LIST OF EXHIBITS-KEN POWELL

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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF PACIFICORP AND SCOTTISH POWER plc FOR AN ORDER APPROVING THE ISSUANCE OF PACIFICORP COMMON STOCK.	DOCKET NO. 98-035-04 UTAH DIVISION OF PUBLIC UTILITIES EXHIBIT NO. DPU 5.0

DIRECT TESTIMONY OF KENNETH B. POWELL

FOR THE

DIVISION OF PUBLIC UTILITIES

DEPARTMENT OF COMMERCE

STATE OF UTAH

June 18, 1999

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kenneth B. Powell and my business address is 160 East 300 South, Salt Lake City, Utah, 84114-6751 .

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Utah Division of Public Utilities as a Technical Consultant.

Q. WHAT ARE YOUR QUALIFICATIONS AND EXPERIENCE?

A. My qualifications and experience are presented in DPU Exhibit 5.1. In general, I have twenty years utility experience and twenty years regulatory experience. I have worked as an engineer, a manager and a technical consultant.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will be presenting the DPU conclusions and recommendations with regard to four issues.

Q. WHAT ARE THOSE FOUR ISSUES?

A. The four issues are:

- Merger Impact on Integrated Resource Planning and Acquisition
- Merger Impact on Existing Obligations
- Merger Impact on Employees
- Merger Impact on Local and State Economies

I will address each of these issues in the following testimony.

IMPACT ON INTEGRATED RESOURCE PLANNING AND ACQUISITION

Q. WHAT IS THE MERGER ISSUE WITH REGARD TO INTEGRATED RESOURCE PLANNING?

A. There are two parts to the issue with regard to Integrated Resource Planning. First, PacifiCorp [PC] has been ordered by the Utah Public Service Commission [PSC] to produce an Integrated Resource Plan [IRP] every two years, with public input on the development of the plan. PC in recent years has been recommending that the public process IRP be discontinued because of the impact of competition. The DPU and other public parties have objected that this is premature and in addition can't be accomplished without bringing the issue to the PSC and getting an order. The DPU wants to make it clear that this case is not a substitute for a PSC hearing on IRPs and that Scottish Power will have a continuing obligation to fulfill the PSC requirements to PC concerning integrated resource plans.

Q. YOU SAID THERE WERE TWO PARTS TO THE ISSUE. WHAT IS THE SECOND PART OF THE ISSUE?

A. In their early announcements about the merger, Scottish Power announced that they were planning to build an additional 50 MW of renewable power production. They have suggested that this 50 MW could be composed of such things as additional wind turbines or re-powering of the Blundell Geothermal Plant. We are concerned about this announcement because earlier IRPs consistently have indicated that additional renewable power production is quite a bit more expensive than the least cost type of power production. We don't believe that Utah ratepayers are interested in paying higher rates to get more renewable power in the production mix.

Q. WHAT HAS BEEN YOUR PERSONAL INVOLVEMENT WITH PC IRPs?

A. I have been working with the PC IRPs for about the last ten years. I have attended almost all of the public meetings and made numerous recommendations orally and in writing designed to add to the value of PCs integrated resource plan.

Q. WHY ARE UTAH REGULATORS SO CONCERNED ABOUT HAVING IRPs?

A. When the only tool that regulators had to control utility costs was auditing of past expenditures, there was little they could do to control costs. When desperate regulators began not allowing certain expenses because they were imprudent, they were accused of "Monday morning quarterbacking." With the advent of IRP requirements, for the first time regulators could have some say about whether **planned** expenditures were prudent and reasonable. Over the years, PC and the public agencies, working together, have developed a procedure that give us a valuable tool in evaluating resource proposals. IRPs are also useful in evaluating DSM [demand side management, i.e., conservation] as well as evaluating special incentive contracts. IRPs are also a good stepping-stone in developing avoided costs for use in pricing Qualifying Facility contracts under PURPA. For these reasons, we believe that the PSC requirements for IRPs are in the public interest, and that to maintain this benefit to the public, IRPs should be retained, at least for now.

Q. DOES THE DPU SEE A NEED FOR CONTINUING IRPs IN THE CURRENT UTILITY-REGULATORY CLIMATE?

A. Yes, we do. As long as any portion of the electric service supply is regulated, then public IRPs will continue to be necessary. At present, virtually all of Utah's electric supply [or that portion provided by investor owned utilities] is regulated, so we will need IRPs for the foreseeable future.

