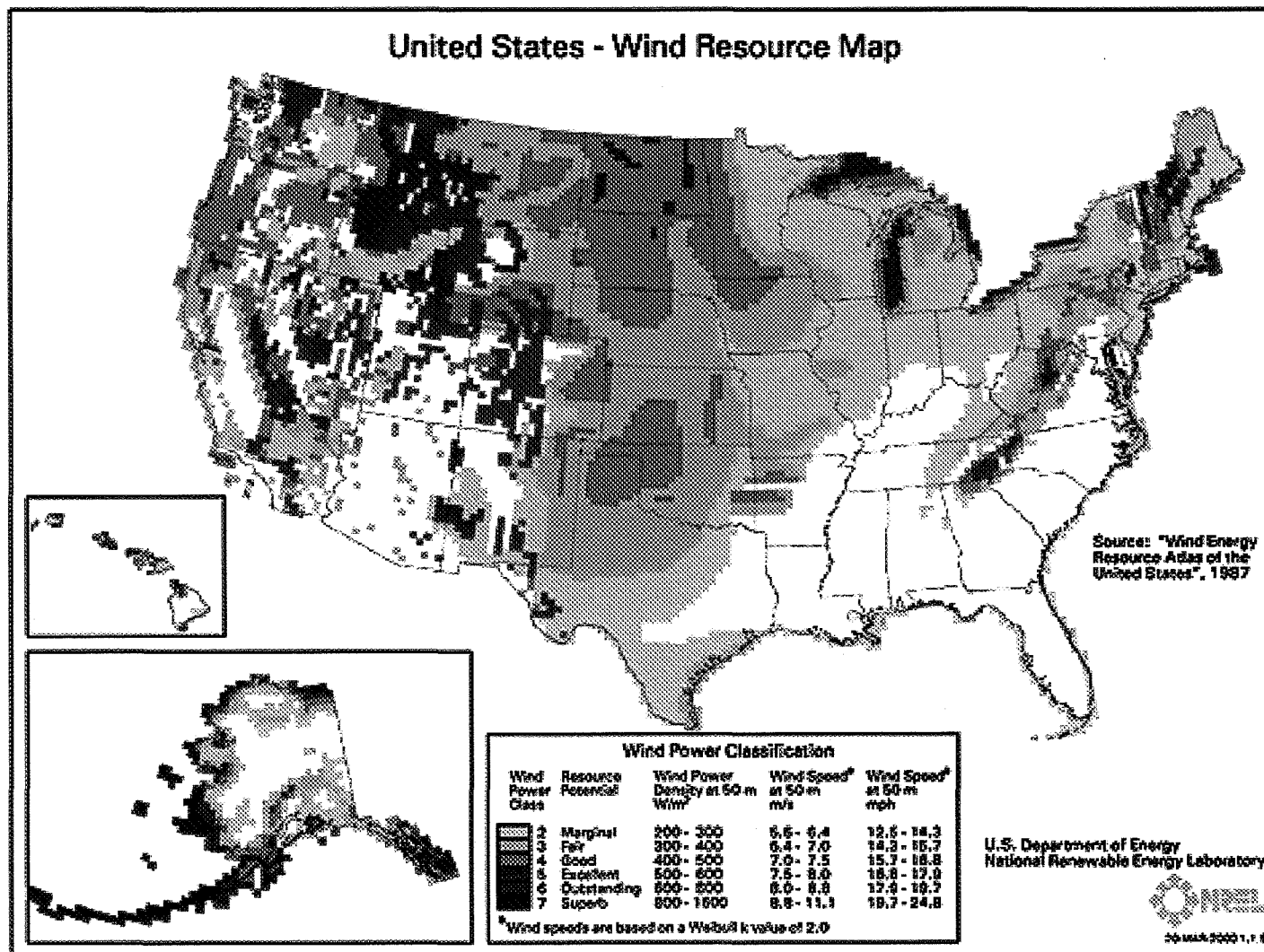
Green: Solar Output (KW)

