Toward Legitimacy through Collaborative Governance: An Analysis of the Effect of South Carolina's Office of Regulatory Staff on Public Utility Regulation

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TOWARD LEGITIMACY THROUGH COLLABORATIVE GOVERNANCE: AN ANALYSIS OF THE EFFECT OF SOUTH CAROLINA'S OFFICE OF REGULATORY STAFF ON PUBLIC UTILITY REGULATION

William H. Ellerbe*


In 2004 the South Carolina General Assembly instituted a major reform to its system of public utility regulation. Previously, the Public Service Commission, the administrative agency in charge of regulating public utilities, both adjudicated utility proceedings and, through its staff, advocated for the public interest. A scandal concerning revelations of extensive ex parte communications between regulated utilities and members of the Public Service Commission led to the 2004 reform, which created the Office of Regulatory Staff (ORS) as a separate agency to perform the Commission’s advocative functions. In my research, I use data on fuel factor proceedings before and after this reform to analyze the effect that ORS has had on public utility regulation to assess whether and how changes to regulatory structure can affect the outcome of regulation. A fuel factor is part of an electricity rate which utilities petition to change on an annual basis as fuel prices fluctuate. Because these proceedings happen so regularly, they provide a robust set of data with which to analyze the impact of ORS on the public utility environment. My research shows that while it is unclear whether ORS has had any effect on the actual fuel factor rates electric utility companies are awarded, these proceedings are now marked by a significantly higher degree of collaboration between utilities and their customers. I argue that this more collaborative process is a significant

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change to the outcome of regulation because it increases the legitimacy of public utility regulation. Inasmuch as the 2004 reform was motivated by a crisis of legitimacy, ORS has been a successful solution to that crisis.

INTRODUCTION ...................................................... 220

A. Of Mandated Monopolies and Rigorous Regulations ........ 220
B. The Push for Regulatory Reform .................................. 222

I. BACKGROUND OF THE CREATION OF ORS ......................... 224

II. THE OFFICE OF REGULATORY STAFF ACT .................. 229

A. The Consumer Advocate ........................................ 230
B. The Office of Regulatory Staff .................................. 231
C. The Public Service Commission .................................. 235
D. The Public Utility Review Committee ............................ 236
E. Other Significant Sections of ORSA ............................ 237
   1. Ex Parte Communications .................................. 237
   2. Fuel Costs .................................................. 237

III. DATA AND ANALYSIS ON FUEL FACTOR DECISIONS ............ 238

A. Law and Procedure Regarding Fuel Factors .................. 238
B. Data and Observations ......................................... 241
C. Settlement Rate ................................................. 242
D. Intervention Rate ................................................ 243
E. Rate of Petitions for Rehearing ................................ 243
F. Proposed Fuel Factor vs. Actual Fuel Factor .................. 243
G. Fuel Factors ...................................................... 247

IV. CONNECTIONS BETWEEN ORSA AND FUEL FACTOR DECISIONS .... 250

A. Evaluating the Success of ORS .................................. 250
B. Accounting for the Changes ..................................... 254

CONCLUSION ........................................................ 258

APPENDIX .................................................................... 260

INTRODUCTION

A. Of Mandated Monopolies and Rigorous Regulations

Imagine two scenarios: in the first, there is a certain resource that every household, business, factory, hospital, school, police precinct and fire station needs to operate, but because of strictly enforced state laws, there is only one private company that is allowed to sell that resource. Every person and entity in the state is captive to this monopoly and forced to pay whatever it charges for the necessary resource. Prices seem to always go up, and the company’s shareholders rake in the profits. In the second scenario, a large company that provides a valuable service to its customers is so tightly regulated by the state that it is forced to turn over to the state the intimate details concerning every business decision it makes, from expanding its infrastructure to bargaining with its suppliers, whereupon unelected bureaucrats
Toward Legitimacy Through Collaborative Governance

scrutinize, second-guess, and even interrogate the company about its business practices. If these bureaucrats deem the company’s behavior “imprudent,” they can issue a legally enforceable mandate reducing the price that the company charges its customers, depriving it of millions of dollars it would otherwise be able to earn from selling its services on the market.

Though both situations sound like nightmare scenarios from mid-20th century Europe—the first from Fascist Italy, the second from Communist Russia—in reality, both exist simultaneously in every state in America. To a large extent, these two scenarios describe the public utility industry. In that industry, states grant privately owned utility companies monopoly power over a region, but, in return, the companies must submit themselves to tight regulation by the state. Charles Phillips offers the following description of the institution of public utilities:

In contrast to most other industrialized countries, in which nationalized firms have traditionally provided these services, the United States has relied primarily on private ownership, controlled by state and federal agencies, to provide services that are more or less essential to the economy and which are public in their nature. . . . The combination of private ownership and public control means that some conflicts are inevitable. . . . [T]here often seems to be a conflict between private and public interests. The basic objective of private corporations is profit maximization, while the public interest demands adequate service at the lowest possible price.¹

As Phillips notes, and as the two scenarios described above demonstrate, regulation of privately owned utility companies seems predisposed to suspicion, distrust, and conflict between the citizens who are served by the utilities and the utilities who are regulated by the state on behalf of their consumers. Citizens suspect that utilities are charging too much by abusing their monopoly power; in return, utilities view the action of rigorous regulators as pandering to consumers who want to use the power of the state to get


². Though the population is the same, I will use the term “citizens” when referring to the people and entities that benefit from the public service that a public utility provides, and the term “consumers” when referring to the people and entities that pay for the services of a public utility. One reason for drawing this differentiation is that the term “consumer” in the public utility context sometimes excludes industrial and commercial customers, so the broader term “citizen,” which includes all of a utility’s customers, can eliminate some of that ambiguity. Still, referring to industrial and commercial entities as citizens may seem strange; however, that strangeness belies an important aspect of the privately owned public utility situation, which is that utility companies are given special privileges because they provide a public service. Constant use of the term “consumers” can hide the fact that public utilities are allowed to exist as monopolies and are regulated by the state because they provide a public service.
away with paying less than a fair price for the valuable services they receive.  

B. The Push for Regulatory Reform

Perhaps because of the intrinsic unease and difficulty in regulating public utilities, the federal government and the states have attempted many reforms of public utility regulation. The essential method of regulation that is applied to public utilities is rate regulation. According to Phillips, "[t]he methods of establishing rates constitutes one of the most fundamental differences between public utilities and the remainder of our private enterprise system." In the State of South Carolina, which is the subject of this Note, the substantive law governing rate regulation for electric utilities has existed essentially unchanged since at least 1932, and that law is quite general: "Every rate made, demanded or received by any electrical utility or by any two or more electrical utilities jointly shall be just and reasonable." Most, if not all, states have a similar requirement that rates be just and reasonable, which has led to the widespread adoption of the general formula for rate regulation \( R = O + B(r) \) where \( R \) is the revenue required by the company, \( O \) is the utility's operating expenses, \( B \) is the firm's rate base (invested capital), and \( r \) is the reasonable return allowed the company on its rate base.  

According to this equation, then, the substantive foundation of rate regulation is that utilities are allowed to charge their consumers for their operating expenses and a rate of return on their invested capital as long as those operating expenses, investments, and rates of return are "just and reasonable." Though specific statutory provisions can be added to a state's body of regulatory law to specify certain expenses and investments that will be deemed just and reasonable, such changes amount to tinkering with the basic substance of public utility law. Any sort of bigger change to public utility law that significantly affects utilities' ability to collect a reasonable rate for its services might run afoul of constitutional protections of private property and due process. Thus, unless the entire legal regime governing public utilities

5. See id., at 176.
6. Id.
9. See id. at 276.
10. See id. at 277. This maneuver will be discussed specifically with reference to South Carolina’s statutory definition of “fuel” later in this Note. See infra note 100 and accompanying text.
11. See Duquesne Light Co. v. Barasch, 488 U.S. 299, 307–08 (1989) (“The guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so ‘unjust’ as to be confiscatory.”); see also Phillips, supra note 1, at 6.
is to be discarded—which is to say, unless private utility companies are to
be nationalized—there is little room to make significant changes to the sub-
stantive law governing rate regulation.

Accordingly, advocates for reform of public utility regulation such as
Philip Harter12 have focused on reforms to regulatory process rather than
substantive regulatory law.13 However, there are also limits to the degree that
regulatory process can be altered—if regulatory procedure were to become
too burdensome on utilities or consumers, those procedures, too, might vio-
late due process requirements.14 Rather than outright changing regulatory
procedure, then, some states change the structure of regulatory bodies with
the hope that such a reconfiguration will make regulation more successful.15

The subject of this Note is an analysis and evaluation of such a reform.
In 2004, the South Carolina General Assembly passed Act 175,16 which cre-
ated a new state agency: the Office of Regulatory Staff (“ORS”), which was
to be the centerpiece of an overhaul of the public utility regulatory struc-
ture.17 Part I offers background on the events leading to the creation of ORS.
In Part II, I will analyze the text of ORSA to understand how its drafters
intended their reforms to change the system of public utility regulation. In
order to empirically evaluate whether ORSA has had any measurable effect
on regulation, I present my data and analysis of fuel factor decisions made
by South Carolina’s Public Service Commission in Part III. Fuel factors are
a discrete portion of electricity rates that electricity utility companies are
allowed to change annually.18 Because these proceedings are similar from
year to year and occur at a regular interval, fuel factors present a robust data
set on trends in South Carolina’s public utility regulation before and after
the creation of ORS. Finally, in Part IV, I will analyze the connections be-
tween the structural changes ORSA instituted and any changes to fuel factor

