



**Public Citizen Exhibit No. 1**

**PREPARED DIRECT TESTIMONY**

**JOHN A. CASAZZA**

**SEC ADMIN PROCEEDING  
FILE NO. 3-11616**

**1. INTRODUCTION AND QUALIFICATIONS**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND  
CURRENT POSITION.**

**A.** My name is John A. Casazza. My business address is 8208 Donset Dr.,  
Springfield, Va. 22152.

I am President of the American Education Institute ("AEI") and a member  
of Power Engineers Supporting Truth ("PEST").

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND  
PROFESSIONAL BACKGROUND.**

**A. Education: Degrees:**

1941 - 1943	Cooper Union School of Engineering (New York, New York)
1943 - 1945	B.E.E. - Cornell University (Ithaca, New York)
1950 - 1951	Power Systems Engineering Course - General Electric Company
1970 - 1971	Management Course - American Management Association

**B. Past Positions**

1998 - 2002	Member Executive Committee of the New York State Reliability Council
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1997 - 1998	Member of the Board - CSA Energy Consultants, Inc.
1997 - 2004	Outside Director - Georgia Systems Operation Company
1994 - Present	President - American Education Institute
1997 - 1998	Member - Board of Adjustment City of Chicago - Commonwealth Edison Dispute
1979 - 1998	CSA Energy Consultants
1979-1991	President
1991-1997	Chairman of the Board
1997-1998	Member of the Board
1977 - 1979	Vice President - Stone & Webster Management Consultants, Inc.
1946 - 1977	Public Service Electric and Gas Company - PSE&G
1974 - 1977	Vice President - Planning and Research (Electric & Gas)
1971 - 1974	General Manager - Planning and Research (Electric)
1968 - 1971	System Planning and Development Engineer(Electric)
1946 - 1968	Various Engineering Assignments (Electric)

**C. Professional Societies:**

IEEE - Life Fellow, Member and former Chairman, Energy Policy  
Committee  
CIGRE – Former Chairman, US Technical Committee  
Expert Advisor - Study Committee 37, System Planning

**D. Academic Medals/Awards:**

Herman Halperin Electric Transmission and Distribution Award - 1990 - for  
contributions to the development of electric transmission systems

Philip Sporn Award - 1994 - for career contributions to the advancement of  
the concept of system integration in the theory, design, and/or operation of  
large, high-voltage electric systems in the United States

**Q. PLEASE DESCRIBE YOUR DUTIES AND RESPONSIBILITIES IN  
YOUR CURRENT POSITION.**

**A.** I am currently President of the American Education Institute, a not-for-  
profit organization that was founded in 1994 dedicated to providing the  
education needed in setting electric power policy. I develop and

administer educational programs and give lectures. I am responsible for the overall operation of AEI and have written five books explaining how power systems work. In addition, I serve in many key industry positions. I am a past Director for the Georgia Systems Operation Company, and have been a member of the Executive Committee of the New York State Electric Reliability Council and the Energy Engineering Board of the National Research Council. Recently I helped form Power Engineers Supporting Truth, a subsidiary of AEI, dedicated to improving the technical competence of government officials and the leadership role of engineers. (See [www.PEST-03.org](http://www.PEST-03.org) ) .

I am the author of more than 80 publications. My most recent book “Understanding Electric Power Systems – An Overview of the Technology and the Market place” has just been published by Wiley/IEEE Press. (See [www.ameredinst.org](http://www.ameredinst.org) for more information).

**Q. HAVE YOU EVER TESTIFIED BEFORE IN A CASE BROUGHT UNDER THE PUBLIC UTILITY HOLDING COMPANY ACT?**

**A.** No. My expertise lies in the operations of public utility systems and their rate and service regulation under state and federal agencies.

**II. PURPOSE OF TESTIMONY**

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

**A.** The purpose of my testimony is to provide impartial engineering and utility operations information that will assist the Commission in fulfilling its responsibilities to enforce the Public Utility Holding Company Act of

1935, particularly sections 9, 10 and 11 thereof, relating to utility mergers and acquisitions by public utility holding companies.

**Q. ARE YOU BEING PAID TO PROVIDE THIS TESTIMONY?**

**A.** No, I am not.

**Q. THEN WHY ARE YOU TESTIFYING?**

**A.** Many incorrect claims have been made and continue to be made about the effects of the restructuring of the electric power industry that has taken place.

These are based on incorrect understandings of how power systems work.

Whenever we see such claims, as some in this filing, we try to provide essential background and information to correct such claims.

**Q. HAVE YOU MADE A PARTICULAR STUDY OF THE BENEFITS TO CONSUMERS OF REGIONAL TRANSMISSION ORGANIZATIONS OR “RTOs” ESTABLISHED BY FERC?**

**A.** Yes, I have. I discovered several years ago that the RTO costs would be significantly higher than prior operating costs. This was based on information we obtained directly from a number of the power pools that have become RTOs, particularly PJM and the New York State Power Pool.

**Q. HAVE ANY OTHER STUDIES REACHED THE SAME CONCLUSION/?**

**A.** Yes. A recent final report of the Alliance of State Leaders Protecting Electricity Consumers (the “Alliance”) concluded that a FERC report on RTO costs was seriously flawed and that the costs were significantly

higher than FERC had concluded. An analysis by Mr. Huli Moore, formerly of the Virginia regulatory Commission, has agreed with this conclusion.

Extensive studies by Margot Lutzenhiser that have been widely published have presented data on the huge increases in costs that are occurring **in RTOs** and the lack of compensating benefits.

