



HOUSE BILL 589: Competitive Energy Solutions for NC.

2017-2018 General Assembly

Committee:	House Energy and Public Utilities.	If Date:	June 6, 2017
	favorable, re-refer to Finance		
Introduced by:	Reps. Szoka, Arp, Watford	Prepared by:	Layla Cummings
Analysis of:	PCS to First Edition		Committee Counsel
	H589-CSTSf-7		

OVERVIEW: *The Proposed Committee Substitute (PCS) to House Bill 589 would amend various laws related to energy policy, including reform of the State implementation of PURPA, the creation of a competitive bidding process for new renewable energy resources, and the enactment of the Distributed Resources Access Act to authorize leasing of third-party owned solar development.*

CURRENT LAW, BACKGROUND, AND BILL ANALYSIS:

PART I: STANDARD CONTRACTS FOR SMALL POWER PRODUCERS

PURPA and Qualifying Facilities: The Public Utilities Regulatory Policy Act of 1978 (PURPA)¹ was enacted by Congress to reduce dependence on foreign oil and promote renewable energy. PURPA requires utilities to purchase energy generated by qualified facilities at a rate based on "avoided cost." The avoided cost is "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility (QF) or qualifying facilities, such utility would generate itself or purchase from another source."²

Implementation of PURPA in NC: The Federal Energy Regulatory Commission has delegated PURPA implementation authority to the States. The North Carolina Utilities Commission (Commission) has jurisdiction to set standards for QFs including the avoided cost calculation and the terms and conditions of contracts and capacity thresholds for those facilities. The Commission currently requires publicly owned electric utilities to offer standard 5-, 10-, and 15-year long term power purchase agreements for small power production facilities 5 MW and under.

The Commission establishes the avoided cost rate and terms and conditions of the standard contract biennially and there is currently an open docket to establish the avoided cost rate.³ The Commission has not yet issued an order in the docket reestablishing the rate or terms and conditions of the contract.

In their avoided cost docket filing, Duke has stated that 60% of all PURPA projects in the country are in North Carolina. As of September 2016, 1,300 MW of utility scale solar has been interconnected in the service territories of Duke Energy Progress and Duke Energy Carolinas.⁴

¹ Pub. L. No. 95-617, 92 Stat. 3117.

² 18 C.F.R. 292.101(b)(6).

³ *Biennial Determination of Avoided Cost Rates for Electric Utility Purchases from Qualifying Facilities-2016*, NCUC Docket No.E-100, Sub 148.

⁴ *Joint Initial Statement and Proposed Standard Avoided Cost Rate Tariffs of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC*, NCUC Docket No. E-100, Sub-148 (filed Nov 15, 2016).

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Legally Enforceable Obligation: Pursuant to PURPA and federal regulations, a QF has the right to sell energy and capacity under a legally enforceable obligation (LEO).⁵ The LEO sets the point in time the QF has committed to sell energy or capacity to the utility and obligated the utility to purchase from the QF at the utility's avoided cost rates calculated when the LEO commitment is made.

Section 1.1 of the PCS would align the definition of small power producer in State law with the federal definition of a small power production facility. A small power production facility is a generating facility of 80 MW or less whose primary energy source is renewable, biomass, waste, or geothermal resources.

Section 1.2 of the PCS would require utilities to offer standard contracts to small power production facilities for up to 10-year terms for facilities that have a capacity up to 1 MW. The standard contract for 1 MW facilities would be capped to a total aggregate of 100 MW per public utility. Once the 100 MW cap is reached, the standard contract minimum capacity threshold would be reduced from 1 MW to 100 kW.

For small power producers over 1 MW, or 100 kW once the 100 MW cap is reached, the rates would be negotiated between the small power producer and the utility for a fixed five-year term. Swine and poultry waste facilities would be able to negotiate for a term beyond five years.

The PCS would also require that capacity payments be made only when capacity is needed by the utility based on need for that resource as established by the utility's statutorily required integrated resource plan. The limitation on capacity payments does not apply to swine and poultry waste for which a need is established by the renewable energy portfolio standards.