Q. DO YOU HAVE EVIDENCE THAT RENEWABLE POWER PRODUCTION RESULTS IN HIGHER COSTS THAN OTHER TYPES?

A. Yes, I do. DPU Exhibit 5.2 shows a summary of investment cost, operating and maintenance cost and total cost for various present and future resources. These two pages are from PacifiCorp's last integrated resource plan, RAMPP-5. The resources are sorted such that the lowest total cost is first. I have marked the lines representing additional wind power, solar power and additional geothermal power. Note that geothermal total cost per kwh is more than double the cost of gas fired cogeneration or combined cycle combustion turbines [CCCT's]. Wind generators are nearly triple and solar is out of all reason. All of these are also considerably higher than coal-fired resources. Therefore, we don't believe that it is prudent to add additional renewable resource at this time.

Q. DIDN'T THE DPU SUPPORT THE WYOMING WIND PROJECT THAT HAS COME ON LINE RECENTLY?

A. Yes, we did. However, we supported it not as a least cost resource, but as an experimental resource. We felt that the higher cost of this resource was justified by PC's needs to 1) vary its resource portfolio, and 2) gain operating experience with renewal resources. We would only support the addition of more renewable resources if it is shown to be economical through the IRPs or through other considerations.

Q. YOU SAID EARLIER THAT YOU DIDN'T BELIEVE THE UTAH PUBLIC WAS INTERESTED IN PAYING HIGHER RATES TO USE RENEWABLE RESOURCES. DO YOU HAVE ANY EVIDENCE OF THIS?

A. Yes, I do have at least an indicator. In our last RAMPP meeting, PC presented the results of a customer survey that they had conducted. Some of those results are attached as DPU Exhibit No. 5.3. The first page [pre-numbered page 7] shows that 31% of all customers said that environmental issues play a key role in their purchase decisions. However, the second page [pre-numbered page 9] shows that only about 18% of all customers and 14%

of Utah customers would recommend obtaining additional wind resources. Note that result comes from a question that doesn't mention the higher cost of the wind resource.

The third page [pre-numbered page 12] shows that in the absence of a competitor, price is three times more important to customers than renewable mix. The fourth and final page of the exhibit [pre-numbered page 15] shows that 48% of customers would pay a 10% price premium to get 100% green power and 36% would pay a 20% price premium. As I showed in Exhibit DPU 5.2, the price for renewable power would be 200% to 300% of the price of the least cost resources. We believe that if the higher cost were known, few Utah customers would favor additional renewable resources.

Q. HOW HAS SCOTTISHPOWER RESPONDED TO THESE CONCERNS?

A. The ScottishPower position on IRPs and the addition of more renewable power production is shown in DPU Exhibit No. 5.4 . The first page states: "ScottishPower has no plans to change the current process [IRP] and will comply with the Commissions's requirements." They also make note that the public advisory group will be looking at the issue of changing IRP requirements in a changing environment, but add, "Any proposed changes to the IRP standards and guidelines would be filed with the Utah Commission for approval prior to implementation."

The second page of the exhibit refers to the renewable resource. Here they modify their original position to state, "

> ScottishPower's commitment to develop an additional 50 MW of renewable resources is conditioned on resources meeting cost-effectiveness standards derived from PacifiCorp's integrated resource planning process. This condition is intended to assure that such resources are developed at a reasonable cost, while still addressing the portfolio, environmental and business risk considerations that a narrow least-cost criteria ignores.

They also commit to additional study on the Blundell geothermal project.

Q. DO YOU AGREE THAT THE IRP USES "NARROW LEAST-COST CRITERIA?"

A. Yes and no. We do believe that the least long term cost is an appropriate standard. We do recognize that a generation portfolio containing varied resources may be less risky than one with limited types of resources. However, we believe that risk can and has been evaluated in the IRP through various scenarios. We have found that with PC's present resource mix, adding only one type of new resource to be not risky enough to justify additional expense in offsetting it.

Q. THEN IS THE DPU SATISFIED WITH THE SCOTTISHPOWER ASSURANCES?

A. We are satisfied with them as assurances, but feel the need to turn them from mere assurances to conditions for approval of the merger, for reasons which I will discuss subsequently. We believe that merger approval should be bound by the following conditions:

- ScottishPower will continue to produce Integrated Resource Plans every two years, according to the current schedule and current PSC rules.
- ScottishPower's commitment to develop an additional 50 MW of renewable resources is conditioned on those resources meeting the cost effectiveness standards of the IRP then in place.

