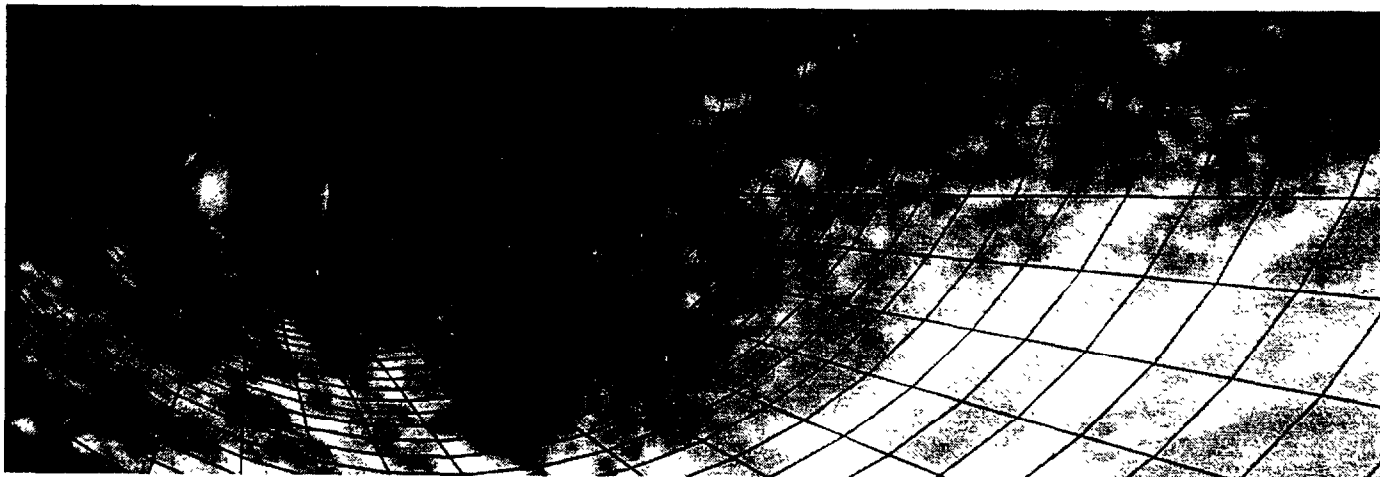


*Report to the*  
***California ISO***  
*Regarding*  
***Cost Allocation Process***

*September 21, 2001*



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**ASSIGNMENT**

R. J. Rudden Associates, Inc. ("Rudden") was retained to review the existing process used by the California Independent System Operator ("CAISO") to distribute its operating costs and financial expenditures to the unbundled services provided to its customers and provide an opinion regarding the reasonableness of those processes. Rudden would also provide recommendations for future changes in the process used to distribute the operating and financial costs to the unbundled services provided by the CAISO. Robert L. O'Brien, Vice President of Rudden was assigned to perform examination and provide the opinions required and make the recommendations. Mr. O'Brien's resume and work history is contained in Appendix A.

**SUMMARY**

Based on a review of the process in place at the CAISO and a review of the operating practices of comparable operations throughout the United States, Rudden's opinion is that the CAISO cost allocation process is appropriate for the distribution of its operating and financing costs to its unbundled services for the years 2001 and, with the changes implemented during the budget process for 2002, will also be satisfactory for the upcoming year, 2002.

**OVERVIEW OF PROCEDURES**

The procedures used by the CAISO for the 2001 budget process show that the payroll expenses and payroll related operating costs were segregated by Cost Center and distributed based on the services performed by the employees within the Cost Center. Similarly, all other operating expenses were

segregated by Cost Center and assigned to the unbundled categories. Annual financing costs for bonds used to acquire capital items including software, communications, support services, furniture and equipment, materials and supplies, etc. were likewise categorized and distributed to the unbundled services based on the nature of the expenditure.