Section 1.3 of the PCS would provide for a grandfathering of small power production facilities that are currently eligible for the avoided cost rates in Commission Docket E-100, Sub 140 (the "Sub 140 tariffs" are the avoided cost rates determined in 2014). Facilities currently eligible for those rates have a 30-month deadline to be placed into service (that deadline is September 10, 2018).

This section would provide for an extension of the 30-month deadline and continued eligibility for the Sub 140 tariff for facilities that would have otherwise qualified if they had met the deadline. These facilities, which would be eligible for a 15-year contract under the Sub 140 tariff, will have the duration of the term begin on September 10, 2018.

Under this section, the utility has the option not to interconnect a solar facility to its distribution system with a nameplate capacity of ten megawatts (10 MW) or greater that had not executed an interconnection agreement prior to July 1, 2017, and may require such facility to interconnect to the utility's transmission system.

Section 1.4 of the PCS would provide that this section is effective when it becomes law. Section 1.2 would apply to standard contract offers made on or after that date and Section 1.3 would apply to small power production facilities that have established a legally enforceable obligation by November 15, 2016.

PART II. COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY

Section 2.1 of the PCS would create a competitive procurement of new renewable energy resources by requiring electric public utilities with more than 150,000 customers (Duke Energy, including Duke Energy Carolinas and Duke Energy Progress) to issue a request for proposals (RFP). The RFP would be issued over a 45-month term for a total procurement of 2,660 MW of renewable energy resources.

⁵ 18 CFR 292.304(d).

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Any amount of renewable energy resources not contracted for during the competitive procurement would be subject to rollover into a new competitive procurement. The Commission would determine whether any additional competitive procurement would be offered at the expiration of the initial 45-month competitive procurement based on a number of specified considerations. The PCS would provide the following limitations on the procurement of renewable energy resources:

- The total amount of energy in the competitive procurement would be adjusted up or down by any amount in which the public utility's renewable energy procurement outside of the competitive procurement and the green source rider program (see Part III below) is more or less than 3500 MW. Current estimates by the utility are that 3500 MW is the total amount of solar energy capacity in the State that is either connected, under construction, or will be developed prior to the first competitive procurement solicitation.
- The cost of the energy procured would be capped at the forecasted avoided cost for the term of the agreement.
- The utility would be required to release a pro forma contract prior to the solicitation for bids on a renewable energy project. The pro forma would establish terms and conditions for resource dispatch and curtailment. The pro forma contract would be for a term of 20 years; that term, however, could be adjusted in the discretion of the Commission.
- The public utility would be able to participate as a developer of renewable energy resources but would be limited to a maximum of 30% of the procurement amount.

The PCS would provide that the utility would have the authority to determine the location and allocated amounts of renewable energy resource projects within its service area. It would also have rights to dispatch, operate, and control third-party operated renewable energy resources as it does its own generating facilities.

The competitive bidding process would be overseen by an independent administrator that would be required to publish the methodology used to choose the projects. The public utility would also have to disclose any non-publicly available information concerning its own system in preparing its bid to other bidders.

The costs to procure energy in the competitive procurement would be eligible to be recovered through an annual rider. The annual costs recoverable, however, would not be allowed to exceed one percent of total revenues of the utility in the State for the prior calendar year.

The Utilities Commission would be required to adopt rules to provide oversight of the competitive procurement program and to establish a procedure to modify or delay the competitive procurement program if it determines it is in the public interest to do so. The Commission would also be required to adopt rules to:

- Provide for a waiver of regulatory conditions or code of conduct requirements that would unreasonably restrict a public utility or its affiliates from participating in the competitive procurement process, unless the Commission finds that such a waiver would not hold the public utility's customers harmless.
- Establish a procedure for expedited review and approval of certificates of public convenience and necessity for renewable energy facilities owned by the public utility.
- Establish a methodology to allow an electric public utility to recover its costs pursuant to the annual rider created in this section.

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Section 2.2 of the PCS would make a conforming change to Chapter 62 to exempt power purchase agreements entered into pursuant to the competitive procurement from Commission filing and approval requirements.