IMPACT ON EXISTING OBLIGATIONS

Q. WHAT IS THE ISSUE ON EXISTING OBLIGATIONS?

A. Any time ownership changes, there are some who question whether the old contracts and obligations are dissolved or continue. Generally, obligations fall into two categories: business and employee. The obligations to employees will be discussed in the next section.

Q. WHAT BUSINESS OBLIGATIONS CONCERN YOU?

A. Most business obligations will have language built into the contracts that make the contracts binding on "heirs, assigns, etc." What we are concerned with here is the wheeling contracts, the wholesales contracts and the special incentive retail contracts with large industrial customers. We are also concerned about the rate-making treatment of those contracts.

Q. HOW WILL SCOTTISHPOWER TREAT WHEELING AND WHOLESALE CONTRACTS?

A. DPU Exhibit No. 5.5 contains the ScottishPower and PacifiCorp responses to DPU interrogatories in these areas. I think it is clear that PacifiCorp and its new parent ScottishPower will continue to honor the contracts. They also plan to continue the same ratemaking treatment, that is, flowing the net proceeds of the contracts through as a revenue credit to retail customers.

Q. IS THE DPU SATISFIED WITH THE SCOTTISHPOWER RESPONSE?

A. We are satisfied that ScottishPower will continue to honor the contracts. We don't feel the need for a merger condition in this area, because enforcement of wholesale contracts is a matter for FERC or the courts and is out of our jurisdiction. The issue of ratemaking treatment of these contracts is already before the PSC and they have established a task force to examine this and other allocation issues. ScottishPower will be bound by any order the PSC issues in that case, so no additional merger requirements are needed, in our view.

Q. WHAT ABOUT SPECIAL INCENTIVE INDUSTRIAL CONTRACTS?

A. ScottishPower has indicated that it will honor the contracts while they are in force. [See DPU Exhibit No. 5.6]. We expect to see a harder look at these contracts by ScottishPower as they come up for renewal.

Q. WHY DO YOU THINK THAT?

A. The response shown on the last page of DPU Exhibit No. 5.6 states:

> ScottishPower has taken the stance that it will not take any business in England and Wales below cost and therefore will not renew or take any new business on that basis. For renewals, the process will involve a price adjustment at the time of renewal, but the customer is free to seek alternative prices and suppliers.

Q. IS THIS TROUBLING TO THE DPU?

A. No, it is not. We will also be taking a different look at any special incentive contracts that come to the PSC for approval.

Q. WHY WILL YOU BE TAKING A DIFFERENT LOOK?

A. At the time those contracts were signed, PC had a surplus of power. No new investment was required to serve the contracts. Now, especially with the sale of the Centralia Plant, there may be small or non-existent surpluses and so contracts will need to cover full embedded costs. So as each contract is brought to us, we will look closely at the power supply situation.

Q. HASN'T THE PSC ALREADY ESTABLISHED A TASK FORCE ON THIS ISSUE AS WELL?

A. The PSC has established a task force to determine the criteria for evaluating special incentive contracts and the ratemaking treatment of those contracts. I am chairing that task force and its report will be out at the end of the year.

Q. IS A MERGER CONDITION REQUIRED TO PROTECT SPECIAL INCENTIVE CONTRACTS?

A. We don't believe so and are not recommending one here. The present contracts are subject to the courts and the PSC and need no special protection. We don't believe that it would be prudent to require future special incentive contracts unless they pass whatever screens the task force recommends and are approved by the PSC.

IMPACT ON EMPLOYEES

Q. WHY SHOULD THE PSC CARE WHAT IMPACT THE MERGER HAS ON EMPLOYEES?

A. The PSC should be concerned for two reasons: 1) Utah PacifiCorp employees [there are about 4000 of them] are a part of the "public" that should receive a net benefit from the merger. If there were harm to the employees, it would have to be weighed against other benefits to determine that there was a positive net benefit for the public interest before the merger could be approved. 2) Changing Utah employment levels will have an impact on the Utah economy which is also a part of the public interest that the PSC is obligated to protect.

