



MIDDLE SOUTH  
UTILITIES SYSTEM

**LOUISIANA**  
POWER & LIGHT

142 DELARONDE STREET • P.O. BOX 8008  
NEW ORLEANS, LOUISIANA 70174-8008 • (504) 388-2345

November 21, 1984

W3P84-3263  
3-A1.01.04  
A4.05

Director of Nuclear Reactor Regulation  
Attention: Mr. G. W. Knighton, Chief  
Licensing Branch No. 3  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Knighton:

Subject: Waterford 3 SES  
Docket No. 50-382  
Proposed FSAR Change

Reference: LP&L letter W3P84-2970 dated October 31, 1984

The referenced letter provided to NRC Region IV the LP&L final report on SCD-116, Failure of Static Uninterruptible Power Supply (SUPS) Inverters. As part of the corrective action for closure of SCD-116, the SUPS frequency trip setpoints have been adjusted to preclude inadvertent trips as a result of synchronizing with the bypass source during normal and accident conditions. The adjustment necessitates an FSAR change in Table 8.3-2. NRC Region IV Inspector J.E. Bess has indicated that NRR would have to concur in closeout of SCD-116 on the basis of the related FSAR change.

Attached for NRC review are copies of:

- a) Marked up Waterford 3 FSAR page 8.3-51 (Amendment No. 34 issue) to reflect the SUPS change on frequency regulation from 60 Hz  $\pm$  0.5% to 60 Hz  $\pm$  1.3%
- b) Backup documentation to justify the FSAR change in Combustion Engineering letters C-CE-8658 (7/21/83) and C-CE-9307 (10/16/84).

LP&L will provide the FSAR change in a future amendment in accordance with 10CFR50.71.(e) requirements.

Very truly yours,

K.W. Cook  
Nuclear Support & Licensing Manager

KWC:GEW:sms

ATTACHMENTS

cc: E.L. Blake, W.M. Stevenson, J.T. Collins, D.M. Crutchfield, J.H. Wilson,  
G.L. Constable, T.A. Flippo, J.E. Bess (NRC Region IV)

8411260394 841121  
PDR ADOCK 05000382  
A PDR

*Bool*  
*1/1*

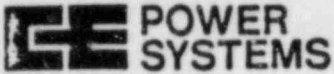
TABLE 8.3-2 (Cont'd)

h) UNINTERRUPTIBLE POWER SUPPLIES	SUPS-3MA-S, SUPS-3MB-S SUPS-3MC-S, SUPS-3MD-S	SUPS-3A-S 3B-S	
<b>Output Rating</b>			
Output (@ Load Power Factor) kVA	20	10	
Load Power Factor	0.8	0.8	
Output Voltage V	120	120	
Output Frequency Hz	60	60	
Output Circuit	1 ph 2 wire ungrounded	1 ph 2 wire ungrounded	
<b>Input Rating:</b>			
Normal & Bypass Input: (ac, 3 )			
Voltage V	480	480	34
Frequency Hz	60	60	
Available Fault Current, rms symmetrical kA	14	14	
Emergency Input: (dc)			
Normal Voltage V	125	125	
Low Voltage V	105	105	1
High Voltage V	140	140	33
Available Fault Current kA	20	10	
<b>Frequency Regulation:</b>			
Commercial Power Available %	$\pm 1.3$ $\pm 0.5$	$\pm 0.5$	
Free Running %	$\pm 0.5$	$\pm 0.5$	
Voltage Regulation (Steady State) %	$\pm 0.5, -2$	$\pm 2.0$	34
Voltage Recovery, no load to full load, 20 within 10% of rated, ms	48	48	
Total Harmonic Distortion, rms %	5	5	
Efficiency @ rated load power factor and normal input source %	72	72	

8.3-51

Amendment No. 36, (1/84)

MSES-FSAR-UNIT-3



Louisiana Power and Light Company  
Ebasco Services Incorporated, Agent  
Two World Trade Center  
80th Floor  
New York, NY 10048



Attention: Mr. R. J. Milhiser

Subject: NY 403402 - C-E Contract 9270  
Louisiana Power and Light Company  
Waterford Steam Electric Station - Unit No. 3  
Uninterruptible Power Supplies (SUPS)

Enclosures: Specifications for C-E Loads.