Section 2.3 of the PCS would provide that the section is effective when it becomes law and specifies that the utilities must file the competitive procurement program with the Commission within 120 days of the effective date and the Commission must issue an order to approve, modify, or deny the program within 90 days of the filing.

PART III. RENEWABLE ENERGY PROCUREMENT FOR MAJOR MILITARY INSTALLATIONS, PUBLIC UNIVERSITIES, AND OTHER LARGE CUSTOMERS.

Background: In December of 2013, the Commission approved a three-year Green Source Rider pilot program designed to give large energy customers the option of offsetting some or all of their energy consumption with renewable energy resources in the Duke Energy Carolinas service territory.⁶ The pilot program has expired.

Section 3 of the PCS would provide for a new renewable energy procurement program for large energy users, the military, and the University of North Carolina (UNC) system. Large energy users would be defined as those with a contract demand for 1 MW or more, or 5 MWs or more at multiple service locations when combined in aggregate.

The public utility would file for Commission approval of the new program within 180 days of the effective date of the section. It would provide for standard contract terms and conditions that allows the customer to choose the renewable energy facility and for a term ranging from 2 to 20 years.

The customer program participants would be limited to contract for 125% of their maximum annual peak demand. The program participants would also be required to establish reasonable financial assurance requirements; however, the military and UNC would be exempt from the requirements.

The program would expire in five years or on December 31, 2022, whichever is later. The program would have a cap of 600 MW of total capacity, with 100 MW set aside for the military and 250 MW set aside for UNC. If the set-asides are not used by December 31, 2020 or three years after the start of the program, whichever is later, the capacity can be used by any eligible program participant. If any capacity is not contracted for by the expiration of the program, it will rollover into the competitive procurement program.

Under the program, the utility would pay the contract price to the renewable energy developer. The avoided cost portion of the contract price would be collected via the fuel clause rider (see Part IV below). The program participant would receive a bill credit as determined by the Commission but not to exceed the utility's avoided cost. In determining the bill credit, the Commission will ensure that all other customers are held harmless from the impact of the renewable electricity procured on behalf of the program customer.

⁶ NCUC Docket E-7, Sub 1043.

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PART IV. COST RECOVERY FOR CERTAIN SMALL POWER PRODUCER PURCHASES

Section 4 of the PCS would enable the public utility to recover the cost of PURPA QF purchased power and the non-administrative costs of the green source rider program through the existing fuel clause rider.

This section would also add those costs to the annual cap on cost increases for other parts of the fuel clause rider and raise the cap on those costs from 2.0% to 2.5% of total revenues of the utility for the prior calendar year.

PART V. AMEND COST CAPS FOR REPS COMPLIANCE

In 2007, the General Assembly enacted a Renewable Energy Portfolio Standard (REPS) requirement for electric power suppliers.⁷ REPS requires electric power suppliers to provide a designated amount or percentage of power from renewable energy resources as a portion of their overall provision of electricity.

Cost Cap: Electric power suppliers are allowed to recover costs of compliance with the REPS requirements through an annual rider proceeding. The recovery of costs may not exceed an amount equal to the per-customer annual charges in the following schedule:

Customer Class	2008-2011	2012-2014	2015 and thereafter
Residential, per acct	\$10	\$12	\$34
Commercial, per acct	\$50	\$150	
Industrial, per acct	\$500	\$1000	

Section 5.1 would reduce the cost caps for residential customers under REPS from \$34 per account per year to \$27 per account per year. **Section 5.2** would hold the public utility harmless for contracts entered into for REPS compliance prior to July 1, 2017.

PART VI. DISTRIBUTED RESOURCES ACCESS ACT

Third Party Sales and Net Metering: In many states, the development of residential and commercial rooftop and on-site solar facilities involves third party financing options such as power purchase agreements (PPA) and leasing arrangements with third party solar developers. Under a PPA, the customer agrees to purchase all the energy produced by the system. With a leasing arrangement, the customer agrees to pay a fixed monthly fee to the third-party for the equipment that is not directly based on the amount of on-site electricity generation. Under either financing model, any excess generation not used on-site is typically subject to a net metering arrangement between the customer and the utility.