Q. WHAT ARE THE ISSUES WITH REGARD TO EMPLOYEES?

A. There are three issues of concern:

- Jobs
- Salaries
- Benefits

Q. WHAT IS THE ISSUE WITH REGARD TO JOBS?

A. We are concerned that the merger not result in a loss of Utah jobs in the near future. We are also concerned that any long-term future loss of jobs be proportionate among the states in which PacifiCorp serves. As mentioned, we are concerned about the impact on employees as a part of the public that we serve and because of the possible impact on local economies. We are also concerned that too rapid a loss of jobs could result in lower service quality.

Q. DO ANY FACTORS COMPLICATE YOUR CONCERN ABOUT EMPLOYMENT?

A. Yes, two factors act to mitigate our concern and complicates it:

First, most of PacifiCorp's Utah employees are covered by a union contract. ScottishPower will have to honor that contract under law. Other employees not covered by the Union tend to have the same protections as the Union. Still this is a trend and not an absolute.

Second, DPU Exhibit 5.7 shows employment levels at various power plants, both of PacifiCorp and ScottishPower. You can see that the employment levels at the plants fall along the same curve. In other words, ScottishPower tends to use the same number of employees to do the same job as PacifiCorp. It is unlikely that ScottishPower would make reductions to staffing below the level where their experience has been satisfactory.

Finally, we note that ScottishPower has promised at least a $10 million reduction in expenses as a benefit of the merger. Those benefits, to some degree, will result from reducing job duplication and other employment level changes. Clearly, we can't have improved efficiency in the utility without some job reductions. Our concern is the speed and the method used to eliminate those jobs. At the same time, we recognize ScottishPower's need to have control over its own employment levels.

Q. HOW HAS SCOTTISHPOWER HANDLED JOB REDUCTIONS IN ITS OTHER ACQUISITIONS?

A. ScottishPower indicates that all those reductions were handled through attrition. We did not attempt to verify that independently, but have no reason to doubt it.

Q. HOW HAS SCOTTISHPOWER RESPONDED TO CONCERNS ABOUT EMPLOYMENT?

A. Their response is shown in DPU Exhibit No. 5.8 . They indicate that they have no plans at this time to change employment levels, so all other questions relating to employment are moot.

Q. IS THE DPU SATISFIED WITH THESE RESPONSES?

A. We are satisfied with them as assurances, but we are not satisfied that they are enforceable. Ordinarily we would recommend that any merger approval contain conditions that provide firmer protection. However, in the UP&L and PP&L merger in 1989, we recommended and the PSC adopted merger conditions that limited the number of layoffs and required consistent ratios between the states. In the last ten years we have found that those conditions are extremely difficult to measure and enforce. We don't see any value in putting ourselves and the PSC in the same position again. So, while these are legitimate public interest concerns, there is little that we can do about them.

Q. WHAT CONDITIONS WOULD YOU RECOMMEND IN THIS CASE?

A. We are not recommending any merger approval conditions, but suggest the following as simply recommendations:

1. For the two years following the approval of the merger, no Utah PacifiCorp employee should lose a job as a result of the merger other than through attrition. Employees leaving employment to take advantage of any termination benefits package offer will not be considered as losing a job to the merger.

2. For the three years following that two year period, reductions in employees should be made in such a manner that employment levels and average salary levels remain in an approximately consistent proportion between the states served by PacifiCorp.

Q. WHAT IS THE DPU ISSUE ON SALARIES?

A. Many of the employees' salaries are covered by Union contract. Other salaries are at least loosely tied to those Union contract wages. Therefore, we don't believe that a merger condition related to salaries is needed or appropriate.

Q. WHAT IS THE DPU ISSUE ON BENEFITS?

A. The utility employee benefits vary widely between the United States and the United Kingdom, which is reasonable given the varied political and economic differences between the two locations. Our primary concern is that Utah employee benefits be benchmarked and "driven" by United States conditions and not those in the United Kingdom. We are also concerned about any immediate change in benefits before the differences between the systems have been studied carefully.

Q. HOW HAS SCOTTISHPOWER RESPONDED TO THIS CONCERN?

A. They have assured us that they will hold the benefits constant for two years and then consider them only in light of US conditions. [See DPU Exhibit 5.9 .]

Q. IS THE DPU SATISFIED WITH THIS ASSURANCE?

A. Once again, we are satisfied with it as an assurance, but would recommend that merger approval be conditioned on the following:

- For the two years following the final approval of the merger, Utah PacifiCorp employee benefits will be held stable.

