BILL ANALYSIS SHEET

Date: 1/21/09 **Prepared By:** Bond

Title and Identifying Codes: Georgia Nuclear Energy Financing Act, SB 31, As Passed Senate

Description of Proposal: Amend O.C.G.A. § 46-2-25 to add new subsection (c.1) dealing with accounting for and recovery of finance costs for nuclear construction.

Revised: 2/16/09

Background: Currently, the Commission has broad discretion in how the financing costs of construction of new electric generation are calculated and how they are recovered from ratepayers. Generally, the Commission has utilized a traditional regulatory accounting procedure for calculating financing cost. This procedure assumes that construction projects are financed with a blend of debt and equity. Finance costs are calculated such that the providers of debt and the providers of equity earn an appropriate return for the use of their capital during the construction period. Generally, the Commission has allowed recovery of finance costs, along with direct construction cost, from ratepayers only when the plant begins providing service.

Proposed new subsection O.C.G.A. § 46-2-25(c.1) would limit this discretion and mandate specific accounting, recovery, and rate design mechanisms that the Commission must use for nuclear construction. Major changes to the current system include:

1. Currently, the Commission has the authority to use any reasonable method for the recovery of finance costs. Traditionally the Commission has allowed recovery of financing costs, along with direct construction costs only when the plant goes on line. This method is referred to in this analysis as 'AFUDC.' The costs are then depreciated over the useful life of the plant. In the case of a nuclear plant, that would likely be 40 to 60 years. Under this method, all of the costs are born by the customers actually receiving service from the plant. While the Commission has typically used this procedure, the Commission has the discretion to use other methods that would allow the Company to recover some or all of its finance costs during the construction period. Such potential methods would include, but would not be limited to: 'Normal CWIP' (projected construction work in progress is included in

rate base like any other operating asset); 'Mirror CWIP' (pre-payments are placed in a liability account and are used to shave the peak off of the revenue requirement the first several years after the plant comes on line); 'CWIP with a True-up' (projected finance costs are charged to customers, but are then trued-up to actual); or part CWIP and part AFUDC. Under the CWIP-like methods, during the construction period the ratepayers would make payments to compensate the Company for financing costs but would not be receiving service from the plant.

Subsection (c.1)(3) of the bill requires that all financing costs must be charged to ratepayers during the construction period, rather than over the life of the plant. For financing costs incurred after the date that the Company begins recovering financing costs from ratepayers (for plants certified before July 1, 2009, that date would be January 1, 2011; for plants certified after July 1, 2009, the Company could pick any date that is within five years of the certification date), the Company would use a form of 'CWIP with a True-up.' For financing costs incurred before that date, the Company would recover those over a five-year period beginning on that same date. The bill prohibits the use of 'AFUDC,' 'Normal CWIP,' or partial CWIP. It appears that it would allow the Commission to use 'Mirror CWIP with a True-up.' It prohibits the Commission from changing the date that recovery would begin. And it prohibits the Commission from changing the period of time over which the costs are recovered.

2. Currently, the Commission has the authority to set a reasonable rate for the carrying costs. The Commission could use the utility's average weighted cost of capital if it was reasonable to do so, but the Commission could find that another rate was more appropriate based on the particulars of the project, such as the availability of federal loan guarantees or short term debt that would result in a lower cost of debt.

   Subsection (c.1)(1) of the bill specifies that the carrying cost must be "the utility's. actual cost of debt, as reflected in its annual surveillance report filed with the commission, and based on the authorized cost of equity capital and capital structure as determined by the commission when setting the utility's current base rates." In a general rate case, this 'authorized cost of equity' is set at a level that reflects the fact that Georgia Power is not guaranteed to earn a reasonable return. It is merely given the <u>opportunity</u> to do so. In contrast, recovery of these finance costs (including the portion that is a return on equity) is guaranteed, which raises the issue of whether a cost of equity set for base rates is higher than what should be used here.