(2009).
13. See id. at 411-12.
14. See PHILLIPS, supra note 1, at 6. See generally, J. Gregory Sidak & Daniel F. Spul-
ber, Deregulatory Takings and Breach of the Regulatory Contract, 71 N.Y.U. L. REV. 851
(1996) (discussing how even deregulation can affect a taking under the Fifth Amendment by
taking away a utilities’ monopoly rights).
15. See Harter, supra note 12, at 411; see also Kenneth W. Costello, Electing Regula-
tors: The Case of Public Utility Commissioners, 2 YALE J. ON REG. 83 (1984); John E.
Kwoka, Governance Alternatives and Pricing in the U.S. Electric Power Industry, 18 J.L.
Econ & Org. 278 (2002).
16. S.C. Code Ann. § 58-4-10 (2004). I will refer to Act 175 as “ORSA,” which is an
abbreviation of “Office of Regulatory Staff Act.”
AND COURIER (Feb. 11, 2004), http://archives.postandcourier.com/archive/arch04/0204/
arc02111579313.shtml.
260-61. Though the statute defines the term “fuel cost,” it also uses the term “fuel factor”
synonymously to mean “fuel cost.” Throughout the Note, I will refer to what is statutorily
defined as a “fuel cost” as a “fuel factor.”
proceedings to evaluate whether a reform to a regulatory structure can have a significant impact on the efficacy of the regulatory process. I conclude that while it is difficult to tell whether there have been any changes to the monetary outcome of fuel factor proceedings (i.e., the amount utilities are allowed to charge for fuel-related expenses), there are a number of indicia of increased legitimacy in the regulatory process as a whole, such as greater stakeholder participation in fuel factor negotiations. Even though the monetary analysis is inconclusive, the increased legitimacy of the regulatory process alone should be considered a significant impact given the potential for concerns about legitimacy when privately owned companies provide public services.

I. BACKGROUND OF THE CREATION OF ORS

In 2002, South Carolina began contemplating public utility regulatory reform after a scandal broke out concerning ex parte communications between the staff of the Public Service Commission ("PSC"), the agency charged with regulating South Carolina's public utilities, and utility companies, raising questions about the PSC's "integrity and incompetence." The scandal involved the surfacing of a series of e-mails in which an attorney representing BellSouth, which is regulated by the PSC, seemed to be bragging about talking to and even advising the PSC about matters it was in the process of adjudicating, off the record and out of the presence of the other parties involved. While the statutes concerning ex parte communications with the PSC were arguably unclear, the revelation that such communications regularly occurred caused an uproar in the General Assembly.

In response to that scandal, the South Carolina Legislative Audit Council ("LAC") performed a review of the PSC. The LAC is an oversight body composed of four members of the Senate, four members of the House, and five members of the general public that was created in 1975 to "review[] the operations of state agencies, investigate[] fiscal matters as required, and provide[] information to assist the General Assembly." Apparently, the doubts raised by this ex parte communications scandal were so grave that one of the questions the LAC investigated was whether the PSC's decisions had been so favorable to the utility companies that they had violated the due process requirements of South Carolina's Administrative Procedure Act.

21. See id.
23. See id. at v.
24. See id. at 1.
Though the LAC did not find any due process violations, it did see problems with the ex parte communication rules and related problems with the regulatory structure of the PSC. According to the LAC, the structure of the PSC exacerbated the problem of the unclear ex parte communications rules:

The commissioners at the PSC do not have staff members permanently assigned to advise them. Instead, each case to be decided by the commission is assigned a technical and a legal advisor. In most cases, the agency’s executive director serves as the technical advisor to the commissioners. The legal advisor for each case rotates among the PSC legal staff.

This situation understandably led to confusion, because under the ex parte communications rules,

Whether an employee may communicate with a commissioner or a commissioner’s advisor without violating the ex parte statute depends on which function the employee is performing. For example, PSC employees who advise the commissioners on technical or legal issues are referred to as “advisory staff.” PSC employees who serve as staff attorneys or witnesses are referred to as “advocacy staff.” Advisory staff may communicate only with commissioners regarding cases; however, advocacy staff may not communicate with either commissioners or their advisors. Advocacy staff may communicate with other parties in contested cases. Also, outside parties are not formally notified of which roles are being performed by PSC staff regarding cases.

Based on this description, the classification of advisory staff or advocacy staff had important implications. However, the system of rotating staff members between advisory and advocacy positions on a case-by-case basis and not formally providing notice of staff assignment undercut the separation between advisory and advocacy staff that should have existed and been enforced by the ex parte communications rules.

The LAC recommended that the General Assembly consider splitting the PSC to form a separate office composed of advocacy staff to address the problem of the PSC staff’s functional ambiguity. Based on its studies of other states with split staffs, the LAC found:

One argument in favor of splitting a public service commission is to help address the issue of ex parte communications. With a split agency, commissioners would have their own staff and would be

25. See id. at 5.
26. See id. at 5, 12.
27. Id. at 12.
28. Id. at 6.
29. Id. at 12.
less likely to discuss cases with staff located in another agency. Another argument is that a separate structure helps to provide objective information. Finally, a separate agency would be better able to appeal the commissioners’ decisions.\(^{30}\)

These three advantages all point to a need for more robust advocacy in the regulatory process untainted by the appearance of capitulation to regulated entities.

Given its emphasis on the separation of advisory and advocacy roles among the PSC staff members, the LAC report was primarily focused on the ratemaking aspect of public utility regulation, as opposed to rulemaking. In many ways, ratemaking procedure mimics federal or state civil procedure for private law claims: a utility files a request for a rate increase with its state commission, which includes both past expenses that the utility needs to recover and future expenses it wants to fund.\(^{31}\) This initial request is like a complaint, and the utility’s claim for “damages” is the rate it requests from the commission. In the “discovery” phase, the commission staff—which is one of the parties to the proceeding—performs an audit of the utility’s records to ascertain the reasonableness of these requests; any other parties to the proceeding (called “intervenors”\(^{32}\)) may also inspect these records.\(^{33}\) The utility and the intervenors must also develop and file the testimony of their witnesses during this phase, along with briefs on the issues to be decided in the proceeding.\(^{34}\) Finally, an adjudicatory hearing is held before the commission at which the utility and the intervenors present their witnesses, who may be cross-examined by the intervenors.\(^{35}\) After the hearing, the commission issues an order granting the utility whatever rate change, if any, that it is entitled to by law on the basis of the evidence presented at the hearing and in the briefs; these orders include findings of facts and conclusions of law.\(^{36}\)

In the private law context, the procedure roughly described here—plaintiff files a complaint, plaintiff and defendants go through discovery and develop an evidentiary record, plaintiff and defendants present briefs to the adjudicator, plaintiff and defendants have a trial before an adjudicator, at which witnesses are presented and subject to cross-examination, and the adjudicator makes a decision based on the record including findings of fact and conclusions of law—is thought to strike a fair balance between the plaintiff’s interests and the defendant’s interests. Civil procedure allows a

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30. Id. at 14.
31. PHILLIPS, supra note 1, at 195–96.
33. PHILLIPS, supra note 1, at 196.
34. Id.
35. Id.
36. Id.
plaintiff to pursue her interests and make her case before the adjudicator without too many impediments, and it gives enough time and opportunity to a defendant to challenge the assertions of the plaintiff before the adjudicator. Civil procedure, then, can be thought of as the fulcrum of a seesaw or lever upon which plaintiffs' and defendants' interests are balanced. See Figure 1.

In the public utility field, the citizens' interests are being weighed against utilities' interests and balanced on the fulcrum of regulatory structure. However, the LAC report indicates that in South Carolina, under the PSC's regulatory structure as it existed at the time of the report, utilities' interests may have outweighed citizens' interests; one of the LAC's recommendations was that advocacy staff, who perform the function of primary intervenors in every regulatory proceeding, be separated from advisory staff so that they could provide more "objective information" and critical analysis of commission decisions." 37 If, as the LAC implied, there was an imbalance in the regulatory procedure, it may have been because the ex parte communications rules and confusion over the differentiation of advisory and advocacy staff allowed utilities to have frequent, off-the-record contact with the very staff members who were supposed to be pushing back against the utilities. Furthermore, with no clear assignment of advisory or advocacy role, staff members may not have pushed back against the utilities as zealously as they would have had they been given a clear, consistent role. Thus, it seems that the procedural seesaw of public utility regulation in South Carolina may have looked less like the civil procedure scheme and more like the unbalanced scheme depicted in Figure 2. 38

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37. See Legislative Audit Council, supra note 22, at 12.
38. Note that in this model utilities' interests are lower on the diagonal line than citizens' interests to demonstrate that the utilities' interests are "outweighing" citizens' interests. The regulatory structure allows utilities' interests to outweigh citizens' interests by giving utilities' interests greater leverage relative to citizens' interests.
Thus, because the fulcrum of regulatory structure was off-center, it gave the utilities more leverage as opposed to citizens' interests. In the context of rate regulation, more leverage for the utilities means that they may have been able to win larger rate increases than were strictly necessary to cover their expenses and provide a reasonable return on equity to attract sufficient investment. In other words, the utilities may have been able to use their monopoly status to extract excess profits from their consumers, which would then go to their shareholders. To regain a balance between the two interests, the regulatory structure needed to be shifted in favor of citizens' interests; according to the LAC, this could best be accomplished by separating the PSC's advocacy role from its advisory role.39

The General Assembly took up the LAC's recommendation and passed ORSA, which contained a suite of reforms to the laws governing public utility regulation.40 The most important part of the bill was the creation of ORS, a new agency assigned with the PSC's advocacy role.41 On the "About Us" section of its website, ORS provides a more complete description of what it means to split the advocacy and advisory roles of the PSC:

ORS is responsible for many of the non-adjudicative functions associated with utility regulation that formerly fell under the auspices of the [PSC]. Prior to [ORSA], the PSC handled all aspects of utility regulation. The creation of . . . ORS by [ORSA] provides a revised structure for addressing the public interest that clearly separates the adjudicative function (which remains with the [PSC]) from the investigative, legal, prosecutorial, and educational roles necessary to utility regulation that are now within the purview of . . . [ORS].42

In ORS's conception of itself, the dichotomy between its function and the function of the PSC is between adjudicative and non-adjudicative roles rather than advisory and advocacy roles as discussed in the LAC report. This

39. LEGISLATIVE AUDIT COUNCIL, supra note 22, at 12.
40. Barbour, supra note 17.
41. See id.
difference makes sense when considering ORS as a separate agency in relation to the PSC rather than a subdivision of the PSC. Before the split, the PSC commissioners’ advisory staff members assisted the commissioners in their adjudicative tasks, and their advocacy staff members were tasked with all of the non-adjudicative duties. Once the agency split, the staff members that stayed with the PSC had exclusive domain over advising the commissioners in adjudications, and ORS was assigned the PSC’s non-adjudicative duties, many of which were advocative in nature.