We recognize that the following recommendation would be difficult to measure and enforce and so suggest it as a recommendation rather than a condition of the merger.

- Any subsequent changes to employee benefits will be made based on comparisons to US practice.

Q. WHY DOES THE DPU ONLY MAKE RECOMMENDATIONS THAT COVER THE FIRST FIVE YEARS AFTER THE MERGER?

A. We hope that similar practices will continue after this five year period, but our experience with the previous merger taught us the difficulties of trying to maintain control too far in the future. The various changes proposed and happening in the electric utility industry also make a farther reach unwise, in our opinion.

IMPACT ON LOCAL AND STATE ECONOMIES

Q. WHAT IS THE DPU ISSUE WITH REGARD TO THE IMPACT ON LOCAL AND STATE ECONOMIES?

A. We are concerned that the merger not have a deleterious effect on our local and state economies, at least not in the near term. Such deleterious effects could result from sharp employment reductions or closing of power plants. We have already discussed the impact of employment levels and suggested conditions to mitigate that. We see no reason to believe that ScottishPower will close any power plants before they would have been closed by PacifiCorp and therefore any changes in plant staffing would not be a result of the merger. DPU Exhibit No. 5.7, previously examined, bears out our contention that power plant staffing will stay consistent.

Taxes can also have an impact on state and local economies. DPU Exhibit No. 5.10 indicates no changes in taxes are expected.

NEED FOR CONDITIONS

Q. SEVERAL TIMES YOU HAVE INDICATED THAT THE SCOTTISH POWER ASSURANCES NEEDED TO BE ADOPTED AS PSC CONDITIONS TO THE MERGER. WHY DO YOU RECOMMEND THAT?

A. Many of the ScottishPower assurances contain “waffle” words that would enable them to escape the commitments of the assurances with ease. I’m sure that the current respondents are acting in good faith, but managements change and conditions change, so it is important that the assurances have the force of law. We believe the way to do that is through establishing conditions only under which the merger is approved by this commission.

Q. CAN YOU GIVE US SOME EXAMPLES OF WHAT YOU MEAN BY "WAFFLE" WORDS?

A. Yes, I can.

On DPU Exhibit 5.4,	"has no plans to change"
	"does not anticipate changes"
	"condition is intended to assure"
On DPU Exhibit 5.6,	"has taken a stance"
On DPU Exhibit 5.8,	"has not announced"
	"nor are there any specific plans"
	"intends to increase"
	"intends to honor"
	"does not have specific plans"
	"will be completed after the transaction"
	"it is anticipated that"
	"is expected to occur"
On DPU Exhibit 5.9	"it is difficult to compare"
	"ScottishPower's intention"
	"there are no immediate plans"
	"it is too early to say at this stage"
	"it is ScottishPower's normal practice"

Q. ARE THERE ANY OTHER REASONS WHY YOU SUPPORT THE NEED FOR MERGER CONDITIONS RATHER THAN JUST ASSURANCES?

A. Yes, I have one additional reason. DPU Exhibit 5.11 is apparently a press release. It quotes Dr. Howells, Competition and Consumer Affairs Minister, "The DGES [Director General of Electricity Supply] intends to incorporate commitments given by ScottishPower into the license conditions of ScottishPower or Manweb's licenses." If ScottishPower's home territory feels a need for “conditions,” then surely we ought to have the protection of merger conditions.

SUMMARY

Q. WILL YOU PLEASE SUMMARIZE YOUR TESTIMONY?

A. Yes. I reviewed the needs, current practices and ScottishPower assurances in four areas:

- Merger Impact on Integrated Resource Planning and Acquisition
- Merger Impact on Existing Obligations
- Merger Impact on Employees
- Merger Impact on Local and State Economies

I found generally that the ScottishPower assurances covered regulatory needs, except that, as “assurances” they aren’t firm enough for the PSC to be able to enforce. Therefore, we recommend that the PSC adopt the following as part of the conditions to the approval of the merger:

RECOMMENDED MERGER CONDITIONS

- ScottishPower will continue to produce Integrated Resource Plans every two years, according to the current schedule and current PSC rules.
- ScottishPower’s commitment to develop an additional 50 MW of renewable resources is conditioned on those resources meeting the cost effectiveness standards of the IRP then in place.
- For the two years following the final approval of the merger, Utah PacifiCorp employee benefits will be held stable.