Direct Assignment Cost Centers, i.e., those where the functions performed by the Cost Center personnel could be segregated and directly identified with one or more of the unbundled services, were distributed to each unbundled service by the Cost Center Manager. The Manager established percentages to distribute the payroll, and other employee costs, and other operating costs in the Cost Center to the unbundled services. In instances where the functions performed by the Cost Center could not be directly identified with one or more of the unbundled services, the Cost Center was classified as overhead or general administrative and its costs were distributed based on the direct charges of the other Cost Centers.

The annual finance costs from bonds issued by the CAISO were likewise categorized into Direct Assignment and other operating categories and distributed directly to the unbundled services or allocated based on previously determined percentages resulting from the allocation of operating costs.

### **SUMMARY OF COST DISTRIBUTION**

The process used by CAISO resulted in approximately 77% of payroll and other operating costs (\$132,000 out of a total of \$171,800) and 75% of the total 2001 budget (\$169,000 out of the total of

\$225,300) being distributed directly based on direct assignments, direct departmental and the specific method used for the telecommunications costs. The remainder of the payroll and other operating costs were for administrative, financial, executive, human resources and other support functions that are correctly allocated based on other costs or factors such as the total operating headcount and total operating costs. The remaining bond amortization costs were also for support functions or applications, which also were correctly distributed to the unbundled services using general allocation factors.

### **PROCESS FOR DIRECT COST DISTRIBUTIONS**

Prior to January 1, 2001 the CAISO provided services to its customers under essentially a single rate for all services provided, with a Settlement agreement that provided for a 50% exclusion of volume for certain entities with existing transmission contracts. Beginning on January 1, 2001 the CAISO unbundled billing for its services and began billing customers separately for three categories of services: Control Area Services; Inter-Zonal Scheduling and Market Operations. In order identify the costs associated with each of these services, the CAISO developed a process to identify costs associated with the unbundled services based on the functions performed by the CAISO to provide the services. This process is described in detail in Attachment D, "Analytical Support for the California ISO Grid Management Charge for 2001", which was included in the CAISO's Annual Informational Filing in ER01-313-001 dated December 15, 2000. The process is based in part on the segregation of payroll and other operating costs into Cost Centers and then the distribution of those costs based on functions performed by that Cost Center.

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## **REVIEW OF THE CAISO PROCESS**

The CAISO process has been designed to identify the functions and costs of the functions used to provide each of the unbundled services and further to develop the rate for each unbundled service based on those costs. This end result is based on several major steps, which are common to costing models and the development of a cost distribution process.

The first major step in establishing a cost distribution process is the establishment of groupings for the costs associated with the process. A review of the Cost Centers established by the CAISO shows that the CAISO has developed Cost Centers in line with its business functions and has segregated those Cost Centers into categories that provide for a logical determination of the charges for each of the unbundled services. Cost Centers where the areas of responsibility of the Cost Center could be directly identified with one or more of the unbundled services were classified as Direct Assignment Cost Centers, Department Direct Cost Centers or Telecommunications Services, while those which provided supporting services to all of the unbundled services in common were grouped as Administrative and Executive categories.

The second major step is to identify the specific functions within each of the Cost Centers. This is necessary to determine how the costs incurred by the Cost Center should be charged to the unbundled services. The functions of the Cost Centers are the basis for the distribution of the expenses of the Cost Center, which, for a service organization, are normally based on the time spent by employees working on each of the functions. The functions should be specific enough to identify the service benefiting from

the function but not so specific as to require minute measurements to determine the cost allocations. A review of the descriptions included for each of the Cost Centers in Attachment D of CAISO's December 15, 2000 Annual Informational Filing in ER01-313-001, together with the recently developed job descriptions for each of the Costs Centers, in this instance, provided the necessary detail for the distribution of the expenses of the Cost Centers. The CAISO has only recently been formed and job descriptions developed for each member of the Cost Center. The combination of the job descriptions, written responsibilities of the Cost Center, and the Cost Center Manager's knowledge of the services provided by the Cost Center provide a sufficient basis for the distribution of costs to the three unbundled services.