ORS has been an integral part of public utility regulation in South Carolina since 2005. Every decision made by the PSC since 2005, then, contains data that can help answer the questions animating this Note; namely, whether a reform to regulatory structure can affect the results of regulation, and, if so, how. I will use data from PSC decisions on the fuel factor component of electricity utilities’ rates from 1994–2010 to try to answer these questions. I chose to use data from fuel factor proceedings because all three electric utilities in South Carolina are required by statute to seek annual PSC approval of their fuel factor, and since 2005, ORS has been an intervenor in each of these proceedings. Thus, fuel factor proceedings offer a regular, standardized and robust set of events in which trends can be seen. However, it is important to note that fuel factors are only one type of proceeding within the larger body of electric utility regulation, which itself only represents one of the public utility industries over which the PSC has jurisdiction. Nonetheless, some of the trends seen in ORS era fuel factor proceedings, such as a 100% settlement rate, stand in such stark contrast to the results of the pre-ORS era that it is clear that ORSA has had some significant impact.

II. THE OFFICE OF REGULATORY STAFF ACT

ORS was created in 2004 when the General Assembly passed ORSA. ORSA did not just create ORS, however; it also changed other aspects of public utility regulation in South Carolina, including adding important ethical provisions to the regulatory process, removing a great deal of the authority of the Consumer Advocate to be involved in public utility regulation, and creating the Public Utility Review Committee to provide legislative and democratic oversight to ORS. To understand how ORS operates and how the General Assembly intended ORS to operate, we must analyze the totality of ORSA.

43. The concept of the fuel factor is sometimes called a fuel adjustment clause. See, e.g., Report of the State Commission Practice & Regulation Committee, 30 Energy L.J. 765, 811 (2009).
44. Until 1996, utilities had to file fuel factor requests biannually.
A. The Consumer Advocate

Before ORS, the Consumer Advocate ("CA") was charged with representing the public interest in public utility regulatory proceedings. Then, as now, the CA was a division within the Department of Consumer Affairs, which was itself administered by the Commission of Consumer Affairs. The members of the Commission were the Secretary of State, four members appointed by the Governor and approved by the Senate, and four members elected by the General Assembly; all served four-year terms. The CA's statutory directive was contained in the following language:

The functions and duties of the Division of Consumer Advocacy are:

(1) To provide legal representation of the consumer interest before the state and federal regulatory agencies which undertake to fix rates or prices for consumer products or services or to enact regulations or establish policies related thereto and to provide legal representation of the consumer interest concerning Certificates of Need for health facilities and services, as required for an activity under Section 44-7-160, health care licensing procedures, and other health related-matters.

(2) To monitor existing regulations, rate structures and policies of that agency of special interest to consumers and report to the public through the news media proposed changes therein under consideration and the effect of those changes on the lives of the citizens of the State.

(3) The annual report required of the Commission on Consumer Affairs must include a report on the activities of the Division of Consumer Advocacy.

(4) To evaluate and act upon requests from consumers concerning the matters set forth in (1) and (2) above, except that any proceedings initiated by the advocate must be brought on behalf of the public at large and not for individuals; initiation or continuation of any proceedings must be at the sole discretion of the consumer advocate.

In order to follow that directive, the CA was authorized to:

have access to the records of state agencies and request access to the records of firms appearing before the PSC and the Department of Insurance;50

• petition a regulatory agency to hold a proceeding on a matter “in the interest of consumers affected by regulatory agencies;”51 and

• have standing to seek judicial review of, or intervene in, “any civil proceeding which involves the review or enforcement of an agency action that the consumer advocate determines may substantially affect the interests of consumers.”52

ORSA modified each of these sources of authority to preclude the CA from being involved in public utility regulation. In general, ORSA eliminated the CA’s “function and duty” to “represent consumers in matters arising under Title 58,” the Title governing public utility regulations.53 Accordingly, ORSA also eliminated the CA’s power to request access to the records of firms appearing before the PSC,54 to petition regulatory agencies to hold proceedings,55 and to be automatically granted intervenor status in any proceeding before the PSC or automatically be considered to have standing to seek judicial review of a PSC case.56

B. The Office of Regulatory Staff

ORSA created ORS “as a separate agency”57 consisting of “an executive director, pipeline safety inspectors, railway safety inspectors, and other professional, administrative, technical, and clerical personnel as may be necessary.”58 According to ORSA, ORS is not under the “supervision, direct, or control” of the PSC,59 nor can ORS even be “physically housed in the same location” as the PSC.60

ORS contains a number of pertinent provisions concerning the executive director of ORS. She must be an attorney qualified to appear in South Carolina courts with at least eight years of “practice experience.”61

56. S.C. Code Ann. § 37-6-607 (2003). It seems at least possible that the CA could still be granted intervenor status in a PSC proceeding or be allowed to appeal a PSC decision after ORSA; however, the statutory presumption of both was taken away by ORSA.
director can only be removed by the Governor for cause, giving the director a great deal of independence from the executive branch. Moreover, the director is not nominated by the Governor; instead, she is nominated by the Public Utility Review Committee ("PURC"), which was also created by ORSA. PURC is defined in ORSA as an entity composed of ten members, three of whom shall be members of the House of Representatives, including the Chairman of the Labor, Commerce and Industry Committee, or his designee, three of whom shall be members of the Senate, including the Chairman of the Judiciary Committee or his designee, two of whom shall be appointed by the Chairman of the Senate Judiciary Committee from the general public at large, and two of whom appointed by the Speaker of the House of Representatives from the general public at large . . . .

The composition of PURC is modeled on the committee formerly used to nominate PSC commissioners. The makeup and function of that ad hoc committee was dictated by § 58-3-26: a ten person committee—consisting of three House members, three Senate members, and four members of the public at large—was charged with presenting nominees for empty PSC commissioner positions to the General Assembly. This ad hoc committee, however, did not have a name and seems to have only existed for the purpose of nominating candidates for any empty PSC positions. Presumably, the committee was dissolved when the General Assembly voted to fill the slots. PURC not only seems more permanent, but it also has more powers other than nominating candidates to the PSC, such as the power to nominate the director of ORS. Under the procedure created by ORSA, PURC nominates a candidate for the directorship of ORS to the Governor, who can then appoint that person to the directorship; if the Governor rejects that candidate, PURC is allowed to make other nominations until the Governor accepts one. PURC does not have any removal power over the director of ORS, but it is instructed to make annual reviews of the director and submit

63. S.C. CODE ANN. § 58-4-30(C) (2010).
64. In contrast, it seems that the CA could have been removed by the Commission on Consumer Affairs, which is also the body which nominated the CA. See S.C. CODE ANN. § 37-6-602 (2003) (current version at S.C. CODE ANN. § 37-6-602 (2010)). It is unclear whether the Governor could also remove the CA, but it is worth noting that the neither the CA nor any members of the Commission on Consumer Affairs were among the offices that the Governor could only remove for cause. See S.C. CODE ANN. § 1-3-240(C) (2003) (current version at S.C. CODE ANN. § 1-3-240(C) (2010)).
those reviews—after giving the director an opportunity to respond to them before PURC—to the General Assembly.68

The nomination procedure for the director of ORS reveals a concern of the General Assembly with giving the director some independence from direct political control. That same concern is echoed in ORS’s funding mechanism. Like the PSC itself,69 ORS is funded through assessments made by the Department of Revenue on public utilities.70 Though PURC is instructed to review ORS’s budget proposal to the Department and submit a letter along with ORS’s proposal,71 it is apparent that the funding—through—assessments provision of ORS’s enabling statute gives it a much greater degree of independence than if its budget were appropriated directly by the General Assembly.

ORS gives ORS a number of powers and duties. Most importantly, perhaps, ORS automatically receives intervenor status in any proceeding before the PSC (though it may withdraw if it so chooses).72 ORSA charges ORS to “represent the public interest,” which is defined as:

[A] balancing of the following:

(1) concerns of the using and consuming public with respect to public utility services, regardless of the class of customer;

(2) economic development and job attraction and retention in South Carolina; and

(3) preservation of the financial integrity of the state’s public utilities and continued investment in and maintenance of utility facilities so as to provide reliable and high quality utility services.73

ORS’s charge to represent the “public interest” is different from the CA’s charge to represent the “consumer interest,”74 especially given that the “public interest” includes the pro-industry and pro-utility concerns of “economic development” and “the financial integrity of the state’s public utilities.”

In pursuit of the public interest, ORS has an extensive set of defined powers. They include the power to:

• “review, investigate, and make appropriate recommendations to the [PSC] with respect to the rates charged or proposed to be charged by any public utility”.75

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70. S.C. Code Ann. § 58-4-60(B) (2010).
• “make inspections, audits, and examinations of public utilities regarding matters within the jurisdiction of the [PSC]”\(^{76}\)

• “review, investigate, and make appropriate recommendations to the [PSC] with respect to the service furnished or proposed to be furnished by any public utility”\(^{77}\)

• “investigate complaints affecting the public interest generally, including those which are directed to the commission, commissioners, or commission employees”\(^{78}\)

• “upon request by the [PSC], make studies and recommendations to the commission with respect to standards, regulations, practices, or service of any public utility”\(^{79}\)

• “provide legal representation of the public interest before state courts, federal regulatory agencies, and federal courts in proceedings that could affect the rates or service of any public utility”\(^{80}\)

• “serve as a facilitator or otherwise act directly or indirectly to resolve disputes and issues involving matters within the jurisdiction of the [PSC]”\(^{81}\) and

• “educate the public on matters affecting public utilities which are of special interest to consumers.”\(^{82}\)

It is important to remember that, for the most part, these are not new powers.