OTHER MERGER RECOMMENDATIONS

- For the two years following the final approval of the merger, no Utah PacifiCorp employee should lose a job as a result of the merger, only through attrition. Employees leaving employment to take advantage of any termination benefits package offer will not be considered as losing a job to the merger.
- For the three years following that two year period, reductions in employees should be made in such a manner that employment levels and average salary levels remain in an approximately consistent proportion between the states served by PacifiCorp.
- Following the two year freeze on employee benefits, any changes to employee benefits will be made based on comparisons to US practice.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

EXHIBIT 5.1

KENNETH B. POWELL RESUME

<u>Resume</u>

KENNETH B. POWELL

Education:

BS (Electrical Engineer), University of Idaho, 1962

Master, Engineering Administration, University of Utah 1968

Program includes operations research, business, management, statistics, finance, accounting, system analysis, etc.

Also, graduated from

AMR Long Range Planning Seminar (New York)

Evelyn Wood Reading Dynamics (Speed Reading)

Dale Carnegie

G E EHV Transmission Line Design Seminar

NARUC Advanced Regulatory Seminar

Employment Experience:

Most Recent Technical Consultant, Utah Division of Public Utilities (three years) - conduct special studies using statistics, engineering economics, decision trees, sensitivity studies, and other engineering science tools to evaluate major constructions projects and sales and purchase contracts. Also teach classes in these subjects for other professionals. Provide written and oral testimony on these subjects. Also working on guidelines, principles, modeling, stranded costs, etc. for electric utility restructuring, allocations, weather normalization, etc. Supervisor: Ric Campbell, Director of Division of Public Utilities.

Also Twenty years as a special instructor at the Brigham Young University Salt Lake Center, teaching algebra and calculus classes. Also working as a freelance technical writer writing management and technical articles.

Previous Manager, Electric Section, Utah Division of Public Utilities (thirteen years)- I managed a group of engineers, economists and CPAs that reviewed and analyzed revenue requirements, rate of return, engineering studies, cost-of-service studies, rate design, PURPA standards and various measures of utility efficiency. I also developed written and oral testimony for hearings, make recommendations for outside witnesses, report to funding agencies and state officers. I prepared and delivered policy testimony on such issues as mergers and acquisitions (e.g. the UP&L, PP&L merger), transmission access, interjurisdictional allocations (particularly in light of mergers,) utility forecasting and least cost planning, other statistical analysis and utility conservation and marketing programs. Supervisor: Ric Campbell, Director of Division of Public Utilities.

Previous Manager, Engineering and Rates, Utah Division of Public Utilities (three years)- Managed engineers and economists involved in all aspects of utility regulation for electric gas, telephone and water utilities. I was instrumental in reorganization into utility teams. Also conducted Engineering Management Seminars for Western American Language Institute.

Previous Supervisor, Transmission Standards and Special Studies, UP&L (2 years)- Supervised a section that 1) developed Transmission System Standards, 2) analyzed transmission equipment failures, 3) conducted-in-depth engineering for other departments, 4) developed quality assurance programs for transmission equipment, and 5) provided on-the-job engineering and managerial training for Engineering Department. Supervisor: G. A. Wilkinson, Transmission Projects Manger.

Previous Project Engineer, UP&L (4 years)- Worked initially as a project coordinator for the design, construction and testing of multi-million dollar transmission substations, then assigned to evaluating new equipment, analysis of equipment failure mode, research and development of transmission substation standards and development of computer model of engineering and construction planning to use with the corporate model. Supervisor: J. A. Bohling, Transmission Line Engineering.

Previous Director of Market Research, UP&L (4 years)- Selected samples, planned, conducted and analyzed customer surveys, prepared and reconciled marketing budget, collected economic and sales statistics; acted as internal audit for Sales and Marketing Department. Prepared reports for management on long-range goals and progress. Taught engineering economics and technical writing courses to company engineers. Computerized many functions, including sales reports. Supervised contract billing on advertising and other sales promotion activities, all under supervision of R. M. Pizza, Manager Customer Service.

Previous Rate Engineering, UP&L (2 years)- Determined customer energy requirements. Designed rates and comparisons between rates. Helped forecast long-range revenues and expenses. Helped prepared $180 million revenue budget. Performed bill frequency analysis. Designed computer applications to assist these programs, all under supervision of A. R. Dunn, Chief of Rates.

