

# The Light company

Houston Lighting & Power South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

August 24, 1995  
ST-HL-AE-5158  
File No.: G25  
10CFR50

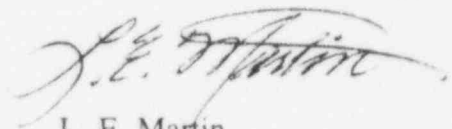
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L. J. Callan  
Regional Administrator, Region IV  
U. S. Nuclear Regulatory Commission  
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South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
Response to City of Austin Letter Regarding Potential  
Reportability of Information Uncovered in Litigation Activities

Attached for your information is a recent City of Austin letter regarding the potential reportability of an occurrence at South Texas Project and our response to that letter. The City of Austin informed us of their concern as a result of NRR's letter reminding litigants of their obligation to report information uncovered in litigation activities that is determined to be reportable under federal requirements. Houston Lighting & Power had previously determined that the occurrence was not reportable and had discussed that determination with your staff.

If there are any questions regarding these letters, please contact Mr. Mark McBurnett at (512) 972-7206 or me at (512) 972-8686.



L. E. Martin  
General Manager,  
Nuclear Assurance & Licensing

9604100029 950824  
PDR ADOCK 05000478  
P PDR

JTC/lf

- Attachments: 1. Letter, W.T. Cottle to M.B. Lee, dated August 23, 1995  
2. Letter, M.B. Lee to W.T. Cottle, dated August 16, 1995

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Houston Lighting & Power Company  
South Texas Project Electric Generating Station

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Page 2

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## HOUSTON LIGHTING & POWER COMPANY

P. O. Box 289  
WADSWORTH, TEXAS 77483

August 24, 1995

W.T. COTTLE  
GROUP VICE PRESIDENT, NUCLEAR

Mr. Milton B. Lee  
Chief Operating Officer  
City of Austin Electric Utility Department  
P.O. Box 1088  
Austin, Texas 78767

Dear Milton:

Thank you for your letter of August 16, 1995, regarding the average power level during an eight-hour period on June 9, 1992. We appreciate your interest in the safe operation of the South Texas Project and the City of Austin's commitment to follow NRC requirements.

A search of the Station Problem Report database located four instances of exceeding licensed power levels since initial criticality of the units, including the one mentioned in your letter. In each of the four instances, the South Texas Project staff determined that the event was not reportable. The NRC staff was informed of each of these instances including the reportability determination:

The licensed power level of Unit 2 was exceeded for more than 24 hours on June 19 - 20, 1989, varying from 100.01% to 100.56% of rated thermal power, depending on which data was used (ERFDADS or Proteus point U1169). The conclusion that this event was not reportable under License Section 2.G was communicated to the NRC Senior Resident Inspector, who conferred with NRC Region IV. Although the event was of an extended duration, the NRC agreed that the severity of the exceedance was insignificant with regard to reportability (SPR 890487).

On November 14, 1989, a Unit 1 feedwater flow transmitter used to perform calorimetrics to verify reactor power was found to be out of tolerance low. The low transmitter drift caused previous calorimetrics to allow power operation at approximately 101% actual power, although it was unknown at the time. At no time was the indicated power level greater than 100%. The event was reviewed with NRC Region IV and NRR, including the determination that the event was not reportable per 10CFR50.72. Additionally, a review of the STP design basis confirmed that 101% actual power level was within the FSAR accident analyses (SPR 890810).

On August 6, 1990, Unit 1 reactor thermal power was between 100.5% and 101% for approximately eight minutes, with the highest power range nuclear instrumentation peaking at approximately 103.5%. Reactor thermal power did not exceed 102% at any time. The event was discussed with the NRC Senior Resident Inspector, who conferred with NRC Region IV. This event was similarly determined to be not reportable (SPR 900380).

During the day shift on June 9, 1992, Unit 1 reactor thermal power slightly exceeded 3800 MWth (3801.0625 MWth or 100.028% of rated thermal power) for an eight-hour period. The South Texas Project staff determined that the occurrence was not reportable and that the eight-hour period described in the 1980 NRC memorandum on the subject was not a "limit." This subject had been discussed previously with the NRC Senior Resident Inspector (SPR 920249).

The following provides our understanding of the bases for determining the reportability of exceeding the licensed thermal power level. The design bases, as reflected in the FSAR commitment to Regulatory Guide 1.49, "Power Levels of Nuclear Power Plants," set the rated thermal power limit at 3800 MWth and require that the plant be designed to accommodate 102% of that limit. According to Regulatory Guide 1.49, the purpose for this margin is

"...for (a) normal operating conditions, (b) transient conditions anticipated during the life of the facility such as load changes, control rod malfunctions and improper operations, loss of forced coolant flow, loss of load or turbine trip, loss of normal a-c power, primary system depressurization, etc..."