The power contained in ORSA § 58-4-50(A)(2)—the power to make inspections, audits and examinations of regulated utilities—is especially notable. ORS specifies that “[ORS] has sole responsibility for this duty but shall also make such inspections, audits, or examinations . . . as requested by the [PSC].”\(^{83}\) This provision gives ORS great prominence vis-à-vis a regulated utility—no other state agency wields such strong investigatory power as ORS. Before the passage of ORSA, the CA could have investigated a regulated utility through its power to access business records (though that power was taken away by ORSA).\(^{84}\) The PSC had the power under § 58-3-190 to demand a “full and detailed report and information concerning its

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business affairs" from any regulated utility. Using its authority under § 58-3-120, the PSC could even request the Attorney General to assist in that effort. With the passage of ORSA, all such investigations are now carried out by ORS.

One of the most interesting powers ORSA gives ORS is the power to "serve as a facilitator or otherwise act directly or indirectly to resolve disputes and issues involving matters within the jurisdiction of the [PSC]." Though this power is arguably ambiguous, it seems likely that ORS relies on this statute for the authority to serve as the settlement broker in matters that are already before the PSC or that might come before the PSC. As evidenced by the fuel factor proceedings for Progress Energy Carolinas in 1994 and South Carolina Electric and Gas in 1994 and 1995, the CA had the ability to negotiate settlements with the regulated utility before ORSA. However, from 1994 to 2004, there were only seven settlements in thirty-nine fuel factor proceedings. Since ORS took over the role of public interest advocate from the CA in 2005, there have been eighteen settlements in eighteen fuel factor proceedings. No other provision in ORSA directly relates to settlements of PSC matters; so, inasmuch as ORS's tendency to negotiate settlements rather than seek adjudication before the PSC derives from a statutory source, ORSA § 58-4-50(A)(9) seems to be that source. The CA did not have any formal directive to seek settlement agreements, which might partially explain why there were fewer settlement agreements before ORSA. However, some proceedings did reach settlements, so even if the CA lacked a formal directive, it presumably could have sought settlements if it had so desired.

C. The Public Service Commission

As discussed above, one of ORSA's goals was to strip the PSC of its non-adjudicative powers and transfer them to the newly created ORS. ORSA § 58-3-60(A) reaffirms the PSC's authority to hire a commission staff that includes attorneys, but it also precludes any commission staff from appearing "as a party in commission proceedings...[or offering] testimony

85. Before ORSA, such investigations followed a two-step process: first, the PSC requested a report from the utility through S.C. Code Ann. § 58-3-190, then, if it deemed that report unsatisfactory, it could direct the utility to address specific concerns under S.C. Code Ann. § 58-3-200. ORSA § 58-3-190 still allows the PSC to use this two-step process, but ORSA § 58-3-190(C) also gives the PSC the authority to request ORS to make an investigation after the initial report from the utility. ORSA § 58-3-200 also allows the PSC to request that ORS make an investigation of a utility through its § 58-4-50(A)(2) power without first requesting a report from a utility.
88. See Appendices B, C and D.
89. See Barbour, supra note 17.
on issues before the commission."  

90. Before ORSA, commission staff members routinely participated in fuel factor hearings.  

91. Related to the power to investigate utilities, the PSC formerly possessed the power to demand "for its confidential use any record filed with . . . [any State agency] or any information in [a State agency’s] possession concerning the property values, operation, income or other matter of any person doing business as a public utility in [South Carolina]."  

92. ORSA § 58-3-130 transfers this power from the PSC to ORS. Unlike the power to directly investigate utilities, the PSC now lacks any authority to request that ORS demand the records of other state agencies, though it is possible that ORS would be forced to use its § 58-3-130 powers in performing an investigation of a utility at the request of the PSC.  

ORSA also significantly changed the way in which PSC commissioners are elected. Previously, § 58-3-26 provided that commissioners were first nominated by the proto-PURC committee discussed above, and then elected by a joint session of the General Assembly; ORSA repealed that statute. Now, ORSA § 58-3-530(1)(a) gives PURC the power to nominate three candidates for each PSC position to the General Assembly, which then elects a commissioner from those nominees. ORSA § 58-3-20(A)(1) adds to the previous qualification requirements for PSC commissioners that a nominee must have a baccalaureate or advanced degree.  

93. Once nominated, ORSA § 8-13-935 provides a candidate for a PSC position with a set of ethical guidelines concerning how she may campaign for herself among the members of the General Assembly.  

D. The Public Utility Review Committee  

As discussed above, PURC nominates candidates for PSC commissioner and director of ORS and performs annual reviews of ORS. PURC is also instructed by ORSA § 58-3-530(3) "to conduct an annual performance review of each member of the [PSC]," though, as with the director of ORS, the commissioner is given a draft of the review and a chance to respond to PURC concerning the review. PURC also performs an annual review of the PSC as a whole.  

94. Perhaps the most interesting of PURC’s duties, however, is to develop a survey concerning the PSC commissioners and distribute it to all parties who appear before the PSC.  

95. According to the statute, the survey must ask the parties to evaluate each commissioner’s
(a) knowledge and application of substantive utility issues; ability to perceive relevant issues;
(b) absence of influence by political considerations;
(c) absence of influence by identities of lawyers;
(d) absence of influence by identities of litigants;
(e) courtesy to all persons appearing before the [PSC]; and
(f) temperament and demeanor in general, preparation for hearings, and attentiveness during hearings.\(^6\)

Regardless of whether or not such a survey can be an effective tool in assessing the function of the PSC, the choice of the drafters of ORSA to include a directive to create such a survey shows a great deal of mistrust in the ability of the PSC in general, and its commissioners in particular, which accords with other provisions in ORSA.

E. Other Significant Sections of ORSA

1. Ex Parte Communications

As discussed above, the *ex parte* communications scandal in 2002 was a major impetus to the General Assembly passing ORSA.\(^7\) Consequently, ORSA § 58-3-260 contains an extensive set of statutes governing *ex parte* communications between “a commissioner, a hearing officer, or commission employees” and any other person, including the staff members of ORS, regarding any matter that is currently before the PSC or that may come before the PSC.\(^8\) ORSA § 58-3-270 creates a procedure by which “any party seeking remedial relief from alleged violations of Section 58-3-260 may file a complaint with the Administrative Law Judge Division.”

2. Fuel Costs

The fuel costs that electric utilities are able to recover through the fuel factor procedure are defined by statute. ORSA’s drafters added clarification to the statute’s definition of “purchased power,” which is the power that utilities purchase from another utility rather than generate themselves. The definition of purchased power had been disputed by the utilities and the CA;\(^9\) the change embodied in ORSA § 58-27-865(A)(2) seems to have been aimed at settling this dispute by declaring that purchased power and all related costs could be counted as fuel. Subsequent statutes passed in 2006 and

\(^{96}\) Id.
\(^{97}\) See Collier, *supra* note 19.
\(^{98}\) See S.C. CODE ANN. § 58-3-260(B) (2010).
2007 also changed the definition of fuel. The 2006 change does not seem to have significantly modified the definition of fuel; however, the 2007 change specifically allowed the cost of transporting fuel to be included in the fuel factor. Accordingly, the 2004 amendment contained in ORSA and subsequent 2007 amendment seem to have been pro-utility as they explicitly allowed more costs to be passed through the fuel designation.

III. DATA AND ANALYSIS ON FUEL FACTOR DECISIONS

A. Law and Procedure Regarding Fuel Factors

In the $R = O + B(r)$ equation discussed earlier, fuel factor fits into $O$, the utility’s operating expenses. A utility’s fuel expenditures can be significant, amounting to more than half of its operating expenses. According to Phillips, fuel factors were a regulatory innovation adopted to deal with problems arising from the energy crisis of the 1970s—with fuel prices changing dramatically and very frequently, utilities needed a way to adjust their rates without having to file for an increase or decrease of their entire rate. The fuel factor allows for such adjustment by permitting utilities to petition the public utility commission on an annual basis for an increase or decrease in their rates in accordance with the fluctuations of fuel prices. As explained by Phillips, a public utility commission will then consider the fuel factor request in light of the just and reasonable standard of rate regulation:

Operating expenses [such as fuel factors] may be controlled in two broad ways, by disallowing improper charges already incurred in rate proceedings, and by prohibiting extravagant or unnecessary charges before they are incurred. In a rate proceeding, a commission has the opportunity to separate the reasonable and unreasonable costs of service. This method of supervision consists of refusing to permit a utility to charge a particular expense to operating expenses. In so doing, the expense is charged to investors. As a method of control, however, the disallowance technique has one important limitation. If a commission disallows a significant percentage of a utility’s operating expenses (expenses that have already been incurred), the revenue of the company will be inadequate to attract sufficient capital.

101. Id.
102. PHILLIPS, supra note 1, at 260.
103. Id.
104. Id. at 261.
105. See id. at 260–61.
For this reason, authority to question expenditures before they are incurred is more satisfactory.\(^{106}\)

Thus, a fuel factor proceeding is both prospective and retrospective.