Previous Associate Engineer, UP&L (3 years)- Designed overhead and underground distribution systems, including Ogden, Utah commercial area. Wrote equipment specifications and purchase orders. Prepared construction budget estimates. Wrote construction specifications. Wrote construction contracts, all work under supervision of Ed Hempel, Distribution Engineer.

Miscellaneous:

- Published more than 40 articles
- Winner AMA paper contest 1972 and NARUC paper contest 1992 and 1994
- Listed in <u>Who's Who in the West</u>
- Member of IEEE, Engineering Management Society, Professional Communication Society and Power Engineering Society
- Member National Association of Regulatory Utility Commissioners Subcommittee on Depreciation
- Member of Society of Depreciation Professionals
- Licensed Professional Engineer (Electrical) - Utah
- Developed and taught Utah Power & Light Company's in-house courses in: Engineering Economics (4 courses) and Technical Writing (2 courses) and

  other technical and engineering courses.
- Developed and taught Utah Department of Commerce in-house courses on Management, Technical Writing (2 courses), Statistics/Multiple regression, Testimony Preparation and Statistics for Regulation.

TECHNICAL ARTICLES

by Kenneth B. Powell

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8. "Post Lights Serve Customer, Utility," (with L. E. Gregory) **Electrical World,** New York, July 19, 1972, pp 84-85
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19. "Chart Simplifies Shielding Low-Profile Substations," **Electrical World,** New York, April 1, 1977, pp 36-37.

20. "Statistical Study Compares Energy Needs," with G. Bryan Drennan, **Electrical World,** New York, May 1, 1977, pp 86-87.

21. "If a Picture says a Thousand Words. . .The Visual Approach to Environmental Impact Statements," with Jay Roundy, **Public Utilities Fortnightly,** Washington, D.C., September 15, 1977, pp 54-56.

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25. "Estimate Transformer Failure Cost," **Electrical World,** New York, December 1, 1978.

26. "Five Step Planning Tool for Engineering & Construction," with C. M. Lee, **Electrical World,** New York, September 1, 1979.

27. "New Approach for Evaluating Capital Costs," **Electrical World,** New York, December, 1980

28. "Regulatory Incentives for Utility Efficiency," with James H. Reedy, **Proceedings of the Eight Annual Reliability Engineering Conference,** Portland, Oregon 1981.

29. "Readability Guides are Helpful If. . .," **IEEE Transactions on Professional Communications,** New York, March 1981.

30. "Writing With Verve," **IEEE Transactions on Professional Communications,** IEEE, New York, December 1982.

31. "On Carts and Horses," **IEEE Professional Communications Society Newsletter,** IEEE, New York, October 1984.

32. "Long Term Electric Forecasting, Possible Problems and Reasonable Responses," **Electric Potential**, January-February 1986.

33. " The Greatest Show on Earth - Using Management Science in Environmental Collaboratives," **Inform, The Journal of Engineering Sciences**, Spring 1997.

CONFERENCE PAPERS GIVEN

1.	April 1979,	Presentation on Valuing Reliability to EEI T&D Committee meeting, Phoenix, Arizona. Paper not published.
2.	May 1979,	Presentation on Visual Simulation to NELPA Engineering Conference, Spokane, Washington. Paper not published.
3.	November 1979,	Presentation on Engineering/Construction Planning Model to IEEE Engineering Management Conference, Washington, D.C. Paper not published.
4.	February 1979,	Presentation on Valuing Reliability to IEEE Winter meeting, New York, New York. Paper not published.
5.	May 1980,	Presentation on Reliability to Engineering Conference on Reliability for the Electric Power Industry, Madison, Wisconsin. Paper published.
6.	May 1981	Presentation on Regulatory Incentives to Reliability Engineering Conference, Portland, Oregon. Paper published.
7.	October 1981,	Presentation on a Conference on Utility Prices and Supplies sponsored by University of Utah and Utah Energy Office. Salt Lake City, Utah. Paper not published.
8.	September 1982,	Presentation at the Third NARUC Biennial Regulatory Information Conference. Columbus Ohio. Paper Published.
9.	June 1983,	Presentation on Measuring Utility Efficiency to the New Mexico Public Service Commission. Paper not published.
10.	May 1984,	Presentation on Cogeneration at a conference on PURPA (Cogeneration) sponsored by the University of Utah and Utah DOE, Snowbird, Utah. Not published.
11.	September 1984,	Presentation on forecasting at NRRI Biennial Regulatory Information Conference, Columbus, Ohio. Paper published.
12.	May 1985,	Presentation at Seminar on Intermountain Energy Future sponsored by Idaho State University. Salt Lake City (Snowbird). Paper not published.
13.	June 1985,	Presentation at Seminar on Intermountain Energy Future sponsored by Idaho State University. Salt Lake City (Snowbird). Paper not published.
14.	October 1985,	Presented paper on Expert Witnesses to Professional Communication Society, Williamsburg, Virginia. Paper published.

