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January 11, 2001

Mr. Dale Hardy Roberts
Executive Secretary
Public Service Commission
Governor State Office Building
Jefferson City, Missouri

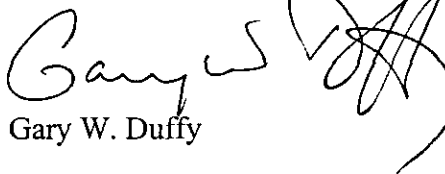
RE: Case No. ES-2001-28

Dear Mr. Roberts:

Enclosed for filing in the above-referenced proceeding please find an original and eight copies of the response of UtiliCorp United Inc. d/b/a St. Joseph Light & Power, as directed by the Commission's December 12, 2000 order.

If you have any questions, please give me a call.

Sincerely yours,


Gary W. Duffy

Enclosures

cc w/encl:

Office of Public Counsel
Office of the General Counsel

FILED²
JAN 11 2001
Missouri Public
Service Commission

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

FILED²
JAN 11 2001
Missouri Public
Service Commission

In the Matter of an Incident at St. Joseph)
Light & Power Company's Lake Road)
Power Plant on June 7, 2000.)

Case No. ES-2001-28

RESPONSE TO STAFF RECOMMENDATIONS

Comes now UtiliCorp United Inc., d/b/a St. Joseph Light & Power, and for its response to the "Order Directing Response" issued in this case on December 12, 2000, respectfully states as follows:

1. The Missouri Public Service Commission (Commission) established Case No. ES-2001-28 in response to a motion by the Staff of the Commission (Staff) for the purpose of receiving a report pertaining to Staff's investigation of an incident involving Turbine-Generator Number 4 (TG-4) at St. Joseph Light & Power Company's (SJLP) Lake Road Power Plant on June 7, 2000.
2. On December 6, 2000, Staff filed a Final Electric Incident Report along with a motion asking that the Commission order SJLP to file a response to Staff's recommendations (contained in the report) within thirty days. The Commission issued an order on December 12, 2000, requiring SJLP to file a response no later than January 11, 2000.
3. On December 29, 2000, SJLP was merged into UtiliCorp United Inc., with UtiliCorp United Inc. (UtiliCorp) being the successor corporation. SJLP is now a division of UtiliCorp. As used hereafter, "SJLP" refers to the SJLP division of UtiliCorp.
4. The purpose of this document is to provide a response to Staff's recommendations

as described above and as ordered by the Commission. Staff's recommendations (which appear on pages 14-15 of Staff's Incident Report) are restated in italics, followed by the corresponding response by SJLP.

Recommendation No. 1: *Modify the DC oil pump test procedure to read: "6. Head Operator should stop the DC oil pump and verify that the control switch returns to the 'Auto' position or place the DCS control for the pump in Auto."*

Response: Prior to returning TG-4 to service following the incident, the emergency DC lube and seal pump ("DC oil pump") controls were modified to use a hardwired control switch / indicating light control station (in a location recommended by the Lake Road operations department). The distributed control system (DCS) control station for the DC oil pump was removed. This modification also included enhancements to the AC lube and seal oil pump controls and additional alarms for the lube and seal oil system. Due to this modification, Staff's recommendation to add wording in the test procedure to "place the DCS control for the pump in Auto" is neither necessary nor appropriate.

Recommendation No. 2: *Provide operator training on the above procedure.*

Response: Prior to returning TG-4 to service, new operating procedures were prepared and related classroom training was provided to all shift supervisors and affected plant operators to address the lube and seal oil system modifications described above under Recommendation No. 1. Therefore, this recommendation has already been implemented.

Recommendation No. 3: *Periodically conduct and document on-site refresher training for*

operators and shift supervisors for both the DCS and Mark V controls.