Utilities desire the certainty of knowing in advance that their fuel purchases will be considered just and reasonable (or prudent—another term used in electric utility regulation), and citizens do not want to pay for fuel-related expenses that will subsequently be determined imprudent. However, a utility’s projections of its fuel expenses for the coming year will likely be somewhat inaccurate, and there is always the possibility that the utility will have to pay for an unexpected fuel-related cost, such as power purchased from another generator to cover the utility’s service load obligations when a facility unexpectedly shuts down. Accordingly, a retrospective review of fuel expenses is needed to account for any over-recovery or under-recovery from incorrect projections. During this review, all of the utility’s expenses are further scrutinized for prudence. The prospective and retrospective nature of fuel factor proceedings is directly discussed in the statutes governing the proceedings:

58-27-865(B) The commission shall direct each electrical utility which incurs fuel cost for the sale of electricity to submit to the commission and to the Office of Regulatory Staff, within such time and in such form as the commission may designate, its estimates of fuel costs for the next twelve months. . . . Upon conducting public hearings in accordance with law, the commission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period.

. . .

(F) The commission shall disallow recovery of any fuel costs that it finds without just cause to be the result of failure of the utility to make every reasonable effort to minimize fuel costs or any decision of the utility resulting in unreasonable fuel costs, giving due regard to reliability of service, economical generation mix, generating experience of comparable facilities, and minimization of the total cost of providing service.\(^{107}\)

There are other important sections of § 58-27-865 discussing what may be considered fuel for the purposes of a fuel factor, but these two sections lay out the groundwork for fuel factor proceedings: utilities estimate how

\(^{106}\) Id. at 260.

\(^{107}\) S.C. CODE ANN. § 58-27-865(B), (F) (2010).
much they will spend on fuel in the coming year, and corrections for over-recovery, under-recovery or unforeseen expenditures are either added or subtracted from the amount needed for fuel in the coming year.

From 1994–2010, there were three utility companies operating in South Carolina that were required to submit fuel factor requests: Progress Energy Carolinas (PEC), South Carolina Electric and Gas (SCE&G), and Duke Energy Carolinas (DEC). In the fuel factor proceedings, the interests of the utilities are most directly represented by the utilities themselves—they will advocate for the fuel factor they are requesting and can be expected to fight back against any claim that their fuel expenses are imprudent. Any pushback against the utilities’ interests in favor of citizens’ interests must come from intervenors, who are allowed to participate in fuel factor proceedings at the discretion of the PSC.

In a recent order denying a petition to intervene in a general rate case, the PSC stated that a potential intervenor must meet general standing requirements, which include simply being a customer of the utility. Though the legal threshold for intervention may seem low, in effect, it is often quite high. In my research, I interviewed Sue Berkowitz, the director of the South Carolina Appleseed Legal Justice Center. Ms. Berkowitz has participated as an intervenor in proceedings before the PSC both before and after ORS was created. According to Ms. Berkowitz, her organization could often get standing to participate in a fuel factor proceeding if it thought that a utility was asking for too large of a rate increase. However, the high costs of fully participating in a fuel factor proceeding, which requires hiring experts to analyze the engineering and accounting information from the utilities regarding their fuel expenses and then developing an evidentiary record from that expert testimony to base a counterargument on, were often prohibitive to an organization of limited resources such as the Appleseed Legal Justice Center. For organizations like Ms. Berkowitz’s—to say nothing of private citizens—the complex nature and frequency of fuel factor proceed-

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108. Prior to 1996, the utilities were required to make fuel factor requests on a semi-annual basis; however, the process was otherwise identical. S.C. CODE ANN. § 58-27-865(A) (1995).


110. See S.C. Elec. & Gas, supra note 32, at 1–2.

111. In its 2010 Annual Report, Palmer Freeman, Chair of the Board of Directors for Appleseed Legal Justice Center, described the organization as such: “[The] South Carolina Appleseed Legal Justice Center has pursued economic, legal and social justice for the state’s low-income population through advocacy, education and litigation for more than 30 years. Its work has helped many thousands of South Carolinians.”


114. Id.
ings are a high barrier to entry to fighting a utility all the way through adjudication.\footnote{Id.} If a party to a fuel factor proceeding is unsatisfied with the PSC’s final order, that party can only appeal the matter to the judiciary if it first petitions the PSC for a rehearing.\footnote{See S.C. Code Ann. Regs. 103–854 (2011).} Judicial appeal not only allows an intervenor the chance to make its argument in a different forum, but it also gives intervenors another bargaining chip with the utilities by introducing increased “regulatory risk” beyond the normal time frame of a fuel factor proceeding which can affect a utility’s cost of capital.\footnote{Phillips, supra note 1, at 409–11.} Yet, if ordinary fuel factor proceedings are often too costly to fully participate in, judicial appeals of those decisions will be even more costly.

**B. Data and Observations**

Since its creation in 2005, ORS has been given intervenor status in every proceeding before the PSC as per statutory requirement.\footnote{See S.C. Code Ann. § 58-4-10(b) (2005).} In these proceedings, ORS is charged with representing the “public interest,” which is defined as a balance of the “concerns of the using and consuming public,” “economic development” and the “preservation of the financial integrity of the state’s public utilities.”\footnote{Id.} I will discuss the contours of this definition of public interest—especially with regard to the preservation of utilities’ financial integrity—more fully below, but given the fact that ORS was created in response to a scandal concerning the appearance of too much utility influence on the regulatory process, it seems that ORS is supposed to broadly represent the interests of citizens vis-à-vis the interests of the utilities, which are represented by the utilities themselves. Before 2005, the Consumer Advocate (“CA”), an office with the Commission on Consumer Affairs, was charged with representing “the consumer interest” before state and federal regulatory bodies that had jurisdiction over consumer services or products.\footnote{See S.C. Code Ann. § 37-6-604(1) (2005).} Though the CA did not have a statutory grant of standing in fuel factor proceedings like ORS, my research, presented in Appendices B–D, shows that the PSC granted intervenor status to the CA in every fuel factor proceeding from 1994–2004.\footnote{As I will discuss later, ORSA specifically took away all authority the CA had to become involved in PSC proceedings.} As discussed above, until ORS was created, some PSC staff members were assigned to serve an advocacy role in every proceeding before the PSC. The PSC gave the commission staff members (“CS”) intervenor status in every proceeding before 2005 that I researched. The only other parties who were granted intervenor status in fuel factor proceedings were Nucor Steel, CMC Steel, and the South Carolina Energy
C. Settlement Rate

There have been eighteen fuel factor proceedings—six for each of the three utilities—since ORS came into existence in 2005. In each proceeding, a settlement was presented to the PSC for its approval, and in every proceeding except one, all of the parties to the proceeding joined in the settlement proposal. The one party that did not join the settlement agreement was CMC Steel in the 2010 SCE&G fuel factor proceeding. It seems likely that CMC Steel did not find the settlement too objectionable because it did not show up at the PSC hearing for that proceeding, nor has it petitioned for a rehearing on the matter. At each hearing, the PSC heard testimony on the settlement agreement and then, in every instance, approved the settlement. This constitutes a 100% settlement rate and a 0% adjudication rate.

Between 1994 and 2004, there were thirteen hearings for each utility for a total of thirty-nine fuel factor hearings. Only seven of those proceedings settled before the PSC hearing, which makes for a 17.95% settlement rate and an 82.05% adjudication rate. Using a t-test to compare these settlement rates, there is a significant difference in the settlement rates at the 95% confidence interval: fuel factor proceedings are much more likely to settle in the ORS era than they were in the pre-ORS era. See Figure 3.

**FIGURE 3**

![Diagram showing settlement and adjudication rates for 1994-2004 and 2005-2010](Image)


123. The results of each of the statistical tests mentioned in this section can be found in Appendix E.
D. Intervention Rate

Since ORS, PEC has had eight parties other than ORS intervene in its fuel factor proceedings; SCE&G has had eleven such interventions; and DEC six. This totals twenty-five non-ORS interventions in eighteen fuel factor proceedings for an average of 1.39 interventions per fuel factor proceeding.

Before ORS, PEC had eight parties other than the CA intervene in its fuel factor hearings; SCE&G had two, DEC one, totaling eleven intervenors in thirty-nine hearings and an average of 0.28 intervenors per proceeding. There is no statistical significance to the difference in the number of intervenors before and after 2005 at the 95% confidence interval, but generally there are more intervenors since ORS’s inception.

E. Rate of Petitions for Rehearing

No entity has petitioned the PSC for a rehearing of a fuel factor proceeding since 2005, so there is a 0% rehearing petition rate. Before ORS, there were five petitions for rehearing—a 12.82% petition rate. The difference between these rates is significant within a 95% percent confidence interval. See Figure 4.

F. Proposed Fuel Factor vs. Actual Fuel Factor

In the three graphs in Figures 5–7, the gray dotted line signifies the utility’s proposed fuel factor, and the solid line represents the actual fuel factor that the utilities were awarded. Some small differences exist between proposed fuel factor and awarded fuel factor prior to 2005, but the biggest differences between the proposed fuel factor and the awarded fuel factor are found after 2005. In each instance in which the proposed fuel factor does

124. It is worth noting that the SCEUC, which has intervened in many hearings, did not exist until 2000. About SCEUC, http://www.sceuc.org/about.htm (last modified Sept. 19, 2004).
not match the awarded fuel factor in the ORS period, the awarded fuel factor is less than the proposed fuel factor. On these graphs and subsequent graphs, 2005, the year in which ORS became involved with the fuel factor proceedings, is demarcated with a vertical line.