3. Currently, the Commission sets rates, including the recovery of the costs of financing, at levels that are "just and reasonable." This

determination would include how the costs are allocated to different customers.

Subsection (c.1)(1) of the bill specifies exactly which customers are assessed the costs and it specifies how much of the costs they are allocated: “These financing costs shall be recovered from each customer through a separate rate tariff and allocated on an equal percentage basis to standard base tariffs which are designed to collect embedded capacity costs.” (Page 1, lines 22-25). By specifying that the costs are allocated on an “equal percent basis”, the bill prohibits the Commission from determining that some classes of customers should pay higher or lower percents than other classes. By specifying that the costs are allocated to rates that are designed to collect “embedded” costs, the bill appears to exempt rates that are based on marginal pricing, such as Real Time Pricing. Depending on exactly which tariffs are determined to be ‘marginal,’ marginally priced tariffs account for approximately 14% to 19.3% of all kWh sold and 5% to 8.4% of base revenues without fuel.

The idea of setting rate design outside of a rate case is contrary to Georgia Power’s testimony at the Commission: "While the Commission needs to decide whether it will incorporate CWIP into rate base at this time, the actual design of the NCCR tariff does not need to be decided until the Company’s next base rate case. That is the proper forum to design the NCCR, as it is a proposed base rate tariff. In that forum, the Commission will be able to review total revenue requirements and tariff design like it did in the 2007 base rate case with the Environmental Compliance Cost Recovery tariff in each subsequent base case prior to the in service dates of the new units." (Rebuttal Testimony of Ann Daiss, p. 17, l. 10.)

Pros:

1. The rate design mandated by the bill provides a stair-step increasing of the rates that would reduce rate shock as compared to AFUDC.
2. Future customers (those receiving service after the plant goes on line) will pay lower rates as a result of pre-payments by current customers during the construction period.
3. According to Georgia Power, CWIP saves ratepayers $300 million in nominal dollars (i.e., dollars that do not factor in the cost of money). According to Georgia Power, CWIP and AFUDC are equal from a net present value (NPV) standpoint, meaning that in NPV dollars (dollars that factor in the time value of money) ratepayers would pay the same amount under either method between 2011 and 2077. GPC argues

that its after tax discount rate of 8% should be used to compute these NPVs. Under this analysis, current customers whose opportunity cost of capital is less than Georgia Power's 8% discount rate () and who will remain Georgia Power customers for a number of years may eventually receive a net benefit from the prepayment. For example, for the current certification case, a customer with a 0% opportunity cost of capital could start receiving a net benefit from the pre-payments in 2027. A customer with an 8% opportunity cost of capital would break even in 2077. A customer with an opportunity cost of capital between 0% and 8% would breakeven sometime between 2027 and 2077..

4. According to Georgia Power, the early recovery of financing costs will reduce the possibility of a down-grade in the Company's bond rating. A lower bond-rating can increase the Company's cost of debt. A higher cost of debt can result in higher rates to customers.
5. Limiting the allocation of financing costs to rates designed to recover embedded capacity costs reduces, and in some cases eliminates, the amount of the financing costs charged to certain large industrial and commercial customers, making them more competitive.
6. The Commission retains the discretion to consider the impact of the pre-payment charges when setting the level of assistance for senior or low income customers. The income qualification for such assistance is set at 200 percent of the federal poverty level, which is higher than the current income qualification used by the Commission. These are typically the customers that are most vulnerable to price increases.