The third major step is the distribution of time worked by employees within each of the functions to each of the unbundled services. There are several acceptable methods for the initial determination of this component. These include estimates by the employees doing the work, time studies for each of the Cost Centers, default time reporting systems (where time distributions are pre-set and only changed for special projects or other significant variations from the pre-set percentage allocations) and positive time reporting systems (where each employee accounts for 100 percent of the time each pay period and charges are based on that reported time).

The CAISO elected to use its employees to estimate the time spent providing each of the unbundled services. Cost Center Managers, who prepared the descriptions of the responsibilities for each of the Cost Centers and generally the job descriptions for the employees in those cost centers, estimated the

percentage of staff time spent on each unbundled service. Total payroll and other non-employee related costs were distributed to the unbundled services based on those estimated percentages. This provides a reasonable result for the CAISO, as the segregation of costs at the cost center level was relatively granular and discrete, permitting a reasonably homogenous set of costs to be assigned to the unbundling categories.

While time studies and time reporting processes could be used in the future to validate the Cost Center Manager estimates, they would not in most instances where there is little historic information available, provide a solid basis for the establishment of the allocations to the unbundled services. In order for time studies to provide a sound basis for establishment of the initial distributions, they would be required for all employees and would be required for several periods during the year to capture the seasonality and in some cases, changing nature of the employees work effort. Time reporting systems, both default and positive, would provide an historic basis for the charging of time, but would not provide the data needed for budgeting or estimating future costs until they have been in place for at least a year or two. In addition, the implementation of time reporting systems can be expensive, and requires significant training of personnel and extensive ongoing maintenance procedures. These mechanisms are normally used for more extensive requirements and not where only three categories are involved.

### **PROCEDURES AT OTHER ISOs**

In addition to reviewing the procedures at the CAISO, Rudden identified other ISOs and reviewed the procedures in place for those entities. Of the 13 identified ISOs, only 5 are currently operational and 2



have unbundled services. Other than the CAISO, only PJM currently provides unbundled rates for the services it provides to its customers. PJM's procedures for determining the charges for its services are similar to those used by the CAISO. Finally, while the NYISO has recently made an unbundled rate filing, it has not implemented a time reporting process to determine the charges for those unbundled services. While the level of sophistication of each of the processes differs, based on the accounting and operational systems in place and the needs of the ISO, the procedures used by the CAISO are reasonable.

### **PROCEDURES FOR 2002 and 2003 BUDGET PROCESS**

Since the CAISO first established its unbundled rates in its 2001 budgeting process there have been improvements made to the process for the establishment of the 2002 budget and additional improvements are planned for the 2003 budget process.

#### **Changes made for the 2002 budget process include:**

- Specifically assigning individual employees and costs directly to the unbundled categories, or to a general category, which is then distributed to the unbundled categories using established methodologies;
- Documentation and justification, where appropriate for these assignments; and
- Documentation of individual tasks performed by each cost center, which can serve as the basis for further unbundling efforts, or further refinements to the allocation process.

Changes being considered for the 2003 budget process include:

- Refinement of the tasks for each cost center;
- Direct linkage of tasks to unbundled categories; and
- The use of limited time studies during 2002 to collect information on employee activities by task.

These changes enhance the Cost Center allocation process currently in place and will provide for the establishment of reasonable rates for each of the unbundled services using the CAISO approved budget for each of the years.

**RECOMMENDATIONS**

The Cost Center process selected by the CAISO to establish the rates for the unbundled service is the most appropriate process for the existing operations of the CAISO and is in line with other ISOs currently operating and providing unbundled services.