**Figure 5**

**Figure 6**
The graph in Figure 8 compares data for all three utilities on the difference between the proposed fuel factor and the actual fuel factor relative to that year’s actual fuel factor. Thus, a difference between a proposed fuel factor of 1.5 ø/kWh and an actual fuel factor of 1.00 ø/kWh (0.5 ø/kWh, or 50% relative to the actual fuel factor of 1.00 ø/kWh) will look the same as a difference between a 3.00 ø/kWh proposed fuel factor and a 2.00 ø/kWh actual fuel factor in another year. As was apparent with the three graphs above, until 2002, the utilities were almost always awarded the fuel factor they requested except in a few circumstances where they were actually awarded a slightly higher fuel factor than their initial request. From 2002 on, the utilities started receiving lower fuel factors with some frequency; that trend increased in 2005, the first year in which ORS was a party to the fuel factors proceedings, and continues through the ORS period. There is statistical significance to the average difference between the proposed fuel factor and the actual fuel factor before and after 2005 at the 95% confidence interval. See Figure 8.
The two pie charts in Figure 9 demonstrate the frequency with which the utilities’ proposed fuel factors were greater than 2% of the actual fuel factor they were awarded. In other words, these charts show how frequently the utilities were awarded fuel factors that were noticeably less than the fuel factors they requested. These charts show that there was a significant difference in the likelihood of a utility being awarded a fuel factor that was almost the same as its proposed fuel factor before 2005, when that practice was very frequent, and after 2005, when it was less frequent.
G. Fuel Factors

Figure 10 contains the graph of each utility's fuel factors from 1994–2010. Although the fuel factors follow a general trend, they are each fairly different, which is a reflection of the fuel mixes that each utility uses for generation and the different prices the utilities are able to negotiate for their fuel. On the graph there is clearly a large uptick in all fuel factors that begins between 2003–2004 and continues through the present with the rate of increase trailing off between 2008–2010.

![Graph of Utilities' Fuel Factors, 1994–2010](image)

In 2010, the market shares for each of the utilities based on total amount of electricity sold were as follows: SCE&G, 47.0%; PEC, 10.2%; and DEC, 42.8%. Assuming that these market shares have been roughly consistent from 1994–2010, the weighted SC average fuel factors are shown in Figure 11. Because coal costs are a major component of fuel factor components for all three utilities, and assuming that most variation in fuel prices is due to coal price fluctuation, I am including the national average price of coal for utilities on the same graph.


126. Of course, there are many reasons that fuel prices can fluctuate from year to year. However, in reading through these fuel factor proceedings, it seems that most parties thought the price of coal was the main driver of fuel price changes from year to year. This belief may overstate the case, or it may be wrong, but it is an assumption for the sake of the argument.
Thus, even though the uptick in national average coal costs ("NACC") corresponds with the uptick in the SC average fuel factor ("SCAFF"), from around 2004 to the present the SCAFF seems to be increasing more than the NACC. However, as I will discuss later, the statutory definition of "fuel" in § 58-27-865 has been changed several times so that more of the utilities’ operating expenses can be passed through the fuel factor; these changes occurred due to statutes passed by the General Assembly in 1996, 2004, 2006 and 2007.\footnote{See S.C. Code Ann. § 58-27-865 (2010).} Using data from the U.S. Energy Information Administration (an office within the Department of Energy) on the entire average electricity rates for the state of South Carolina ("SCAER")—of which fuel factor is a component along with the base rate—we can see that SCAFF has increased as a total percentage of SCAER in Figure 12.\footnote{See Electric Power Annual 2009—State Data Tables, U.S. Energy Info. Admin., http://www.eia.gov/cneaf/electricity/epa/epa_spreadsheets.html (last revised Jan. 4, 2011).}
The graph in Figure 12 shows that from 1994–2010, fuel factor has increased from around 20% of electricity rates in the mid 1990's to almost 35% in 2010. This indicates that even though fuel factors have increased dramatically since 2003, as seen on the graphs above, overall electricity rates are not increasing at the same rate. The changes to the statutory definition of fuel factor in 1996, 2004, 2006 and 2007 are represented by the delta symbols on the graph. Three of these points—2004, 2006 and 2007—indicate places on the graph where the trend line of SCAF as a percentage of SCAE changes sharply. These points indicate that statutory changes to the definition of fuel factor may be the explanation for the dramatic increase in fuel factor in the past ten years. Using the data from the U.S. Energy Information Administration, we can see that, indeed, SCAE has increased from 1994–2009 (data is not yet available on 2010). However, the average rate of electricity for the entire country (USAER) has also increased in that same time period. The graph in Figure 13 compares the two. A t-test comparing the difference between USAER and SCAE in the ORS era and the pre-ORS era shows that the difference between USAER and SCAE has been significantly higher since 2005 at the 95% confidence interval. This difference indicates that even though South Carolina's electricity rates have increased since 1994, and at relatively rapid pace since ORS has existed, electricity rates for the entire country have increased during the same period and at an even more rapid pace since 2005.
IV. Connections Between ORSA and Fuel Factor Decisions

As discussed above, the primary motivation of the General Assembly in passing ORSA was to create a better regulatory system through a suite of structural changes. After the ex parte communications scandal, there was concern that because the PSC had both adjudicative duties and advocative duties in public utility regulatory proceedings, it was not fulfilling its advocative duties as zealously as it should have been, creating a perception that all decisions made by the PSC were somewhat untrustworthy. This perception could be characterized as a crisis of what Jody Freeman and Laura Langein identify as the legitimacy of regulatory process.129 Whether the reforms enacted by ORSA were successful, then, can be measured by their success in the general goal of preventing utilities from using their monopoly power to charge unreasonable rates to consumers and in the specific goals of increasing the transparency and trustworthiness of the regulatory process.

A. Evaluating the Success of ORS

The data I presented in Part III show that there have been significant, measurable changes in the results of fuel factor proceedings and overall electricity rate regulation since ORS has existed. The pertinent changes are: (1) an increase in the number of settlements of fuel factor proceed-


130. I have not systematically studied overall electricity rate regulation except to look at the general trends of electricity rates in South Carolina as opposed to the rest of the country. Thus, my observations about settlements, inventions, etc., do not apply to electricity rate regulation generally.
Toward Legitimacy Through Collaborative Governance

ings;\textsuperscript{131} (2) an increase in the number of intervenors;\textsuperscript{132} (3) decreased instances of petitions for rehearing;\textsuperscript{133} (4) increased instances of utilities being awarded lesser fuel factor than they had originally proposed;\textsuperscript{134} (5) increased overall fuel factors;\textsuperscript{135} (6) an increase of fuel factor as an overall percentage of electricity rates;\textsuperscript{136} and (7) a decrease of overall electricity rates relative to national rates.\textsuperscript{137} These changes can be broken down into two groups: 1–3 can be characterized as relating to concerns about the legitimacy of the regulatory process, and 4–7 relate to the purely monetary aspects of the regulatory process. As discussed above, ORSA’s goals correspond to these groupings, as it aimed at changing the regulation of public utilities to increase the legitimacy of that process and to limit the utilities’ ability to take advantage of their monopoly powers.

As far as ORSA’s legitimacy goals are concerned, the structural reforms seem to have been successful at making the regulatory process more favorable to citizens’ interests. Since the creation of ORS, more intervenors have been involved in the regulatory process; furthermore, no intervenors have filed petitions for rehearing; finally, except for one case, every intervenor has joined in the settlements brokered with the utilities through ORS. A number of regulatory reform advocates have recognized such participation as a hallmark of collaborative governance.\textsuperscript{138} Jody Freeman, one of the leading scholars on the theory of collaborative governance, has described the concept:

I contrast collaborative governance with the interest representation theory of administrative law to illustrate the limits of interest representation as an explanatory tool and a normative model. Interest representation relies on a pluralist theory of legitimacy to finally solve the problem of administrative discretion . . . . [I]nterest representation has limited normative appeal; it assumes that regulatory policy should be the product of bargaining and trade-offs struck by representative groups with the power to delay and obstruct agency decision making.

\begin{thebibliography}{99}
\bibitem{131} See supra Figure 3.
\bibitem{132} See supra Part IV.D.
\bibitem{133} See supra Figure 4.
\bibitem{134} See supra Figures 5–9.
\bibitem{135} See supra Figures 10–11.
\bibitem{136} See supra Figure 12.
\bibitem{137} See supra Figure 13.
\end{thebibliography}
I argue that the goals of efficacy and legitimacy are better served by a model that views the administrative process as a problem-solving exercise in which parties share responsibility for all stages of the rule-making process, in which solutions are provisional, and in which the state plays an active, if varied, role.\footnote{139}

Under the collaborative governance theory, regulatory structures that invite the participation of regulated entities and beneficiaries, as mediated by administrators, will lead to more efficacious governance. In the seesaw metaphor discussed in Part I,\footnote{140} the interests of citizens and utilities will be balanced from an objective standpoint and, importantly, from the standpoint of citizens and the utilities. The fact that ORSA does not force parties into settlement negotiations but merely instructs ORS to serve as a facilitator for dispute resolution means that intervenors can take the proceeding to adjudication without a settlement if they do not believe that the collaborative process is producing a satisfactory result. The fact that more parties participate in settlements and that no parties have sought adjudication is an indication that the intervenors prefer the collaborative process to the former process. Ms. Berkowitz, director of the Appleseed Legal Justice Center, wholeheartedly agreed that, based on the proceedings she had been involved with since 2005, the regulatory process in the ORS era is preferable to the previous process.\footnote{141}

On the matter of the monetary concerns—the fuel factors themselves—the record is complicated by the fact that the General Assembly has changed the definition of fuel numerous times during the period of study. These changes, along with the comparison of fuel factors to overall electricity rates, and, in turn, those rates to national rates, indicate that the sizable increase in fuel factors since 2005 might not be a result of a change of regulatory structure but rather, a change of substantive law. Had increases in fuel factors resulted exclusively from the creation of ORS, there would be a strong indication that it did not actually change the regulatory process to give citizens’ interests more leverage, and had actually done the opposite. However, this is not the case, and, in fact, the data comparing proposed fuel factors to granted fuel factors indicates that the utilities are being awarded lower fuel factors than they request more frequently than they were before ORS was created.

