The Florida Senate

BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Communications, Energy, and Public Utilities

BILL: SB 1472

INTRODUCER: Senator Legg

SUBJECT: Nuclear and Integrated Gasification Combined Cycle Power Plants

DATE: April 8, 2013 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Wiehle	Caldwell	CU	**Pre-meeting**
2.			CA	
3.				
4.				
5.				
6.				

I. Summary:

SB 1472 potentially reduces certain costs recovered from ratepayers of a regulated utility that is developing a nuclear power plant in two ways. First it provides that the applicable rate for allowance for funds used during construction is the rate in effect at the time the increment of cost is incurred and recovery is sought, which will, under current conditions, reduce costs to ratepayers. Second, it prohibits a utility that decides not to complete a nuclear power plant from recovering or retaining any rate of return on the project, thus preventing the utility from making a profit off its ratepayers under these circumstances.

The bill also addresses the concern that a utility may continue to recover costs with no intention of ever building the plant. It automatically repeals the cost recovery statute on October 2, 2016, unless the Legislature preserves the statute based upon a determination that a report by the Public Service Commission contains adequate proof that a utility has begun actual construction of a nuclear plant and is making continuous, good faith efforts to continue construction.

This bill substantially amends section 366.93 of the Florida Statutes.

II. Present Situation:

Section 366.93, F.S., was enacted in 2006. The statute provides the following definitions.

- “Cost” includes, but is not limited to, “all capital investments, including rate of return, any applicable taxes, and all expenses, including operation and maintenance expenses, related to or resulting from the siting, licensing, design, construction, or operation of the nuclear power plant, including new, expanded, or relocated electrical transmission lines or facilities of any size that are necessary thereto, or of the integrated gasification combined cycle power plant.”

- "Preconstruction" is "that period of time after a site, including any related electrical transmission lines or facilities, has been selected through and including the date the utility completes site clearing work. Preconstruction costs shall be afforded deferred accounting treatment and shall accrue a carrying charge equal to the utility's allowance for funds during construction (AFUDC) rate until recovered in rates." (By implication, everything after completion of site clearing is construction.)

The statute requires the Public Service Commission (PSC) to establish, by rule, alternative cost recovery mechanisms designed to promote utility investment in nuclear power plants and to allow for the recovery in rates of all prudently incurred costs. The mechanisms must include:

- Recovery through the capacity cost recovery clause of any preconstruction costs.
- Recovery through an incremental increase in the utility's capacity cost recovery clause rates of the carrying costs on the utility's projected construction cost balance associated with the nuclear or integrated gasification combined cycle power plant. To encourage investment and provide certainty, for nuclear or integrated gasification combined cycle power plant need petitions submitted on or before December 31, 2010, associated carrying costs shall be equal to the pretax AFUDC in effect upon this act becoming law. For nuclear or integrated gasification combined cycle power plants for which need petitions are submitted after December 31, 2010, the utility's existing pretax AFUDC rate is presumed to be appropriate unless determined otherwise by the commission in the determination of need for the nuclear or integrated gasification combined cycle power plant.

Thus, under this section, the utility recovers all preconstruction costs in full as they are incurred, but recovers only the carrying charges on construction costs.[1] Generally, this means that non-capital costs and the interest on capital costs will be recovered in advance of the plant becoming operational.

Technically, the preconstruction phase includes both licensing and preconstruction. Examples of activities performed during this combined phase include: site selection and purchase; filing of the combined construction and operating license (COL) application with the Nuclear Regulatory Commission (NRC); obtaining the determination of need from the PSC; execution of the engineering, procurement, and construction (EPC) agreement; obtaining the state site certification; the U.S. NRC Safety Review, a multi-phase process; the U.S. EPA Environmental Review, also a multi-phase process; and hearings before the Atomic Safety & Licensing Board and the NRC Commissioners to obtain the COL.[2] Licensing phase costs will constitute approximately 1 percent of total project costs recovered. [3] Preconstruction phase costs will constitute approximately 2-5 percent of total project costs recovered.[4] Estimated amounts will vary by project size and duration.[5]

[1] For any recovery to occur, the PSC must make a finding that the costs were prudently incurred (s. 366.93(2), F.S.).
[2] Statement of Alex Glenn, State President, Progress Energy Florida, before the Florida Senate Committee on Communications, Energy, and Public Utilities (March 18, 2013).
[3] Statement of Steven Scroggs, Senior Director, Nuclear Development, Florida Power & Light Company, before the Florida Senate Committee on Communications, Energy, and Public Utilities (March 18, 2013).
[4] *Id*.
[5] *Id*.