Cons:

1. Under current law, the Commission, as the expert ratemaking agency, has the discretion to use reasonable accounting, recovery, and rate design mechanisms, including, but not limited to, the ones set forth in the bill. The bill removes the current flexibility to consider the circumstances of a particular case and mandates that the Commission use particular mechanisms even if the Commission finds that others might be more appropriate.
2. The pre-payments would force current customers to subsidize future customers.
3. Customers do have a cost of money. Current customers whose opportunity cost of capital is more than Georgia Power's will never receive a net benefit from the prepayment. They will, in fact, have a net harm from the pre-payments. When ratepayers' cost of money is taken into account, the pre-payments cost rate payers at least $200 million in net present value dollars over the life of the plants using the Company's 8% after tax discount rate according to Public Interest Advocacy (PIA) Staff, the Georgia Industrial Group (GIG) and the Georgia Traditional Manufactures Association (GTMA). At 8%, PIA Staff calculated the NPV harm at $218 million. GIG/GTMA calculated

it to be $200 million. PIA Staff further argues that using the after tax discount rate understates the impact on customers. Georgia Power is indifferent to the early payment of taxes – taxes are a pass through for them. But ratepayers are not indifferent. It is real money that they must pay years before it would otherwise be due. When the pre-tax discount rate (9.23%) is used to compute the NPV, CWIP costs ratepayers $576 million more, according to PIA Staff. According to GIG/GTMA, most ratepayers have a much higher opportunity cost of capital than the Company. For example, consumers can have credit card debt with much higher interest rates. Businesses can have the opportunity to invest in themselves for higher returns. GIG/GTMA testified that 14% was a conservative estimate of the customers' opportunity cost of capital. Using that rate, the pre-payments cost ratepayers $740 million more in NPV dollars over the life of the plant according to GIG/GTMA.

4. According to PIA Staff, GIG, and GTMA, the Company is not currently in danger of having its bond rating down-graded, so pre-payment is not necessary at this time. If and when it is shown to be necessary, the Commission can provide for it at that time, but only to the extent that it is necessary so that the negative effects of pre-payments on ratepayers are minimize.
5. Limiting the allocation of financing costs to rates designed to recover embedded capacity costs means that at least 14% of all kWh sold are exempt from the allocation. Costs that could have been allocated to certain large industrial and commercial customers for the percentage of their energy that they buy on marginal rates would have to be allocated to remaining customers, thus increasing their rates even more. The Company has not constructed a large base load plant since the RTP marginal tariff went into effect, so there is no precedence as to whether marginally priced tariffs should be exempt from paying a CWIP charge. Customers on marginal rates do benefit from the addition of base load capacity since the addition results in downward pressure on the marginal rates. So, an argument could be made that marginally priced tariffs should not be exempt. Finally, while manufacturers are certainly subject to pricing pressures from other states and countries, not all customers on marginal rates are manufacturers. In fact, many of these customers are large grocery and big box retailers.
6. According to PIA Staff, pre-payment reduces the company's incentive to get the plant in service on time. The bill allows the Company to start receiving profit payments years before the plant is done. This reduces the pressure on the Company to finish the plant on schedule. Delay will cause the cost of the plant to escalate.
7. The more senior low-income customers that receive discounts, and the larger the amount of those discounts, the more other customers will have to pay to make up the difference.

Fiscal Impact on State Budget and Commission Operations:

The State Government is also an electric customer. State agencies and authorities that pay rates designed to collect embedded costs would have to make the pre-payments between 2011 and 2016. Beginning in 2017, however, the rates would be lower than they otherwise would have been. When or if State Government eventually receives a net benefit from CWIP depends upon the cost of money assumed for the State.

Economic Impact on Business & Consumers:

Customers would have to pay $1.6 billion in finance costs, an additional $400 or $500 million for gross up for income taxes, plus any applicable sales taxes during the construction period before the plants are completed. A current customer with a 0% opportunity cost of capital would breakeven with CWIP in 2027. A current customer whose opportunity cost of capital is approximately 8% (it varies slightly depending on whose NPV analysis you use) would break even in 2077. A current customer whose opportunity cost of capital is more than approximately 8% would never break even. Future customers who join the system after the plants come on line would benefit.

According to Georgia Power, and assuming that there are no cost overruns or delays, the cumulative average increase in monthly rates for residential customers for CWIP as compared to AFUDC would be:

	2011	2012	2013	2014	2015	2016	2017
CWIP	$1.30	$2.60	$3.90	$5.20	$6.50	$7.80	$9.10
AFUDC	$0	$0	$0	$0	$0	$5.85	$11.70

After 2017, the CWIP and AFUDC amounts slowly decline over the next 60 years to $0.