15. September 1986, Presentation at NRRI Regulatory Information Conference, Columbus, Ohio. Paper published.

16. September 1988, Presentation at NRRI Regulatory Information Conference, Columbus, Ohio on UPL/ PPL merger. Paper published.

17. September 1990, Presentation on marketing in regulated utilities at NRRI Regulatory Information Conference, Columbus, Ohio. Paper published.

18. November 1990, Presentation on marketing in regulated utilities at EPRI/EUMRC Marketing Conference, Atlanta, Georgia. Paper published.

19. September 1992, Presentation on utility mergers at NRRI Regulatory Information Conference, Columbus, Ohio. Paper published. Won award as best paper of conference.

20. October 1992, Presented paper on Communicating with Multiple Audiences to Professional Communication Society, Santa Fe, New Mexico. Paper published.

21. June 1994, Presented paper on Using Management Science in Environmental Collaboratives to The Institute for Management Science, Anchorage, Alaska. Paper published.

22. October 1994, Presented paper on Environmental Issues to NRRI in Columbus, Ohio. Paper won special award and was printed in two documents.

23. March 1995, Presented paper on Management Science in Public Policy to Industry, Engineering and Management Science Conference in Orlando, Florida. Paper published.

24. September 1996, Presented paper on Deregulation Issues to NRRI Regulatory Information Conference, Columbus, Ohio. Paper published.

25. March 1999, Presented paper on Using Statistics in Analytic Studies to Industry, Engineering and Management Science Conference in Orlando, Florida. Paper to be published.

EXHIBIT 5.2

PC EXISTING AND POTENTIAL RESOURCES AND THEIR COSTS

Source: RAMPP-5

[Exhibits 5.2 through 5.11 are other parties documents and are not available electronically. Scanning was attempted, but was not successful.]

EXHIBIT 5.3

PACIFICORP “GREEN” POWER SURVEY RESULTS

EXHIBIT 5.4

SCOTTISHPOWER INTERROGATORY RESPONSES ON RESOURCE PLANNING

EXHIBIT 5.5

SCOTTISHPOWER INTERROGATORY RESPONSES ON

WHEELING AND WHOLESALE

EXHIBIT 5.6

SCOTTISHPOWER INTERROGATORY RESPONSES ON

SPECIAL INCENTIVE CONTRACTS

EXHIBIT 5.7

POWER PLANT STAFFING LEVELS FOR PC AND SP

EXHIBIT 5.8

SCOTTISHPOWER INTERROGATORY RESPONSES ON EMPLOYMENT

EXHIBIT 5.9

SCOTTISHPOWER INTERROGATORY RESPONSES ON EMPLOYEE BENEFITS

DPU EXHIBIT NO. 5.10

SCOTTISHPOWER INTERROGATORY RESPONSES ON TAXES

EXHIBIT 5.11

PRESS RELEASE STATING DGES CONDITIONS

DPU EXHIBIT 5.12

RECOMMENDED

SCOTTISHPOWER MERGER CONDITIONS

RECOMMENDED MERGER CONDITIONS

- ScottishPower will continue to produce Integrated Resource Plans every two years, according to the current schedule and current PSC rules.
- ScottishPower's commitment to develop an additional 50 MW of renewable resources is conditioned on those resources meeting the cost effectiveness standards of the IRP then in place.
- For the two years following the final approval of the merger, Utah PacifiCorp employee benefits will be held stable.

OTHER MERGER RECOMMENDATIONS

- For the two years following the final approval of the merger, no Utah PacifiCorp employee should lose a job as a result of the merger, only through attrition. Employees leaving employment to take advantage of any termination benefits package offer will not be considered as losing a job to the merger.
- For the three years following that two year period, reductions in employees should be made in such a manner that employment levels and average salary levels remain in an approximately consistent proportion between the states served by PacifiCorp.
- Following the two year freeze on employee benefits, any changes to employee benefits will be made based on comparisons to US practice.