Under current law, electric public utilities in the State have the exclusive rights to sell electricity in a designated franchise area. Third-party financing models are not available because solar developers are not authorized to sell power back to the consumer in the State unless they are the regulated public utility serving that franchise area.

⁷ S.L. 2007-397, also known as "Senate Bill 3."

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Retail customers, however, can own a renewable energy system for their own primary use and are compensated through bill credits under a net metering rate. The Commission established net metering rules for investor-owned utilities in 2005 and last revised those rules in 2009.⁸ Under the current net metering rates, retail customers that own their own renewable energy systems receive a bill credit at the retail rate for net excess power generation. Those credits carry forward to the next month's bill and rollover month to month if not used. The credits expire annually at the beginning of the summer billing season.

Section 6.1 of the PCS would enact the Distributed Resources Access Act to allow third parties to offer leasing of solar energy facilities in the service area of an offering utility or a municipality that offers electric service and to create a community solar energy program to be implemented by the offering utility. The offering utility is any electric public utility as defined in G.S. 62-3(23) serving at least 150,000 North Carolina retail jurisdictional customers as of January 1, 2017, but does not include any other electric public utility, electric membership corporation, or municipal electric supplier.

The PCS would allow retail electric customers of an offering utility to enter into contracts with solar developers or the electric public utility for the lease of eligible solar facilities. The solar energy facility would have to meet the following requirements to be eligible:

- Generates electricity from a solar photovoltaic system.
- Is limited to a capacity of:
 - Nonresidential customers: 1MW or 100% of contract demand.
 - Residential customers: 20 kW or 100% of estimated demand.
- Is located on the premises of the customer being served.
- Is interconnected with the public utility.
- Is intended to offset no more than 100% of the customer's own consumption.
- Meets all applicable safety, performance, interconnection, and reliability standards.

The total installed capacity of all leased solar energy facilities on an offering utility's system would be capped at 1% of the previous five year average of the North Carolina retail contribution to the offering utility's coincident retail peak demand.

Net Metering: The PCS would require the electric public utility to file a docket with the Commission for revised net metering rates. The rates would be established after an investigation of the costs and benefits of customer-sited generation. The Commission is directed to establish rates that ensure net metering customers pay their full fixed cost of service and the rates may include fixed monthly charges. Retail customers that own their own renewable energy system and are on an approved net metering rate, prior to the approval of the revised net metering rates, are grandfathered in at the rate at the time of interconnection until January 1, 2027.

Consumer Protection: The PCS would require that the lease agreement provided by a lessor, including the utility or a third party developer, would be required to comply with the following requirements:

- Be signed and dated and in at least 12 point font.
- Include the right to rescind the agreement for three business days.
- Provide a description of the solar energy facility.
- List the cost, fees, payments, interest, etc. over the life of the agreement.
- Identify State and federal tax incentives that are included in the lease payments.

⁸ NCUC Docket No. E-100, Sub 83 (March 31, 2009).

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- Provide a disclosure if a transfer of the lease is subject to any restrictions.
- Provide a disclosure if a transfer of ownership of the real property to which the solar energy facility is affixed is subject to any restrictions.
- Provide a summary of total costs for maintaining and operating the solar energy facility.
- If the agreement contains an estimate of the customer's future utility charges, provide an estimate of the retail electric customer's estimated utility charges during the same period as impacted by potential utility rate changes ranging from at least a five percent (5%) annual decrease to at least a five percent (5%) annual increase from current utility costs.
- Provide a standard disclaimer that utility rates and tax incentives are subject to change.

The PCS would further require that if the maintenance or warranty for the solar energy facility is transferred, the person who is currently obligated to maintain or warrant the solar energy facility must disclose the contact information of the person who will be assuming the maintenance or warranty obligations of the solar energy facility.

With regard to marketing materials, the PCS would require that if those materials contain an estimate of the customer's future utility charges, it must provide an estimate of the retail electric customer's estimated utility charges during the same period as impacted by potential utility rate changes ranging from at least a five percent (5%) annual decrease to at least a five percent (5%) annual increase from current utility costs.