Attachments: Attached is an illustration in nominal dollars (i.e., dollars that do not factor in the cost of money) of 3 possible ways to recover construction finance costs.

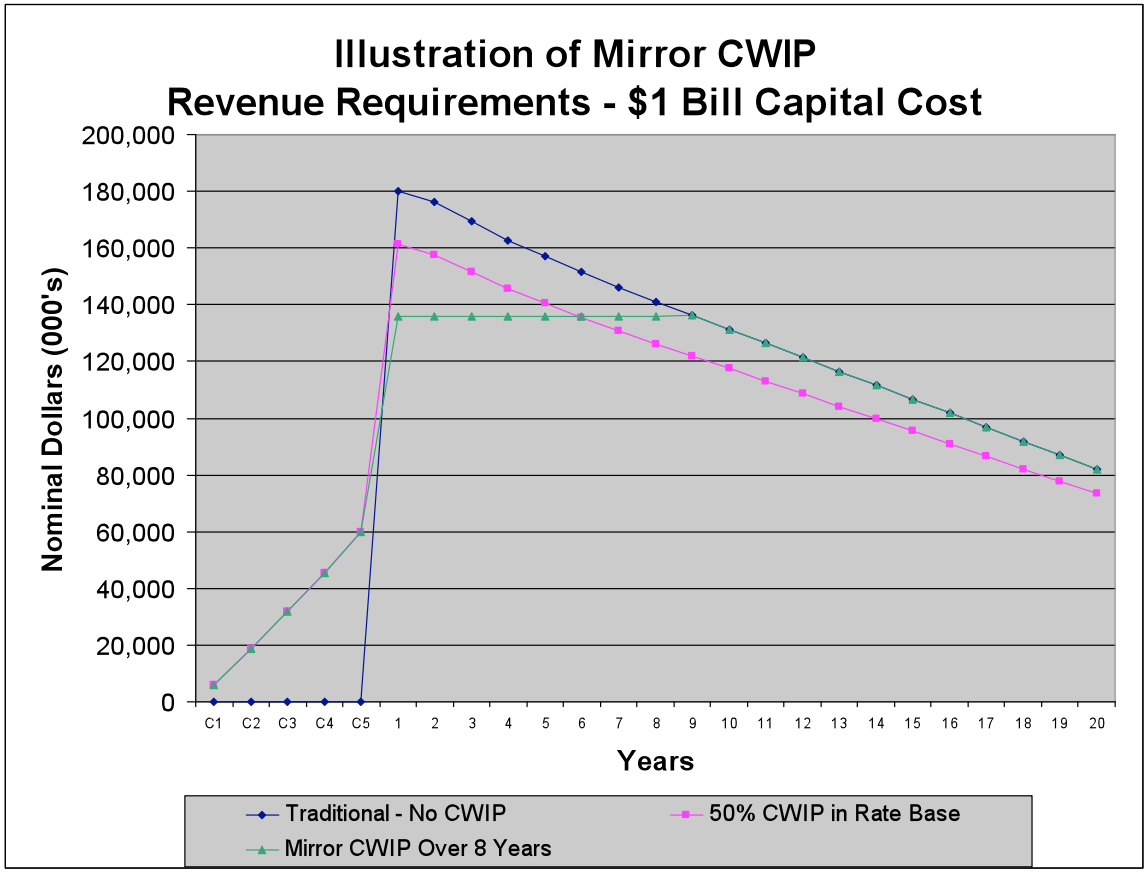
Illustration of Mirror CWIP
Revenue Requirements - $1 Bill Capital Cost
Nominal Dollars (000's)
200,000
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
C1 C2 C3 C4 C5 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Years
Traditional - No CWIP
50% CWIP in Rate Base
Mirror CWIP Over 8 Years