Examples of costs incurred during the construction phase include: major equipment, materials, labor, and construction management.[6] During the construction phase, only the carrying costs are recovered: these costs will constitute approximately 8-10 percent of total project costs recovered.[7]

Until the nuclear plant becomes commercially operational, the utility must annually report to the PSC the budgeted and actual costs compared to the inservice cost of the nuclear power plant as estimated by the utility during the determination of need hearing.

When the nuclear power plant becomes operational and is placed in commercial service, the utility may increase its base rate charges by the projected annual revenue requirements of the nuclear power plant.

If the utility either elects not to complete or is precluded from completing construction of the nuclear power plant, it must be allowed to recover all prudent preconstruction and construction costs incurred following the commission's issuance of a final order granting a determination of need.

The statute provides for advanced, or early, cost recovery in that the utility recovers some costs earlier under the statute than it would under traditional recovery. Under traditional recovery of the costs related to constructing a power plant, the utility fronts the money to pay these costs by providing the initial funding for the project through money it holds for capital projects or by raising capital through borrowing or selling stock, and does not begin to recover any costs until the plant is placed into operation. Under s. 366.93, F.S., the utility still fronts the money, but it begins to recover some costs earlier, those being all preconstruction costs and the carrying costs on the utility's projected construction cost balance that is associated with the nuclear power plant. One arguable benefit of this advanced recovery is that the carrying costs, primarily interest, may not be as high and do not accumulate and compound in the time period until the plant is placed into operation, which may be as long as 17-20 years from the time the first costs are incurred. By recovering these costs earlier, the increase in rates when the plant is placed into operation and recovery of capital costs begins is also significantly reduced. One past estimate of the impact on the monthly bill was that the statute would reduce the amount of this increase by $3.44, from $8.91 to $5.47.[8]

There were other potential incentives for enacting the statute, including the following.

- Florida's population was growing quickly, as was the related demand for electricity. [9]
- Natural gas was increasingly the fuel of choice for generating electricity and concern was growing about over-dependence on one fuel type.[10] In 1980, natural gas was the fuel for

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[6] *Id*.
[7] *Id*.
[8] Statement of Jeff Lyash, President and CEO, Progress Energy Florida, before the Florida Senate Committee on Communications and Public Utilities (January 13, 2009).
[9] *Supra*, note 2, PowerPoint slides 6 and 7.
[10] The same legislation that created the early cost recovery statute (s. 44, Ch. 2006-230, Laws of Florida) also: required that the PSC, in reviewing utilities' 10-year site plans, consider the effect of the plan on fuel diversity within the state (s. 15, Ch. 2006-234, Laws of Florida, amending s. 186.801(2), F.S.); authorized the PSC to require installation of necessary generating plants if it determined that there is probable cause to believe that inadequacies exist with respect to the electric

approximately 15 percent of the electricity generation in Florida; in 2010, it was over 50 percent.[11] Florida is in the top quartile of states in its reliance on natural gas.[12]

- Natural gas prices were high and spot market prices were fluctuating greatly.[13]
- Florida had just been through the extremely bad, back-to-back hurricane seasons of 2004 and 2005, which had interrupted natural gas deliveries to Florida and the power plants.[14]
- The federal government was considering potential limitations on carbon emissions due to concerns about climate change, which would have hit coal-fired plants hard, decreasing their output, increasing the expense of production, or both.[15]

However, circumstances have changed since 2006.

- Florida's real estate market collapsed and the resulting recession significantly reduced the demand for electricity.[16]
- With the advent of fracking, the supply of natural gas has increased and prices have decreased and stabilized.[17]

III. Effect of Proposed Changes:

The bill makes numerous grammatical or technical changes and three substantive changes.