These are the licensing bases for the rated thermal power limit that establish the requirements for application of the 3800 MWth limit in the operating licenses. The memo written by E. L. Jordan in 1980 was internal NRC guidance to inspectors and is not a license requirement. We use this information only to gain insight to the NRC's thoughts and interpretations. It is clear that routine operation in excess of 100% rated thermal power is not within the intent of the regulations. However, the eight-hour average concept in the Jordan memo was an attempt to provide inspectors a tool for assessing operating practices at plants. Based on our conversations over the years with the NRC on this issue, we believe that other factors such as magnitude, frequency, and duration bear significantly on the determination of routine operation above 100%. We also believe that to impose a requirement to operate below 100% solely to meet an arbitrary average is not appropriate.

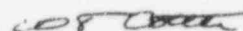
We believe that the reportability determination made in each of these cases was correct. The NRC staff was notified of our determination in each case. We have reviewed each of these cases in light of current regulatory guidance and management expectations and confirmed the appropriateness of the original reportability determinations.

W. T. COTTLE

Reactivity management is our primary day-to-day function at the South Texas Project and we perform that function diligently. Though these occurrences were determined to be not reportable to the NRC, they were challenges to our reactivity management philosophy of safety, conservatism, and ownership of reactivity control. Therefore, corrective actions were taken to ensure that we continue to maintain reactor thermal power levels within the license limit.

We are submitting a copy of this letter and your letter of August 16, 1995, to the NRC for information. If you have any further concerns, by all means please notify me. Your input to the safe operation of the South Texas Project is welcomed at any time.

Sincerely,



JTC:es

cc: K. J. Fiedler  
G. E. Vaughn



# City of Austin

Founded by Congress, Republic of Texas, 1839  
Municipal Building, Eighth at Colorado, P.O. Box 1088, Austin, Texas 78767 Telephone 512/499-2000

ST-HL-AE-5158  
Attachment 2

August 16, 1995

Mr. William T. Cottle  
Group Vice President, Nuclear  
South Texas Project Electric  
Generating Station  
P. O. Box 289  
Wadsworth, Texas 77483

Dear Bill:

As you are aware, in a letter dated May 2, 1994, the STP co-licensees were reminded by Ms. Suzanne Black of NRC's Office of Nuclear Reactor Regulation that we will have a regulatory obligation to report information uncovered in litigation activities that is determined to be reportable under federal requirements. Based on documents obtained through discovery in our lawsuit, and our recent completion of an extensive analysis of the information contained in some of those documents, Austin has discovered an event that we believe warrants NRC written notification.

On June 9, 1992, the average thermal power output at STP Unit 1 was found to have exceeded 3800 MW(th) for a period of 8 hours, contrary to the requirements in the STP Operating License restricting thermal power to 3800 MW(th), as well as two HL&P policies and an NRC guidance document regarding overpower events. HL&P apparently did not, as required, submit a written report to NRC at the time or afterwards.

Austin believes NRC should be notified in writing of the overpower event of June 9, 1992. Therefore, I am providing you with the attached documents in the expectation that HL&P will make the required written notification. Since the STP Operating License provides only a limited period of time to make the written notification once we, as a licensee, have made our determination, if we have not heard from you by September 14, 1995, Austin will presume that HL&P is not making the notification, and will submit the attached information to NRC the next day.

Sincerely,

Milton B. Lee  
Chief Operating Officer  
Electric Utility Department

Attachment  
cc:w/attach.  
Mr. Kenneth J. Fiedler  
Mr. Gerald E. Vaughn

Letters-8/15/95-001

## SUMMARY OF STP OVERPOWER EVENT OF JUNE 9, 1992

### Governing Requirements

Pursuant to Paragraph 2.C(1) of Facility Operating Licenses NPF-76 for STP Unit 1 and NPF-80 for STP Unit 2, "HL&P is authorized to operate the facility at reactor core power levels not in excess of 3800 megawatts thermal (100% power) ...." See Enclosures 1 and 2. Thus, 3800 MW(th) is the licensed power limit for STP.

In 1980, NRC provided guidance to its regional inspectors with regard to enforcing the licensed power limit. See NRC Memorandum from E.L. Jordan, entitled "Discussion of Licensed Power Limits," dated August 22, 1980 (Enclosure 3). NRC recognized that occasionally licensees would exceed their licensed power limit, but concluded that such "excursions" would not constitute violations of the license provided the following criteria are met:

The average power level over any eight hour shift should not exceed the "full steady-state licensed power level" (and similarly worded terms). The exact eight hour periods defined as "shifts" are up to the plant, but should not be varied from day to day (the easiest definition is a normal shift manned by a particular "crew"). It is permissible to briefly exceed the "full, steady-state licensed power level" by as much as 2% for as long as 15 minutes. In no case should 102% power be exceeded, but lesser power "excursions" for longer periods should be allowed, with the above as guidance (i.e., 1% excess for 30 minutes, 1/2% for one hour, etc., should be allowed). There are no limits on the number of times these "excursions" may occur, or the time interval that must separate such "excursions," except note that the above requirement regarding the eight hour average power will prevent abuse of this allowance.