Commission Authority over Lessors: The PCS would require lessors to obtain a certificate from the Commission before beginning operations. To be certified an applicant must comply with the following requirements:

- Register each solar energy facility that the applicant leases to a customer.
- Certify that each lease of a solar energy facility that the applicant offers or accepts will comply with the requirements set out in the act.
- Consent to the auditing of its books and records by the Public Staff.
- Conduct its business in compliance with all federal and State laws, regulations, and rules for the protection of the environment and conservation of natural resources, the provision of electric service, and the protection of consumers.

The PCS would create a civil penalty of up to \$10,000 for any person to operate in violation of the terms of the Act or to engage in unfair or deceptive practices in the leasing of solar energy facilities.

Community Solar: The PCS would require the development of a community solar program that would require the offering utilities to file a program with the Commission to construct up to 20 MWs of solar facilities per public utility that would allow customers to participate by buying subscriptions for a certain amount of output of the electricity produced by the facility. Each community solar energy facility would be required to offset the electric needs of at least five subscribers and no single subscriber would be allowed to subscribe to more than 40% of the output of the facility. The facility would be limited to 5 MW in size and each subscription would represent at least 200 W of generating capacity and no more than 100% of the maximum annual peak demand of electricity at the subscriber's premises.

The program would be capped at 20 MW per public utility, for a total of 40 MW between Duke Energy Carolinas and Duke Energy Progress. Subscribers to the program would be required to be in the same county or a county contiguous to the facility. If the subscriber does not meet the location requirements, the Commission may approve requests from the electric public utility to allow a subscriber to be up to

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75 miles from the facility. Subscribers to the facility will receive a bill credit at the utility's avoided cost rate.

The public utility would be required to file for Commission approval of the program within 180 of the effective date of the section. The Commission may approve, disapprove, or modify the design of the community solar energy program submitted by the utility to ensure that customers who do not subscribe to a community solar energy facility are held harmless, among other requirements.

Leasing Program by Municipalities: The PCS would provide that a municipality that sells electric power to retail customers may offer leases to solar energy facilities located within the municipality's service territory at the election of its governing council or commission. It would prohibit the costs a municipality incurs in marketing, installing, owning, or maintaining leases through its own leasing programs as a lessor to be recovered from other nonparticipating municipality retail customers through rates.

If the municipality offers a leasing program, a third party lessor may lease a solar energy facility within the municipality's service territory if they have received a certificate issued by the Commission and comply with terms and conditions approved by the municipality. The Commission's net metering rates will not apply in the municipality's service territory: any net metering tariffs offered in a leasing arrangement under this section will be adopted by the municipality's governing council or commission.

Section 6.2 would make a conforming change to provide that lessors of solar energy facilities are not regulated public utilities under Chapter 62 of the General Statutes.

Section 6.3 would make a conforming change to G.S. 62-110.1(g) to exempt leased solar energy facilities from the certification requirements Chapter 62 (the certificate of public necessity and convenience). This section would also require the exempt facilities to report the proposed construction and completion of the facility to the Commission and the interconnecting public utility.

PART VII. EXPEDITED REVIEW OF INTERCONNECTION OF SWINE AND POULTRY WASTE

Under current law, the Commission has the authority to adopt rules to establish standards for interconnection of renewable energy facilities with a capacity of 10 MW or less to an electric public utility's distribution system.

Section 7 directs the Commission in its rule adoption authority under REPS, to establish interconnection standards that include an expedited review process for swine and poultry waste to energy projects of two megawatts (2 MW) or less, and other measures to help achieve compliance with the swine and poultry waste set-asides under REPS.

PART VIII. SOLAR REBATE PROGRAM

Section 8.1 would create a solar rebate program to provide incentives to customers that install or lease solar energy facilities and are subject to the public utility's net metering tariff. The incentives would be limited to facilities as follows: (i) residential: 10 kW alternating current; and (ii) non-residential: 100 kW alternating current. The program shall meet the following requirements:

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- Limited to 10 MW annually of total installed capacity over five years from 2018 through 2022. (a total of 50 MW per utility). There are two utilities subject to this section, Duke Energy Carolinas and Duke Energy Progress, thus a total 100 MW of total installed capacity would be eligible for the rebates program.
- Non-residential installations must not exceed half of the capacity of the program, which is 5 MW. 2.5 MW must be set aside for non-residential installations by non-profits, with 50 kW set aside for NC Greenpower Solar Schools Pilot or a similar program.
- Any set-asides or any portion of the incentives that goes unsubscribed will rollover to subsequent years.