AFUDC – Rate of Return

The bill changes the applicable rate for allowance for funds used during construction (AFUDC). The AFUDC rate is a method of allowing a utility to recover its costs of raising capital. It includes both a debt component (for borrowed funds for interest paid on bonds and short-term debt) and an equity component (for common and preferred equity funds used to support a project's construction). These components are weighted to determine that utility's overall cost of capital at that time.[18]

Under traditional cost recovery, the AFUDC charge accumulates until the plant becomes operational and cost recovery begins. Under the current statute, prior to the plant becoming operational, the utility recovers preconstruction costs in full (which may rarely accrue an AFUDC rate), and recovers only the carrying charges, the AFUDC rate, on construction costs. In practice, there will be very few, if any, occasions for an AFUDC rate to apply to preconstruction costs; it will apply almost exclusively to construction costs. The AFUDC rate represents the utility's cost of raising capital and has two components, debt and equity. These components reflect interest costs and a rate of return, respectively. The reasons the AFUDC rate will rarely, if ever, apply to preconstruction costs are 1) these costs are recovered in full as they are incurred,

grid, including inadequacies in fuel diversity or fuel supply reliability (s. 17, Ch. 2006-230, Laws of Florida, amending s. 366.05(8), F.S); and required that when the PSC determines the need for a proposed power plant, it must consider the need for fuel diversity and supply reliability (s. 43, Ch. 2006-230, Laws of Florida, amending s. 403.519, F.S.).

[11] *Supra*, note 2, PowerPoint slide 10.
[12] *Supra*, note 2, PowerPoint slide 11.
[13] *Supra*, note 2, PowerPoint slides 12 and 13.
[14] *Id*.
[15] *Supra*, note 2, PowerPoint slide 8.
[16] *Supra*, note 2, PowerPoint slides 5, 6, and 7.
[17] *Supra*, note 2, PowerPoint slide 13.
[18] *See*, Public Service Commission, *Florida's Electric Utilities: A Reference Guide*, Revised 1994 Edition, pages 2-3.

so no interest accumulates (the debt component), and 2) they will include very few, if any, capital costs on which to earn a rate of return (the equity component). In contrast, construction costs will not be recovered until the plant becomes operational, so interest would accrue if not for the early cost recovery statute, and the construction costs will include most, if not all, of the capital costs, the investments in brick and mortar capital investments on which a rate of return is allowed.[19]

The current statute provides:

> To encourage investment and provide certainty, for nuclear or integrated gasification combined cycle power plant need petitions submitted on or before December 31, 2010, associated carrying costs must be equal to the pretax AFUDC in effect upon this act becoming law. For nuclear or integrated gasification combined cycle power plants for which need petitions are submitted after December 31, 2010, the utility's existing pretax AFUDC rate is presumed to be appropriate unless determined otherwise by the commission in the determination of need for the nuclear or integrated gasification combined cycle power plant.

The "pretax AFUDC in effect upon this act becoming law" was 8.84 percent for Progress Energy Florida (PEF) and 7.42 percent for Florida Power and Light (FPL).[20] As was stated above, the AFUDC rate consists of two portions, equity and interest. The interest portion was each utility's average interest rate at the time. The equity portion for each was 11.5 percent. The two components were weighted to determine the total percentage rate.

The bill changes this language to:

> To encourage investment and provide certainty, associated carrying costs must be equal to the most recently approved pretax AFUDC at the time an increment of cost recovery is sought.

The current AFUDC rates are 7.44 percent for PEF and 6.41 percent for FPL; they are less than the 2006 levels due to a decrease in both components, that is, decreased interest costs and decreased rate of return on capital investments.[21] Thus, under current conditions, the bill would lower the AFUDC rate for each utility to fit its current circumstances. If either component of a utility's AFUDC rate increases in the future above its 2006 level (that is, if its interest rates for debt or its allowed rate of return increases), the applicable AFUDC rate may actually increase.

Decision not to Complete – Rate of Return

The bill provides that if a utility decides not to complete a nuclear power plant, as opposed to being precluded from completion by circumstances beyond its control, it cannot recover or retain a rate of return. The utility can continue to recover costs, but the recovery cannot include a rate of return. Additionally, it must refund to its customers the costs recovered before the date of the decision which are attributable to a recovery of a rate of return.