NRC Memorandum at page 1.

HL&P adopted this NRC guidance by incorporating its terms in two STP documents: Operations Policies and Practices Manual, Policy No. 0-0014, "Control and Operation of Reactor Power at 100% Power," dated October 16, 1989 (Enclosure 4); and Technical Specification Interpretation No. TSI-047, dated October 19, 1990 (Enclosure 5).

### 1992 Recommendation by HL&P's Licensing Department

Notwithstanding the NRC guidance and its adoption by HL&P, on April 6, 1992, HL&P's Licensing Department proposed a revision to Policy No. 0-0014 in an attempt "to alleviate the 8-hour power average concern." See HL&P Memorandum OPL-3666 from W.J. Jump to G.N. Midkiff, entitled "Control and Operation of Reactor Power at 100% Power," dated April 6, 1992 (Enclosure 6). While the proposed revision retained the 102% absolute limit, and also retained the graduated limits of 1/2% for 1 hour, 1% for 30 minutes, and 2% for 15 minutes, the Licensing Department omitted the requirement for ensuring that the 8-hour average reactor power would not exceed 100% power. See Attachment 2 to Enclosure 6. The Operations Department reviewed the proposed revision, recognized the omission, and recommended against adopting any guidance that did not contain the 8-hour average reactor power requirement. See Attachment 1 to Enclosure 6.

The Licensing Department rejected the comments offered by the Operations Department. See Enclosure 6, at pages 1-3. Although the 1980 NRC memorandum provided the criteria that must be followed in order to avoid enforcement action for exceeding the 3800 MW(th) power limit in the operating license, apparently the Licensing Department concluded that additional leeway was needed from that already afforded by the NRC memorandum -- namely from the 8-hour average power requirement. In addition, the Licensing Department was concerned that operating in accordance with the 8-hour average power requirement would result in a derating of the plant, for which Mr. Hall, Group Vice President, Nuclear, would have to concur. See Enclosure 7, at page 10.

### June 9, 1992 Overpower Event

During shift turnover activities in the evening of June 9, 1992, the Operations Department discovered that the average thermal output of STP Unit 1 over an 8 hour period had exceeded 100 percent. Specifically, the average thermal power output during the day shift on June 9, 1992, was 3801.0625 megawatts, or 100.028 percent of rated thermal power. See SPR-92-0249, dated June 9, 1992 (Enclosure 7).

The Operations Department recognized the event was reportable in accordance with Policy No. 0-0014; however, no report was filed in reliance on the Licensing Department memorandum of April 6, 1992 (OPL-3666).

Plant Operations has a policy, 0-0014, which specifies a limit of 3800 MW(th) for an 8 hour period and



recommends that exceedances be reported to the NRC. This guidance has since been reviewed by Nuclear Licensing such that the guidance of this Policy is no longer completely accurate. The original Policy wording was based on a 1980 internal memorandum from the NRC. Subsequent review has shown that the memorandum is not a hard and fast rule. In OPL-3666 Licensing indicates that the 8 hour period is not a limit which requires reporting to the NRC. This subject has been discussed with the Senior Resident Inspector who has preliminarily concurred. Plant Operations Management has ongoing actions to clarify the reportability of this type of situation.

See SPR-92-0249, at page 6. Therefore, in reliance on Mr. Jump's memorandum, the Operations Department did not notify NRC of the overpower event of June 9, 1992.

#### Reportability

Austin believes that NRC should be informed in writing of the overpower event of June 9, 1992, because on that day STP Unit 1 appears to have been operated in noncompliance with the following requirements: NRC Operating License NPF-76, the 1980 NRC memorandum, HL&P Policy No. 0-0014, and HL&P Technical Specification Interpretation TSI-047.

#### Attached Documentation

Enclosure 1	NRC Facility Operating License NPF-76 (STP Unit 1)
Enclosure 2	NRC Facility Operating License NPF-80 (STP Unit 2)
Enclosure 3	NRC Memorandum from E.L. Jordan, dated August 22, 1980
Enclosure 4	HL&P Policy No. 0-0014, dated October 16, 1989
Enclosure 5	HL&P Technical Specification Interpretation TSI-047, dated October 19, 1990
Enclosure 6	HL&P Memorandum OPL-3666 from W.J. Jump, April 6, 1992
Enclosure 7	HL&P SPR-92-0249, dated June 9, 1992