Response: Periodic refresher training for the Unit 4/6 (TG-4/Boiler 6) DCS and Mark V controls will be provided to the shift supervisors and all operators with direct responsibility for operating the DCS and Mark V equipment. The training will primarily involve classroom instruction, with emphasis on current applicable operating procedures and critical control functions from the operator's perspective. Documentation of the training will be maintained at the Lake Road Plant. The first refresher training for all affected personnel will be completed in 2001.

Recommendation No. 4: *Schedule and perform any system maintenance or troubleshooting that has the potential to trip the turbine only during periods of shutdown or low load demand.*

Response: A utility has the responsibility to maintain equipment availability to serve its customers and to correct equipment problems that might affect that availability. Many times troubleshooting must be done with a generating unit on-line. The decision to perform such work on-line is based on system requirements, economics and the perceived risk of a trip and/or unit damage. It is essential that the utility have the flexibility to address each situation on a case-by-case basis.

Furthermore, it should be understood that tripping, in itself, is not harmful to a generating unit; but, in fact, serves a critical protective role. Units are designed to be tripped (under all potential operating conditions, including full load) in response to the protective systems monitoring their operation. An accidental trip occurring while troubleshooting a unit, in itself, is no more threatening to the unit's long-term reliability than a trip resulting from a protective relay operation or turbine-supervisory shutdown. Typically, when an accidental trip occurs (depending on the specific circumstances) the unit can be placed back on-line within a relatively

short period of time (perhaps 30 to 60 minutes). Generally, on-line troubleshooting and maintenance work removes operational risk by allowing problems to be identified and/or corrected before they become more serious. The overall net result is more reliable operation and lower cost.

After discussing this recommendation further with Staff via a telephone conference on January 5, 2001, SJLP learned that Staff's concern with on-line troubleshooting was primarily associated with unit start-ups following outages for major modifications. Staff requested that a comment be made on how this issue might be addressed with the units at the Lake Road Plant.

As SJLP understands the issue, Staff desires to ensure that adequate time is allowed for unit startups following major outages to eliminate the need for on-line troubleshooting and testing during the period immediately after the unit is placed in operation. It is SJLP's opinion that additional time, in and of itself, cannot ensure that on-line troubleshooting and testing will become unnecessary. In fact, many times on-line testing and adjustment of controls are necessary to complete the installation of a new system. On-line tuning of controls is a common example of this.

While SJLP strives to identify and correct problems while a unit is off-line, there are occasions when on-line troubleshooting is necessary. For example, it is occasionally necessary to perform troubleshooting of new controls and other equipment after a unit is put on-line to resolve problems not found during off-line checkout. This can occur regardless of how extensive the off-line preparations and checkout may have been. It should be noted that SJLP would not knowingly place a unit in operation prematurely such that it would be exposed to undue risk of damage. In any given situation, SJLP has the option of extending the length of an outage to provide more time for start-up and system checkout if it is appropriate.

With all this said, SJLP recognizes that it is still possible to improve the process and provide greater assurance of more problem-free unit startups after major outages. SJLP believes the most appropriate approach for accomplishing this is through techniques such as increased sophistication in project management (using computerized methods for scheduling, tracking and pre-operational testing, for example), and refined scope and specification definition for purchased equipment and services.

Recommendation No. 5: *Develop procedures to include at least one shift supervisor in early planning stages of any modification to the plant.*

Response: SJLP agrees that input from the end-users of a system is helpful in the design process. End-users have generally been consulted for recommendations on all major modifications at Lake Road Plant, particularly where an interface between an operator and a critical control system is a factor. However, SJLP believes it is impractical and inefficient to require that a shift supervisor be included in the planning stages of every modification made at the plant. It is also important to understand that it may not always be prudent or cost-effective to use design recommendations provided by shift supervisors or other end-users. At times, other considerations dictate how a modification is completed. The general process followed at Lake Road Plant to address this issue is summarized as follows:

The plant operations manager is familiar with the equipment used by operations department personnel and is aware of all plant projects planned and underway at the plant. The plant operations manager provides operations department design input to projects and makes other resources available (such as shift supervisors and/or operators) if it is deemed necessary. Individual project managers are also aware that design input

from the operations department may be necessary and consult with the operations manager when work begins on applicable projects. The plant manager provides additional oversight to ensure the process is followed.