In addition to completing the 2002 process enhancements and due consideration and possible implementation of the 2003 enhancements described above, there are several steps that the CAISO could consider for future validation of its Cost Center Managers' estimates. First, time studies designed to address the potential shortcomings I previously described could be conducted for selected Cost Centers and selected functions of the Cost Center to validate the estimates to be used for the next budget year. As noted above, CAISO has indicated that the groundwork is being laid currently for this data to be

available for use in the 2003 budget allocation process. Second, all employees of each Cost Center could participate in the process of determining the percentage distribution for the functions they perform. Finally, a review team could be established to review the percentage distributions and select several for review and either validate the Cost Center Manager's determinations or make recommendations for changes prior to the establishment of the unbundled rates for the next budget year.

This review team would be comprised of members of the CAISO and other interested groups to provide for a comprehensive review of the Cost Center Manager's final determinations. It must be noted that each of these validation processes will require time and will cause an increase in cost to the CAISO and its customers. While CAISO's current budget review process provides for stakeholder review and input, additional structure and input could be of value. Under the current level of unbundling I do not believe that a time reporting process, either default or positive time reporting, is necessary to obtain reasonable rates for each of the unbundled services. If the CAISO expands its unbundled offerings or establishes additional unbundled rates in the future, some form of time reporting system or activity based costing process should be considered prior to the establishment of those expanded services.

## **CONCLUSION**

The process for the determination of the CAISO unbundled rates that was established for the 2001 budget year was a reasonable process and resulted in a reasonable, unbiased rates for each of the unbundled services. The enhancements to the process for the 2002 budget year improved the accuracy

of the process and the enhancements under consideration for the 2003 budget year will provide additional improvements.

However, the process should also include a validation component that can be used to assist in the development of future unbundled rates. The establishment of an independent review team is a first step in the implementation of a validation process that will provide data for the CAISO management to assist the Cost Center Managers in the development of future cost distributions and the establishment of enhancements to future budget processes. The review team can make recommendations to the CAISO for changes in the process and is the most cost effective validation process for the CAISO.

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## SUMMARY

Diversity, creativity and success define Mr. O'Brien's experience and the advantages he brings to Rudden clients. He is a generalist in the areas of utility regulation, utility accounting, strategic planning and business planning and development, and a specialist in the practice areas of regulatory filings, financial and tax impacts on regulated utilities, business change, financial and economic analysis, business modeling and related management consulting. He is highly proficient in analyzing business situations, especially in the context of their regulatory environments, and in the development of response strategies.

## PROFESSIONAL EMPLOYMENT

1/00 - Present	<i>R. J. Rudden Associates Vice President</i>
3/99 - 12/99	Independent Consultant
1975 - 1999	Citizens Utilities Company <i>Vice President, Strategic Planning and Regulatory Affairs</i>
1972 - 1975	Dolphin Communications, Inc. <i>Controller</i>
1970 - 1972	Utilities & Industries / Mills Music Inc. <i>Real Estate Coordinator / Controller</i>
1969 - 1970	Service Die Cutting Company <i>Controller</i>
1967 - 1969	Education Performance Systems, Inc. <i>Controller/Business Manager</i>
1961 - 1967	Ernst & Young (Formerly Ernst & Ernst) <i>Senior Auditor, 1961-1965 "Co-op" Student Program</i>

## **PROFESSIONAL EXPERIENCE**

During his years with Citizens Utilities Company, Mr. O'Brien was responsible for all regulatory affairs for more than 50 operating electric, gas, water and telecommunications utilities in 12 states. His responsibilities included corporate leadership, acquisition analysis and assimilation, systems development, business culture changes, business development, strategic planning and oversight of Citizens' Communications operations.

### **Regulatory Functions and Activities**

Mr. O'Brien, during his 25 years with Citizens, testified and/or submitted expert testimony in over 200 cases and provided direction and oversight for professionals reporting to him in over 100 additional general rate cases, merger proceedings, fuel pass-on proceedings, generic proceedings establishing commission policies, order to show cause proceedings, accounting policy proceedings, tax policy proceedings, and other proceedings initiated by Citizens or commissions.