**Q. IS IT YOUR VIEW THAT OTHER ANALYSES STILL NEED TO BE MADE?**

**A.** Yes. An important analysis that still needs to be made is a comparison of the costs for operation as an RTO versus those operating as a power pool or coordination group. For example, the New York State RTO had its operating costs increase almost 10-fold from five years ago when it operated as a pool without any change in geographic scope. Similar huge cost increases occurred in PJM. The obvious question is what benefits have accrued from these huge cost increases?

**Q. TO YOUR KNOWLEDGE, HAVE ANALYSES OF THE BENEFITS OF OPERATING AS A POOL VERSUS THOSE OF OPERATING AS AN RTO OR ISO BEEN MADE?**

**A.** To my knowledge, they have not and they are very important. When I was a senior officer in the largest company in the PJM, Public Service Electric & Gas Company, I regularly received monthly reports showing the huge benefits from operation of the PJM pool for the pool as a whole and to each of the member companies. A review of these prior reported benefits

is essential to evaluate the benefits of RTOs. These benefits occurred before the restructuring that has taken place and resulted from cooperation among the participants.

**Q. HAVE YOU BEEN INVOLVED IN STUDIES OF OTHER PARTS OF THE COUNTRY TO DETERMINE THE BENEFITS OF COORDINATION BETWEEN REGIONS?**

**A.** Yes. Over the years I have been involved in reviews of the cost and benefits of interconnection and coordination among powers systems throughout the country. The results of these reviews have been published. I have also been involved in the National Power Surveys made by the Federal Government, particularly the 1964 survey that lead to the national transmission grid we currently have and very large savings. The grid was developed over many years through coordination among the participants. There is no question that these benefits achieved by coordination and by operating as pools were significantly larger than those being achieved as RTOs, and were achieved at a significantly lower cost.

**Q. THEN HOW HAVE THE ANALYSES MADE BY FERC SHOWN GREAT BENEFITS FROM RTOS AND ISOS?**

**A.** The analyses that are being made by FERC and others of the savings from restructuring continually fail to compare present benefits from RTOs with former benefits of pooling and coordination that were already taking place. The approach used by FERC and most others could be used to

show what a great golfer I am by comparing me with someone who had never played golf before.

Also, FERC omits many costs in their analyses as identified by the analyses of Margot Lutzenhiser.

**Q. COMPARING RTOS AND ISOS WITH THE PREVIOUS POWER POOLS, DO YOU BELIEVE THAT RTOS AND ISOS HAVE SUBSTANTIALLY CHANGED THE ABILITY OF A SINGLE UTILITY SYSTEM TO OPERATE ON AN INTEGRATED BASIS?**

**A.** No. The physical natures of the systems have not changed and their basic technical functioning and capabilities have not changed. The problems in their operation have increased, however, because of the large increase in the number of participants and the increased complexity of transactions, making for much greater difficulty. While RTOs are attempting to handle these growing problems, they will have very difficult problems as indicated by the huge increases in personnel requirements and costs that have occurred and are continuing to occur.

**Q. DO YOU BELIEVE THAT RTOS AND ISOS HAVE RESULTED IN THE ABILITY OF A SINGLE INTEGRATED UTILITY SYSTEM TO OPERATE ECONOMICALLY AT LARGE DISTANCES, SUCH AS IN OHIO AND TEXAS?**

**A.** I do not. Such operation as a single integrated utility system would have very serious consequences for all intervening and surrounding systems, seriously affecting both costs and reliability. The availability of sufficient

transmission capacity at all times to handle all the requirements of the integration of two large systems would involve a great many lines, would depend on many uncertainties involving many parties, such as when transmission and generation facilities would be returned to service, would be questionable. Long distance transfers would also greatly increase transmission losses in the intervening systems, significantly harming the systems and consumers they supply.

**Q. IN YOUR EXPERIENCE AS A SENIOR UTILITY OPERATING OFFICIAL, DO YOU BELIEVE THAT A SINGLE ELECTRIC UTILITY SYSTEM COULD BE OPERATED UNDER NORMAL CONDITIONS BY INTERCONNECTING ITS VARIOUS GENERATION AND DISTRIBUTION FACILITIES IN DIFFERENT STATES BY RELYING ON NON-FIRM TRANSMISSION?**

**A.** Integration requires that adequate transmission be available at all times as loads vary, equipment is removed for maintenance, and generator dispatch changes in the two parts of the system. An integrated system should have the ability to handle the outages of large generator units, to share spinning and standby generator reserves, and to dispatch generation economically within the system. This requires that dependable firm transmission capacity be available to allow integrated operation at all times. Non-firm transmission could not have the necessary capacity when needed.



**Q. FROM YOUR EXPERIENCE, DO YOU BELIEVE THAT A SINGLE ELECTRIC UTILITY SYSTEM COULD BE OPERATED UNDER NORMAL CONDITIONS BY INTERCONNECTING ITS VARIOUS GENERATION AND DISTRIBUTION FACILITIES IN DIFFERENT STATES BY SIMPLY RELYING ON THE EXISTENCE OF “OPEN ACCESS” TRANSMISSION SERVICE?**

**A.** No. The availability of the specific transmission needed can not be depended on in an open market. Other systems will require transmission capacity to meet their needs, and past experience has shown increasing transmission constraints because of limited transmission capacity. The large number of transmission facilities intervening between the two AEP systems increases the probability that constraints will occur somewhere, limiting AEP's ability to operate as an integrated system. This is the result of the nature of the transmission systems and the requirements of reliability standards. It will not be changed by the existence of RTOs.

**Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

**A.** Yes, it does.