Section 8.2 would amend the REPS rider to allow cost recovery by the public utility for the cost of the rebates program.

Section 8.3 would require the public utilities to file the application for the rebates program within 180 days after the section becomes effective. The section becomes effective when it becomes law.

PART IX. DEMAND-SIDE MANAGEMENT FOR STATE OWNED FACILITIES PILOT PROJECT

Section 9 would establish a pilot program in the Department of Public Safety to enroll in a demand-side management program rate or tariff with the public utility if available. The program would potentially allow load to be curtailed or shifted onto the generator when called upon for energy efficiency or emergency purposes and would qualify the agency to enroll in a potentially cost saving rate or tariff. The Department would be required to report on the pilot program to the Joint Legislative Commission on Energy Policy by January 31 of each year and the program would expire on January 1, 2020.

PART X. UPDATE UTILITIES COMMISSION CHARGES AND FEES

The Commission and the Public Staff issued a recommendation to the General Assembly in 2016 to consider changes to fees and charges of the Commission, pursuant to a direction to review fees and charges included in the 2015 Appropriations Act.

The costs of the activities of the Commission and the Public Staff are supported by the fees and charges imposed under G.S. 62-300 and the utility regulatory fee imposed under G.S. 62-302. The fees and charges imposed under G.S. 62-300 are intended to defray the administrative costs of processing filings.

Section 10.1 would codify a required filing at the Commission for a renewable energy registration statement pursuant to Commission Rule R8-66 and reference a new associated fee for renewable energy facilities seeking a renewable energy certificate (REC). G.S. 62-133.8(k) currently requires the Commission to track renewable energy certificates but has no associated fee required to register and process facilities applying for the RECs under Commission rules adopted to implement the online tracking database.

Section 10.2 would amend the fees under G.S. 62-300. It would create a \$250 fee for (i) an application for a certificate of authority to engage in business as a solar generator lessor (see Part VI of the PCS); and (ii) the processing of the registration statement for a REC (see Section 10.1 of the PCS). This section would also create a \$50 fee for the processing of Reports of Proposed Construction that are

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required to be filed with the Utilities Commission for facilities exempt from the requirement to obtain a certificate of public convenience and necessity.

PART XI. DIRECT THE JOINT LEGISLATIVE COMMISSION ON ENERGY POLICY TO STUDY PROPERTY TAX EXCLUSIONS FOR SOLAR ENERGY ELECTRIC SYSTEMS AND FACILITIES UTILIZING SWINE OR POULTRY WASTE RESOURCES

Section 11 of the PCS would require the Joint Legislative Commission on Energy Policy to study the property tax exclusions for solar energy electric systems and energy and biogas facilities utilizing swine or poultry waste resources. The Commission would consider the economic impact of the property tax exclusion for solar energy electric systems; whether there should be a property tax exclusion for facilities utilizing swine or poultry waste resources to generate electricity or biogas; and, if so, how much the property tax exclusion for facilities utilizing swine or poultry waste resources to generate electricity or biogas should be. The Commission would report its findings, including any legislative proposals, to the General Assembly by March 1, 2018.

PART XII. ENERGY STORAGE STUDY

Section 12 of the PCS would require the North Carolina Policy Collaboratory at UNC to conduct a study on energy storage including how energy storage may or may not provide value to North Carolina consumers based on capital investments, value to the grid, net customer savings, net job creation, impact to rates and service quality, and other factors. The study must address the feasibility of energy storage in North Carolina, what services energy storage can provide that are not being performed currently, the economic potential or impact of energy storage in North Carolina, and the policies needed or impacted by coordinated energy storage policy. The Collaboratory would be required to report the results of the study to the Energy Policy Council and the Joint Legislative Commission on Energy Policy by December 1, 2018.

EFFECTIVE DATE: The PCS would become effective when it becomes law.