### **General Rate Case Proceedings**

Mr. O'Brien submitted expert testimony and testified regarding all areas of rate base and operating expenses, depreciation policies, income taxes, amortization of contributions-in-aid-of-construction, deferred income taxes, rate of return, cost of debt, capital structure, fair value rate base determinations, and other areas of general rate making. In many instances developed, presented and received approval of situation unique concepts for many of Citizens operations.

### **Acquisition Proceedings**

Mr. O'Brien submitted or oversaw submission of testimony where Citizens was acquiring or supporting the prior acquisition of operating water, wastewater, electric, gas and communications properties. The testimony addressed the valuation of the acquisition and the recovery of any acquisition premiums, treatment of deferred income taxes and investment tax credits for customers of the acquired properties, recovery mechanisms for future commitments, right to profit from sale of utility assets, and other acquisition related issues.

### **Generic Policy Making Proceedings**

Mr. O'Brien participated in many proceedings where the commissions were establishing regulatory policies addressing changes in income tax laws, accounting rules and regulations, pass-on clauses, recovery of storm damage restoration costs and other regulatory functions. In many instances, such as the changes caused by the Tax Reform Act of 1986, the requirements related to Post-retirement benefits, the expensing of inside wiring and the divestiture of the Bell System, many of the proposals developed by Mr. O'Brien were adopted by the state regulatory commissions for Citizens' operations.

### **Forecasted Test Years**

Mr. O'Brien developed procedures that were used and accepted by commissions for the forecasting of future test years in Hawaii and California. The procedures were later used in other states, such as Illinois, Ohio, Indiana and

Pennsylvania, when those state commissions adopted a forecasted test year procedure. The procedures significantly reduced Citizens' preparation time and increased the commission's acceptance of the forecasts.

### **Adoption of Cost Allocation Procedures**

Mr. O'Brien, in response to commission disallowances of recovery for administrative costs of Citizens, developed, implemented and received regulatory approval of a cost distribution and recovery process for those expenses. The procedure, developed in 1975-1976, was approved and allowed recovery of administrative expenses in all states where Citizens had operations and by the FERC, FCC and the Bell System Companies for settlement recoveries.

### **Development of Business Model for Initial Rates**

Mr. O'Brien developed business models to support initial rates, which were later adopted by commissions without reduction or loss of income. Recently was Citizens' lead negotiator and architect of a business model used to support the investment of \$24 million by Citizens as part of Del Webb's Anthem Arizona project which included \$125 million water and wastewater facilities. The model included procedures for full recovery of the total \$125 million investment through rates over a 20-year period and has protection provisions for non-build-out by the developer. Mr. O'Brien also developed or oversaw the development of other models that were supported by professionals reporting to Mr. O'Brien.

### **Recovery of Post-Retirement Benefit Costs**

Mr. O'Brien was Citizens' main architect and witness regarding the recovery of the full accrual requirements of the post-retirement benefit costs from customers in rates. Mr. O'Brien, or other professionals reporting to him, presented and achieved recovery of costs from all states where Citizens had utility operations. Mr. O'Brien designed the process and the procedure for establishment of costs and recovery mechanisms. The procedures were flexible enough to allow for return of payments to customers once Citizens eliminated the post-retirement benefit package from its benefits program.

### **Acquisition Support**

Mr. O'Brien was Citizens main corporate regulatory officer regarding the acquisition of gas and telecommunications properties. These acquisitions included the Louisiana Gas Company, which increased Citizens customer base from 430,000 to 660,000 (60%) in 1990, 500,000 access lines in nine states from GTE in 1993, which increased Citizens customer base from 800,000 (60%) and the acquisition of 110,000 access lines in seven states from ALLTEL in 1995. Mr. O'Brien was later assigned, with Citizens' Controller, to negotiate final settlement of over 40 issues remaining in the GTE acquisition. One issue, related to post-retirement benefit costs was not settled. It was litigated before an arbiter, where Mr. O'Brien as Citizens' expert achieved an award of \$11.3 million, over 80% of the difference amount identified between GTE and Citizens.