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[19] Telephone conversation with Mark Futrell and Marshall Willis, Public Service Commission staff, (Feb. 15, 2013).
[20] These are the two utilities that are developing nuclear power projects and have sought advance cost recovery under the statute. FPL did "uprates" or expansions at an existing nuclear power plant; both are pursuing new units.
[21] *Supra*, note 4.

As was discussed immediately above:

- The mechanism for recovering a rate of return is that portion of the AFUDC rate that relates to the equity component of the AFUDC.
- The equity component of the AFUDC will apply almost exclusively to construction costs as preconstruction costs will include very few, if any, capital expenses.
- The applicable AFUDC rate under the current statute is 8.84 percent for PEF and 7.42 percent for FPL, with the equity portion for each being 11.5 percent. (The bill reduces this rate to the current AFUDC rate in effect at the time an increment of cost recovery is sought.)

Using these rates for purposes of an example, if a utility decides not to complete a nuclear power plant, it cannot recover or retain that portion of the AFUDC percentage that is for recovery of that part of the weighted rate that represents the 11.5 percent equity component. The actual percentage applicable to any particular recovery of an increment of costs will vary depending on which AFUDC rate is in effect at the time that cost was incurred.

Automatic Repeal – PSC report

Finally, the bill repeals the advanced cost recovery statute on October 2, 2016. It requires the Florida Public Service Commission to submit a report by January 1, 2016, to the President of the Senate and the Speaker of the House of Representatives specifically describing any action taken by each public utility to develop a nuclear power plant and obtain advance cost recovery under this statute. The report must include whether the public utility is making continuous, good faith efforts to construct a nuclear power plant and whether actual construction has begun. The bill states that it is the intent of the Legislature that this report will be used in determining whether to reenact the statute prior to its automatic repeal, and that the statute should be reenacted only if the utility's progress indicates that construction will be completed.

Effective Date

The bill takes effect July 1, 2013.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

Not applicable; this bill does not require counties or municipalities to spend funds or take action requiring the expenditure 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.

B. Public Records/Open Meetings Issues:

Not applicable; this bill does not have any effect on public records or open meetings.

C. Trust Funds Restrictions:

Not applicable; this bill does relate to or have any effect on trust funds.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None; the bill has no affect on taxes or fees.

B. Private Sector Impact:

The bill will have the following economic impacts on the utilities recovering costs under this statute and their ratepayers.

- The bill applies an AFUDC rate that is based upon the circumstances at the time the cost is incurred. This will always allow each utility to recover all interest costs and a rate of return that is fair and reasonable at the time the cost is incurred. With current AFUDC rates being lower than those in effect on June 19, 2006, when the Governor approved the bill and it became law, the applicable rate, and the total costs to the utility's customers, will decrease. *However*, if the total amount of the AFUDC components increase beyond those of the 2006 rates, both the applicable rate and the costs to ratepayers would increase beyond the amounts currently established in the statute.
- The prohibition against a utility that decides not to complete a nuclear power plant recovering or retaining any rate of return on the project prevents a utility from making a profit off its ratepayers under these circumstances. The utility still recovers all costs, so it should not be harmed in the financial markets (which could also harm its ratepayers).
- The automatic repeal is intended to require proof that a utility has begun actual construction of a nuclear plant before October 2, 2016, and that thereafter it is making continuous, good faith efforts to continue construction of the plant in order to preserve the advanced cost recovery statute by reenactment. If this condition is not met and the statute is repealed, ratepayers will no longer be subject to recovery of costs for a plant that may not be built. *However,* if only one utility meets the requirement and the statute is preserved, ratepayers of any other utility or utilities with nuclear projects under development at the time may still be in doubt as to actual completion of the project(s).

The bill may also result in a repeal of the statute and in no new nuclear plants being built in Florida. If, on the other hand, the statute is repealed and afterward a nuclear project is pursued and completed, costs to ratepayers will be higher when the plant is placed into service. The loss of early recovery will result in accrual and compounding of interest and other carrying charges. The longer loan periods and the lack of certainty on recovery of costs (since the prudency review will not be done as the costs are incurred, but rather when the plant is fully operational) may also result in higher interest rates. Another factor is that a plant is not likely to be built until the economy improves and demand for electricity increases, at which point interest rates may also be higher in general.

C. Government Sector Impact:

None.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.