This conclusion is not incontrovertible—the utilities could be initially overstating their desired fuel factors as a strategic negotiation tactic, knowing that they will first attempt a settlement with ORS and the intervenors. However, the fact that the statutory definition of fuel has been changed twice since ORS has been involved in the regulatory process—probably at

\footnote{139} Freeman, supra note 138, at 5–6 (citations omitted).
\footnote{140} See supra Part I.
\footnote{141} Berkowitz Interview, supra note 113.
the behest of lobbying from the utilities—is itself an indication that the utilities are having genuine disagreements with the other parties in their settlement negotiations about what expenses can count as fuel. Assuming that utilities are the parties advocating for these statutory changes, the only reason they would expend the political (and financial) capital needed to implement those statutory changes is that they were having disagreements with other parties in settlement negotiations about whether certain kinds of expenses can be counted as fuel. Rather than continue to fight for these expenses to be included in the fuel factor calculation in negotiations with ORS and other intervenors, it seems that the utilities may have gone to the legislature to get the very definition of fuel changed to settle the matter. This interpretation is not certain, but since the statute has been repeatedly changed, there is at least some indication that the fuel factor settlement negotiations are hard fought and not subject to easy manipulation by the utilities; if the utilities could easily manipulate the process, they would not have needed to amend the statute.

It is also possible, however, that the structural reforms instituted by ORSA have had little significant effect on the monetary concerns. Freeman and Langbein conclude in their analysis of regulatory negotiations in the EPA that “the agency was equally responsive to stakeholders in both conventional and negotiated rulemaking contexts.” Even though he recognizes that the public utility environment is often fraught with both suspicion of the utilities by citizens and suspicion of the citizens by utilities, Phillips doubts that either side can ever really gain a significant advantage over the other:

[The] conflict [between citizens and utilities] is more apparent than real[,] for a public utility cannot maximize profit in the long run without providing adequate service at prices acceptable to the public, while the public in the long run cannot receive adequate service at a reasonable price except from a utility which is financially healthy.

The monetary results can perhaps best be described as inconclusive: though the difference between US electricity rates and SC electricity rates has increased since ORS has existed, indicating that it may be helping citizens’ monetary concerns, fuel factors have undoubtedly continued to dramatically rise since 2004. Though this increase may be explained by changes in the substantive law or changes in energy costs nationwide, it is clear that ORS has not driven fuel factors down. One possibility is that fuel factors would have been even higher under the former regulatory structure; another is that fuel factors would have been approximately the same whether or not ORS had been created; and still another is that fuel factors may not

142. Freeman & Langbein, supra note 129, at 65.
143. Phillips, supra note 1, at 7.
have risen so much, though the statutory changes would still have allowed more expenses to be passed through the fuel designation.

With a 100% settlement rate, a 0% petition for rehearing rate and a subsequent 0% judicial appeal rate, ORS may have saved the state of South Carolina significant administrative costs. While ORS still performs the advocacy roles formerly performed by the PSC and uses state funds to do so, once a fuel factor proceeding gets to the PSC, the only issue at stake is whether to accept the settlement agreement. Furthermore, the PSC does not have to expend resources on rehearings, and the judicial system does not have to expend its resources fielding appeals. This simplified process may also save money for intervenors and utilities as well, leading to fewer dead weight losses in attorneys' and expert witnesses' fees. For utilities, the greater certainty of obtaining a settlement agreement that will not be appealed by an intervenor may also represent significant savings. Thus, even if fuel factors themselves have either been unaffected by the existence of ORS or have only been affected at the margins, the total social costs of public utility regulation may have decreased as a result of ORS. This effect is hard to calculate, but it is clear that regulatory process in the ORS era so far is less complicated, and that increased simplicity almost certainly saves the State resources.

B. Accounting for the Changes

I began this Note with an aim to investigate whether a reform to a regulatory structure can have a significant impact on the efficacy of that regulatory process. ORSA has changed the efficacy of the regulatory process of fuel factor proceedings in terms of the legitimacy of the procedure if not the monetary aspect of the procedure. The remaining question, then, is whether these changes can be attributed to changes in regulatory structure. Though that answer might seem obvious, it is also possible that the change in personnel brought about by ORSA is primarily responsible for the changes seen in fuel factor regulation. Scholars such as David Lewis have argued that changes to personnel can have significant impact on the effectiveness of government administrators.144 Though Lewis is more concerned with the differences between the performance of political appointees and career civil servants, the ability of personnel changes to affect the outcome of government regulation without any substantive change to the applicable law is apparent from his studies.145 In Stefan Krieger's description of the "natural life cycle" theory of agency capture, the period directly after a reform can observe an increase of regulatory behavior because of increased attention from the public and politicians to the matter brought on by the scandal that

145.  See id.
Toward Legitimacy Through Collaborative Governance

prompted the reform.\textsuperscript{146} Inasmuch as the ex parte communications scandal was a response to the perception of the utilities’ capture of the PSC, the life cycle theory suggests that ORS is currently strongly advocating for citizens’ interests because the memory of the 2002 scandal is still fresh.

According to ORS’s website, C. Dukes Scott has served as its executive director since its inception.\textsuperscript{147} If changes to regulatory process can be attributed to personnel changes, Mr. Scott may be the party most responsible. Mr. Scott’s biography reveals him to be an insider to the public utility environment in South Carolina: after receiving a B.S. from Clemson University and a J.D. from the University of South Carolina Law School and practicing law at a firm for a few years, Mr. Scott began working at the PSC where he held a variety of roles until he was elected a commissioner and served in that position from 1994 to 1999.\textsuperscript{148} Notably, Mr. Scott authored the only dissent to a PSC order that I came across in my research: in PEC’s September, 1994 fuel factor proceeding, the PSC approved a stipulation agreement (essentially, a settlement) between PEC and the other intervenors in the case.\textsuperscript{149} Mr. Scott objected to the fact that the stipulation agreement had been accepted by the PSC without a hearing—a clear violation of the procedural statutes—and questioned whether stipulation was in the public interest.\textsuperscript{150} This dissent demonstrates that Mr. Scott had some concern for how the public interest was served in regulatory matters at least a decade before ORS was created. After serving as a PSC commissioner, Mr. Scott was elected an administrative law judge, a position he held until he became the executive director of ORS.\textsuperscript{151} Ms. Berkowitz positively reviewed Mr. Scott’s performance at ORS.\textsuperscript{152} She thought he was very trustworthy and made a good faith effort to represent the interests of citizens in regulatory matters.\textsuperscript{153} As an example, Ms. Berkowitz described how Mr. Scott had been instrumental in helping her organization institute South Carolina’s Lifeline program (a telephone service subsidization program for recipients of Medicaid, the Supplemental Nutrition Assistance Program, or the Temporary Assistance for Needy Families program) when the telecommunications utilities who were supposed to institute the program were dragging their feet, even though there was no strict legal requirement that ORS had to be

\textsuperscript{148} See id.
\textsuperscript{150} See id. (dissent).
\textsuperscript{151} See Executive Staff, supra note 147.
\textsuperscript{152} Berkowitz Interview, supra note 113.
\textsuperscript{153} Id.
involved in setting up Lifeline. In fact, ORS still plays a role in administering the Lifeline program.

In addition to being led by a director with a great deal of experience in the public utility environment, ORS enjoys a large budget that is tied to assessments made on regulated utilities. A recent newspaper article listed ORS’s budget at $7 million. According to state budget reports, the PSC’s entire budget in 2004—the year before ORS was created—was $10.4 million; in that same year, the CA’s entire budget of $2.6 million was used to represent consumer interests in proceedings before the PSC as well as the Commission on Consumer Affairs and the Department of Insurance. In 2010, the PSC’s budget was only $4.8 million. Thus, ORS is able to concentrate a majority of the money appropriated for the representation of the public interest in public utility regulation in one agency. There is no indication of how the PSC split its budget among its advisory and advocative staff before 2004, but it seems likely—if not probable—that ORS is able to use those funds for its advocative purposes more robustly than the previous combination of the PSC and the CA.

These four personnel-related factors—money, experienced leadership, relatively fresh commitment to the purposes of reform, and the simple change of actors involved—have almost certainly had an impact on the way in which fuel factor regulation has occurred in South Carolina since 2005. However, there are still important structural changes to the system of regulation that explain, in part, the results observed in my research. Ms. Berkowitz expressed that she felt that she could trust ORS’s analysis of the utility’s data that was pertinent to the matter at hand in a settlement negotiation. Because she could trust ORS, and because ORS has the dedicated resources and statutory authority to perform analyses and audits of the utilities’ data, her organization did not have to pay expert witnesses to try to develop their own record. Thus, Ms. Berkowitz’s organization could become involved in a proceeding with an eye primarily to advocating for its constituents’ interests instead of performing a substantive investigation of the utilities’ business practices. Furthermore, as the ex parte communications scandal indicated, there was quite a lot of ambiguity in the PSC as to which staff members had which roles in each proceeding. With the line between adjudi-

154. Id.
161. Id.
162. Id.
ators and advocates blurred and constantly shifting, it seems likely that the staff members who were supposed to perform the advocative role did not perform it as zealously as ORS, whose new primary role is to serve as an advocate for the public interest. As the LAC review discussed, a separate office of advocative staff is better able to appeal the PSC's decisions. Otherwise, the advocative staff members themselves are being asked to consider appealing the commissioners' decision. However, when considering whether an appeal is called for in a particular case, these staff members must also consider that they are going to serve as advisors for the same commissioners in the next case.\textsuperscript{163} This is obviously a problematic situation, and the reorganization of the regulatory structure recommended by the LAC and adopted in ORSA was aimed at rectifying that situation.

In the absence of zealous advocacy for the public interest by PSC staff, the CA did intervene in every fuel factor proceeding on behalf of consumer interests. However, the CA did not have a very large budget to devote to public utilities regulation; even though the CA's statutory duties were reduced by ORSA, the General Assembly has continued to fund it at the same level as it did before 2005, despite state budget shortfalls.\textsuperscript{164} Even if the CA intervened in a fuel factor proceeding as a zealous advocate for consumer interests, it did not have the same investigatory and prosecutorial power that the PSC staff had and that ORS now has. Thus, ORS combines the advantages of having a separate entity assigned to represent the public interest before the PSC with the advocative prerogatives of a regulator.