### **System Development**

Mr. O'Brien was Citizens business representative on a Steering Committee, with Citizens VP of Telecommunications and Controller, with ALLTEL to develop a new telecommunications customer information and billing system during 1995 to 1998. Mr. O'Brien served as Citizens' main negotiator with ALLTEL's "point-

person” for settlement of many issues during the development process. Mr. O’Brien served, as one of five senior officers, on Citizens’ Operating Technology Team, which was responsible for the approval of all enterprise-wide system development, including the approval for the implementation of four SAP modules. Mr. O’Brien, in early 1998, assumed responsibility for direct oversight of the SAP Project, after the Project Manager left, completed Phase I and II. During this time, Mr. O’Brien developed a Project Office that was capable of assuming oversight and completion of Phase III. The total project was completed on time and on budget.

### **Strategic Planning and Budgeting**

As Vice President of Citizens’ Public Utility Service in 1998 1999, Mr. O’Brien directed a group to develop a strategic planning process for Citizens’ combined electric, gas, water and wastewater operations. The process was designed to reflect the marketing focus and the re-regulation of the gas and electric businesses while recognizing the continued regulation of the water and wastewater utilities and the fact that Citizens business focus was changing to a telecommunications environment which focused on cash-flow and EBITDA from the earnings based focus of the utility industry in prior years.

### **Tax Reform Act of 1986**

Mr. O’Brien developed, presented and had adopted several positions for recovery of costs and implementation of new rates in 10 states to reflect the changes caused by the TRA-86. In most cases offsets to the reduction in the Federal income tax rate were adopted by the state commission, which reduced the impact on the utility.

### **Bell System’s Divestiture and Settlement Changes**

Mr. O’Brien, working with the AT&T management, developed procedures to supplement settlement payments from the Bell system during the period between the divestiture and the establishment of a new interstate settlement procedure. The interim procedures secured a revenue stream that was approximately 30 percent of the Company’s revenues at the time and provided for a substantial increase in revenues during the period the procedures were in effect.

### **Exit of California Telephone Settlement Pools**

Mr. O’Brien led a team that negotiated an exit from the California Settlement Pools under a contract that provided for a substantial increase in revenues for a four-year period. The contract was in place until completion of a general rate case, which provided a revenue replacement for a large portion of the exit contract revenues.

### **Oversight of Citizens Telecommunications Operations**

Mr. O’Brien was assigned by the Chief Operating Officer of Citizens to head the Telecommunications Operations of Citizens for a period of approximately 6 months while a search was made for a Vice President, Communications. In addition to overseeing the management team and day-to-day operations, Mr. O’Brien’s responsibilities included leading the team during the acquisition of several telecommunications properties, integration of other telecommunications operations and the development of new billing systems. Mr. O’Brien continued as an advisor to the new VP for several months after the VP joined Citizens.



**Recovery of Storm Recovery Restoration Costs**

Mr. O'Brien developed a strategy and procedures for the recovery of Restoration costs resulting from damage caused by Hurricane Iniki to the electric utility system on the Island of Kauai. The Public Utility Commission adopted Citizens' position and allowed full recovery and recognized the regulatory compact, rejecting the Consumer Advocate argument that the costs should be charged 100 percent to the shareholders or, at a minimum, shared 50/50 between the customers and shareholders. In addition, the Commission adopted Mr. O'Brien's recommendation to defer the depreciation and certain other costs related to the recovery and allow full recovery over a remaining useful life of the new plant.

**Recovery of Excess Capacity and Depreciation**

Mr. O'Brien developed and presented procedures that quantified excess capacity and related depreciation amounts and received commission approval for full recovery of those amounts. The procedures included the deferral of depreciation and the recovery of that depreciation over the remaining useful life of the original plant.

**EDUCATION**

University of Cincinnati, Bachelor of Business Administration, Majors in Accounting and Finance  
Certified Public Accountant, New York State