Solar Intensity: United States

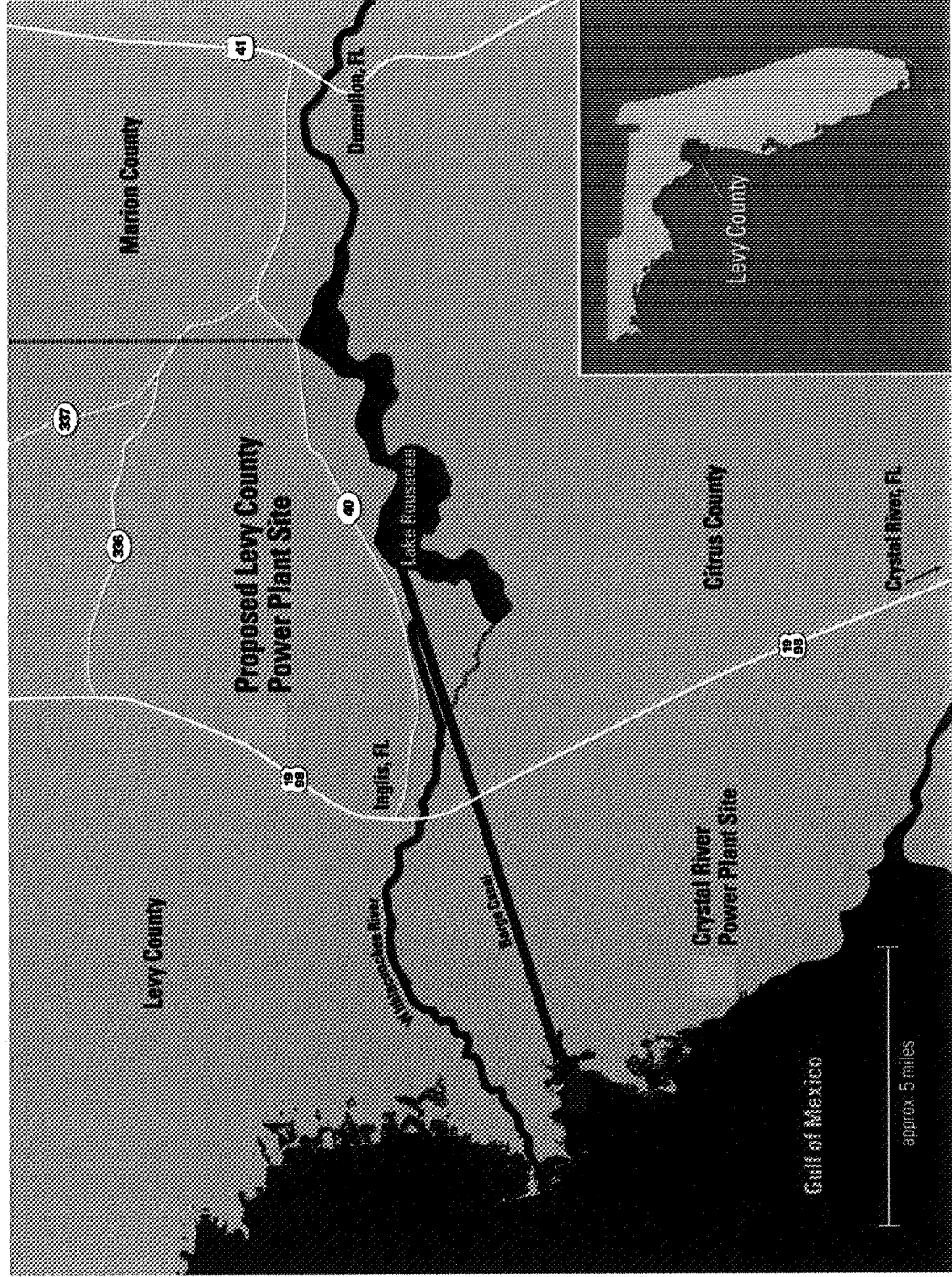


Wind Power Generation Potential

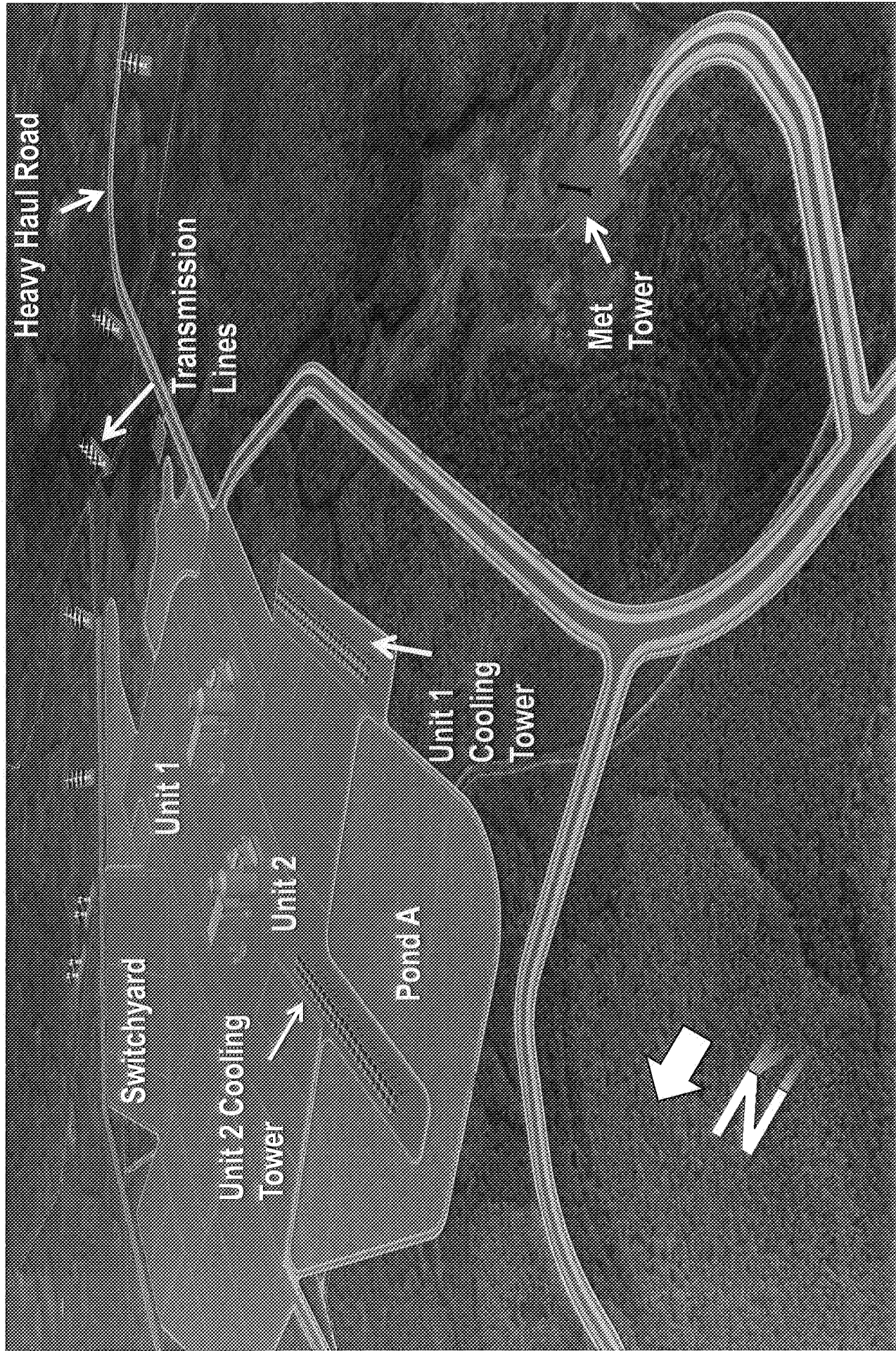
Wind Potential Rated from Class 1 to 7








Levy Site Location










Site Layout



Levy Milestones Achieved

Purchased site	1/2008	
Filled Combined Construction & Operating License (COL) Application	7/2008	
FPSC Determination of Need approved	8/2008	
Engineering, Procurement, and Construction (EPC) agreement executed	12/2008	
State site certification obtained	8/2009	

Levy Milestones (cont.)

<i>U.S. Nuclear Regulatory Commission Safety Review</i>	<i>Levy Plant</i>
Phase A – Requests for Additional Information (RAIs) and Supplemental RAIs	03/29/10 
Phase B – Advanced NRC Safety Evaluation Report (SER) without Open Items	09/16/11 
Phase C – ACRS meeting on Advanced FSER	12/01/11 01/18/13 (CEUS) 
Phase D – Final SER	Scheduled Sept. 2013
<i>U.S. EPA Environmental Review</i>	
EIS Scoping Summary Report Issued	05/28/09 
Draft EID Issues to EPA	08/06/10 
FEIS Issued to EPA	04/27/12 
<i>U.S. NRC Combined Operating License</i>	
Completed Hearing before Atomic Safety & Licensing Board	10/31/12 
Mandatory Hearing (NRC Commissioners)	Est. Nov. 2013
COL Issued	Est. Dec. 2014



Our Balanced Approach

- Diversity is key to creating a sustainable energy future:
 - Energy Efficiency
 - Alternative and renewable energy
 - State-of-the-art power plants



Our Focus

- Build on our record of operational excellence
- Continued implementation of our balanced approach
- Use financial strength to deal with future infrastructure investments
- Providing affordable, reliable and increasingly clean energy in a safe manner 24/7