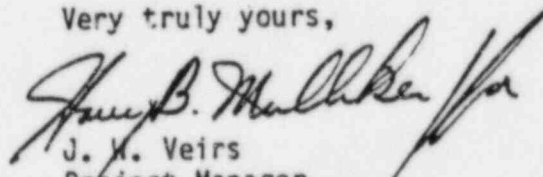
Gentlemen:

During a recent phone conversation between Ebasco (H. Chu) and C-E (B. Tessman), Ebasco requested voltage and frequency specifications for C-E loads which are powered by Ebasco's SUPS. The enclosure presents those specifications.

Please be advised that although transients of 120 Vac  $\pm 10\%$  and 60 Hz  $\pm 5\%$  are allowed, steady state voltage and frequency regulation shall be governed by the most limiting load on the enclosure.

If you have any questions, please do not hesitate to call.

Very truly yours,

  
J. W. Veirs  
Project Manager

JWV/BWT:emc  
C-IPE-2123  
I26096

cc: R. J. Milhiser (0+1)  
R. Marshall (3w/encl)  
J. M. Brooks  
Nuclear Records (2w/encl)  
F. J. Drummond  
M. I. Meyer  
T. F. Gerrets  
D. B. Lester  
T. K. Armington  
P. V. Prasankumar

R. P. Barkhurst  
Central Records (encl)  
L. V. Maurin (encl)  
G. B. Rogers  
C. J. Decareaux  
J. F. Fager (encl)  
~~S. A. Toelle~~ (encl)  
F. J. McQuiston  
P. J. Hauser  
E. S. Hornsby

Steady State Voltage and Frequency Requirements

PPS	120 Vac <u>+10%</u>	60 Hz <u>+5%</u>
Process Instrumentation Cabinets	118 Vac <u>+5%</u>	60 Hz <u>+1%</u>
CPC	115 Vac <u>+8.6%</u>	60 Hz <u>+1.6%</u>
RCPSSSS	120 Vac <u>+10%</u>	60 Hz (No tolerance specified)
Incore Amplifier	120 Vac <u>+10%</u>	60 Hz <u>+5%</u>
CPIA	120 Vac <u>+10%</u>	60 Hz <u>+5%</u>
Transients	120 Vac <u>+10%</u>	60 Hz <u>+5%</u>

C-E Power Systems  
Combustion Engineering, inc.  
1000 Prospect Hill Road  
Post Office Box 500  
Windsor, Connecticut 06095-0500

Tel. 203/688-1911  
Telex: 99297

RECEIVED

OCT 18 1984

COMBUSTION ENGINEERING  
WATER

**CE** POWER  
SYSTEMS

Louisiana Power and Light Company  
142 Delaronde Street  
New Orleans, Louisiana 70174

October 16, 1984

C-CE-9307

Attention: Mr. D. Dobson  
Subject: C-E Loads Frequency Requirements  
Reference: (A) C-CE-8658 of July 21, 1983.  
Enclosure: (1) Westinghouse TLX of October 8, 1984.

Dear Mr. Dobson:

The following information is provided at the request of your  
Mr. Singh Mahtharu.

Reference (A) provided C-E equipment steady state voltage and frequency requirements including the C-E supplied Process Instrument Cabinets. A frequency requirement of 60 Hz +1% was identified for the Process Cabinets. As discussed on October 5, 1984 and confirmed by Enclosure (1), this frequency requirements can be relaxed to 60 Hz +1.3%.

Additionally the RCPSSSS frequency requirement was defined as 60 Hz (no tolerance specified). This should be 60 Hz +10% as stated in the RCPSSSS Instruction Manual; Specification Section; Page VI.

Please be advised the Process Instrument Cabinet's documentation will not be changed to reflect the above.

If you have any questions, please do not hesitate to call.

Very truly yours,

*T. Turisco*  
for J. W. Veirs  
Project Manager

JWV:WFL:ec  
C-IPE-2377  
126595

cc: M. K. Yates (2/encl)  
R. Marshall (3w/encl)  
J. Brooks  
Nuclear Records (2w/encl)  
F. Drummond  
E. Hornsby  
T. Gerrets  
V. D. McAdams (encl)  
R. Burski (encl)

Central Records (encl)  
R. Barkhurst  
R. Leddick  
J. Fager (encl)  
S. Toelle (encl)  
F. McQuiston  
P. Hauser  
S. Mahtharu (encl)  
N. V. Prasankumar  
R. Iyengar