Having a more zealous advocate for the public interest does not mean that fuel factor regulation is necessarily more adversarial, however. If the regulatory process were more adversarial under ORS, it might be expected that ORS would not settle with the utilities and would instead seek adjudication before the PSC, with the possibility of appealing to the judiciary if the PSC sided with the utilities. However, a number of aspects of fuel factor regulation mitigate against a stridently adversarial process: the personnel at ORS are very familiar with the enterprise of public utility regulation, there are seldom any new matters of law to be decided in fuel factor regulation, and because of the regularity of fuel factor proceedings, all the parties are familiar with each other and anticipate participating in the same process a year later. Thus, all parties are acting with a great deal of knowledge about each other and about the ultimate matter at hand. In this situation, ORS, acting as a zealous advocate, may push hard against the utilities in negotiation while still seeking to ultimately arrive at a settlement that will maintain a functional relationship with the utilities. Given that the utilities seemingly possess the capacity to change the law concerning fuel factor regulation with some ease, pushing the utilities too hard on the monetary aspect may be counter-productive. However, if ORS can bring the utilities to the

\textsuperscript{163} See Legislative Audit Council, supra note 22.

\textsuperscript{164} See Fretwell & Phillips, supra note 157.
negotiating table with other intervenors, the overall legitimacy of the regulatory process is improved through a collaborative process. Thus, the changes to regulatory process observed since 2005, though probably due in part to changes in personnel, can also be explained by changes in regulatory structure.

CONCLUSION

In many ways, the major event that led to the creation of ORS—uproar over reports that utility companies in South Carolina were regularly engaging in ex parte communications with PSC staff members—was a very specific, small-scale scandal. The singular problem of ex parte communications could have been solved through less drastic means than bifurcating the PSC and putting one of the resulting halves in an entirely different building, as was mandated by ORSA. Yet, in the examination of the public utility environment in South Carolina that the ex parte communications scandal caused, some members of the LAC and legislators in the General Assembly saw the need for greater regulatory reform. In some ways, the striking changes in the process of public utility regulation that came about so rapidly after those structural reforms were instituted to prove that there was a need for reform. Though my study of the ORS reform has been limited to fuel factor proceedings, these proceedings offer a robust set of data about the regulatory procedure in South Carolina under ORS.

One of the fallouts of the ex parte communications scandal was suspicion that utilities were getting more favorable results at the PSC than they deserved because they were able to communicate with the staff of the PSC off the record. While the data on fuel factor decisions in the ORS era is inconclusive as to whether utilities are now getting less favorable results or not, there is strong data to support the assertion that public utility regulation under ORS is more legitimate. All of the fuel factor proceedings have reached settlements since ORS has existed, and no intervenor has petitioned for a rehearing—this is an indication that the participants in fuel factor proceedings are more satisfied with the results reached under ORS. It seems that more parties are becoming involved with the fuel factor proceedings, indicating that the barriers to entry in these proceedings are lower under ORS. Before ORS, utilities very frequently were awarded exactly the fuel factors they requested from the PSC, indicating that the advocates for the public interest at the time were ineffectual to some degree in pushing back against the utilities if, indeed, they were extracting higher rates than they deserved. Under ORS, utilities are ultimately agreeing to lower fuel factors than the fuel factors they originally proposed.

It is unclear whether there was a definite systemic problem with public utility regulation in South Carolina before ORS that allowed public utility companies who have state protected monopolies to force consumers to pay
unreasonably high rates for the services they offered. However, the suspi-
cion of such a systemic problem is itself proof that public utility regulation in South Carolina lacked a sufficient level of legitimacy from the citizen's perspective. The change to the regulatory structure of public utility regula-
tion embodied by ORS has had a significant effect on regulatory procedure in many measurable ways. This new procedure can be characterized as em-
bodying the spirit of collaborative governance. With the benefits of collaborative procedure, the interests of citizens and utilities—interests which are actually often aligned and only adversarial at the margins—can be properly balanced. With this rebalancing of regulatory procedure, featuring the collaborative involvement of citizens' interests and utilities' interests, ORS has significantly increased the legitimacy of public utility regulation in South Carolina. The regulatory reform experience in South Carolina shows that better governance results can be achieved through changes to regulatory structure which need not disrupt the paradigm of a privately owned utility providing a public service to citizens. Accordingly, ORS can provide a model to other states, and even federal agencies, that want to bolster the legitimacy of their regulatory system through a collaborative process.
## APPENDIX

### A. ABBREVIATIONS

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<td>1995</td>
<td>4/20/95</td>
<td>95-003-E</td>
<td>Yes</td>
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<td>CA</td>
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E. Statistical Tests

T-Test for Settlement Rates Before and After 2005

### Group Statistics

<table>
<thead>
<tr>
<th>ORS</th>
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<th>MEAN</th>
<th>STD. DEVIATION</th>
<th>STD. ERROR MEAN</th>
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<tbody>
<tr>
<td>Total Percent Settle</td>
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### Independent Samples Test

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<th>Equal variances not assumed</th>
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<tbody>
<tr>
<td></td>
<td>-104.68911</td>
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<tr>
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</table>

T-Test for Petitions for Review and Numbers of Intervenors Before and After 2005

### Group Statistics

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<th>STD. DEVIATION</th>
<th>STD. ERROR MEAN</th>
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### Independent Samples Test

<table>
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<th>Total Petition</th>
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<tbody>
<tr>
<td></td>
<td>F 9.576</td>
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<tr>
<td></td>
<td>Sig. .006</td>
<td>.016</td>
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<tr>
<td></td>
<td>t 1.208</td>
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<tr>
<td></td>
<td>df 17</td>
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### Independent Samples Test

<table>
<thead>
<tr>
<th>Total Petition</th>
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</thead>
<tbody>
<tr>
<td>Sig (2-tailed)</td>
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<tr>
<td>Mean Difference</td>
<td>385</td>
<td>385</td>
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<tr>
<td>Std Error Difference</td>
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<td>.213</td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Total Interveners</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig (2-tailed)</td>
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<td>.000</td>
</tr>
<tr>
<td>Mean Difference</td>
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<tr>
<td>Std Error Difference</td>
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<td>.379</td>
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### T-Test for the Difference in Proposed Fuel Factors and Actual Fuel Factors for Each Utility Before and After 2005

#### Group Statistics

<table>
<thead>
<tr>
<th>ORS</th>
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<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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</thead>
<tbody>
<tr>
<td>PEC.PFF.Dpercent</td>
<td>0</td>
<td>0.56064</td>
<td>1.117290</td>
<td>.336876</td>
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<td></td>
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<td>4.96817</td>
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<tr>
<td>SCEG.PFF.Dpercent</td>
<td>0</td>
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<td>.042380</td>
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<td>DEC.PFF.Dpercent</td>
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<td>0.000000</td>
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<tr>
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<td>1</td>
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#### Independent Samples Test

**Levene's Test for Equality of Variances**

<table>
<thead>
<tr>
<th>ORS</th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEC.PFF.Dpercent</td>
<td>9.162</td>
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<td>SCEG.PFF.Dpercent</td>
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<tr>
<td></td>
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<td>DEC.PFF.Dpercent</td>
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<tr>
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<td>1.067</td>
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**t-test for Equality of Means**

<table>
<thead>
<tr>
<th>ORS</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEC.PFF.Dpercent</td>
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<td>-4.427530</td>
<td>3.183921</td>
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<tr>
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<tr>
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<tr>
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**95% Confidence Interval of the Difference**

<table>
<thead>
<tr>
<th>ORS</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEC.PFF.Dpercent</td>
<td>-11.213897</td>
<td>2.398836</td>
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</table>
T-Test for Number of Times That the Difference Between the Proposed Fuel Factor and the Actual Fuel Was Greater Than 2% of the Actual Fuel Factor Before and After 2005

<table>
<thead>
<tr>
<th></th>
<th>ORS</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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</thead>
<tbody>
<tr>
<td>Total.PFF.D.GreaterTwoPercent</td>
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<td>1.00</td>
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</table>

**INDEPENDENT SAMPLES TEST**

**Levene's Test for Equality of Variances**

<table>
<thead>
<tr>
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<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Total.PFF.D.GreaterTwoPercent</td>
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**INDEPENDENT SAMPLES TEST**

**t-test for Equality of Means**

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
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</thead>
<tbody>
<tr>
<td>Total.PFF.D.GreaterTwoPercent</td>
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**INDEPENDENT SAMPLES TEST**

**t-test for Equality of Means**

<table>
<thead>
<tr>
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<th>Mean Difference</th>
<th>Std. Error Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total.PFF.D.GreaterTwoPercent</td>
<td>-923</td>
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**INDEPENDENT SAMPLES TEST**

**t-test for Equality of Means**

<table>
<thead>
<tr>
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<th>Upper</th>
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</thead>
<tbody>
<tr>
<td>Total.PFF.D.GreaterTwoPercent</td>
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T-Test for the Difference Between US Electricity rates and SC Electricity rates Before and After 2005

<table>
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<th>Std. Deviation</th>
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<tbody>
<tr>
<td>Diff.SC.US</td>
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<td>1.2809</td>
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**INDEPENDENT SAMPLES TEST**

**Levene's Test for Equality of Variances**

<table>
<thead>
<tr>
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**t-test for Equality of Means**

<table>
<thead>
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<tbody>
<tr>
<td>Diff.SC.US</td>
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### Independent Samples Test

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<th>Std. Error Difference</th>
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</thead>
<tbody>
<tr>
<td>Diff.SC.US</td>
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### Independent Samples Test

<table>
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<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
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<tbody>
<tr>
<td>Diff.SC.US</td>
<td>Equal variances assumed</td>
<td>.001</td>
<td>-.43709</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
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<td>-.43709</td>
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