SJLP believes the process as summarized above is the most appropriate approach to address Staff's concerns on this issue. SJLP proposes to use this method, with related documentation, on all projects involving critical control systems requiring operator interaction. It should be noted that only a small percentage of projects requiring operations department design input involve critical control systems. Most involve simple logistic or ergonomic issues, such as where to locate a new valve or how to orient its operating handle. It is necessary to limit the projects affected by this procedure to only those involving critical systems. Otherwise, it would be overly burdensome and wasteful.

Recommendation No. 6: *Within 180 days:*

A) Identify and review, with supporting documentation, all of the critical control systems used in the operation of its power plants to assure that appropriate redundancies and fail-safe designs are in place.

B) Document that appropriate personnel are properly trained on the operation of these critical control systems, including backup (i.e. redundant) systems.

C) Report, in writing, its activities regarding items A) and B) to the Commission's Electric Department, Engineering Section.

Response: Due to SJLP transitional issues related to the merger and a busy spring outage schedule for Lake Road Plant, it is not feasible to complete the tasks described in Staff's recommendation within the recommended 180 days. SJLP believes it would be feasible, and

allow for more efficient use of plant resources, to undertake the recommended project using a phased approach. Critical control systems for the largest, most-important Lake Road unit (Unit 4/6) would be reviewed first, followed by reviews of other Lake Road units based on their relative importance and projected remaining service life. The following is SJLP's proposal for addressing this recommendation:

A) SJLP will review, with supporting documentation, the following critical systems associated with Lake Road Unit 4/6 to assure that appropriate redundancies and fail-safe designs are in place:

1. Boiler Burner Management System, including Startup Fuel System
2. Boiler Drum Level Control System
3. Turbine (Mark V) Protective Schemes
4. Generator Protective Relaying
5. Auxiliary / Emergency Power System
6. Turbine Water Induction Protection System
7. Unit 4/6 Operating Procedures
8. DCS Trip Logic
9. Unit Fire Protection

B) SJLP will document that appropriate personnel are properly trained on their respective responsibilities relating to the operation of the critical control systems listed above, including backup (i.e. redundant) systems.

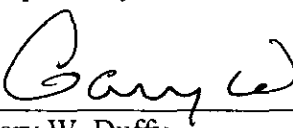
C) SJLP will prepare a written report of its activities regarding items A) and B) for submission to the Commission's Electric Department, Engineering Section.

SJLP agrees to complete the tasks identified in A), B) and C) above specific to Unit 4/6 within (12) twelve months of the date this proposal is accepted. This time period does not include engineered modifications or upgrade projects SJLP may choose to undertake based on

the findings of the review or normal business planning. SJLP also agrees to notify the Commission's Electrical Department, Engineering Section, of the next unit to be reviewed, along with its associated critical control systems, within (9) nine months of the date the proposal is accepted. Review of subsequent units would follow in a similar manner and similar time-frame. For each unit reviewed, the tasks identified in A), B) and C) would be performed.

WHEREFORE, SJLP requests that the Commission accept the responses and proposals contained herein.

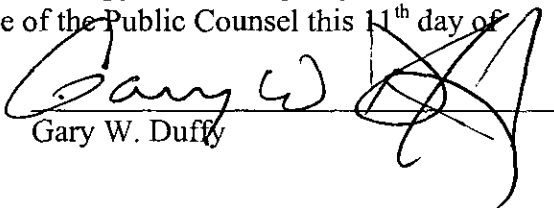
Respectfully submitted,


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St. Joseph Light & Power

Certificate of Service

The undersigned certifies that a true and correct copy of the foregoing was hand delivered to the Office of the General Counsel and the Office of the Public Counsel this 11th day of January, 2001.


Gary W. Duffy

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