## DUKE POWER

August 21, 1996
U. S. Nuclear Regulatory Commission

ATTN.: Document Control Desk Washington, D.C. 20555

Subject: Catawba Nuclear Station
Dockets 50-413 and 50-414
Operator Aid Computer (OAC) Replacement
Link to NRC Emergency Response Data System (ERDS)
Request for Additional Information

In a letter dated June 3, 1996 letter, Duke informed the NRC of plans to replace the OAC at Catawba Nuclear Station, Unit 1 and of the impact of this OAC replacement on the Unit 1 link to the NRC ERDS. A revised data point library was submitted as an attachment to that letter.

By letter dated July 15, 1996, from Frank J. Congel of your staff, five areas were identified where additional information was required in order to provide physical significance to the ERDS data for use by NRC technical teams. Catawba's response to those questions is attached.

If there are any questions concerning this response, please contact Kay Nicholson at (803) 831-3237.

Sincerely,
W. R. McCollum,

$\backslash K E N: E R D S-O A C . R A I$
XC: S. D. Ebneter, Regional Administrator
P. S. Tam, ONRR
R. J. Freudenberger, SRI
F. J. Congel
J. R. Jolicoeur

Duke Power Company
Catawba Nuclear Station
Docket Nos. 50-413, 50-414

1. For Point ID Number C1P0300 (Pressurizer Level)
$1 \%=5.22$ inches with $<13 \%(P Z R),<75 \% \mathrm{RX}=$ Level at the top of the pressurizer heaters ${ }^{1}$
2. For Point ID Numbers C1P0180 and C1P0181 (RV Level)
5.04 inches $=1 \%$ level change ${ }^{2}$
3. For Point ID Numbers C1A0674, C1A0680, C1A0686, C1A0692 (S/G W/R Level)
$69.4 \%^{\circ}=$ level at top of S/G U-Tubes ${ }^{3}$

*     - Value at cold calibration conditions

4. For the following Point ID Numbers:
a) C1E0131 (EMF36H Unit Vent Gas Monitor)
b) C1E0263 (EMF49L Waste liguid Discharge)
c) C1E0259 (EMF49H Waste Liquid Discharge)
d) C1E0115 (EMF34H Steam Generator Water Sample High)

Provide any conversion factors that could be used to convert to a release rate in $\mathrm{Ci} / \mathrm{hr}$ or equivalent; if these are variable conversions, a representative range of the conversion factors.
a) C1E0131 (EMF36H Unit Vent Gas Monitor) ${ }^{4}$ (Values are ( $\mu \mathrm{Ci} / \mathrm{cc}$ )/cpm)

| Decay <br> Time <br> (hours) | Normal <br> Reactor <br> Coolant | Gap <br> Spectrum | Core Melt <br> Spectrum |
| :---: | :---: | :---: | :---: |
| 0.01 | $4.19 \mathrm{E}-04$ | $3.32 \mathrm{E}-04$ | $3.32 \mathrm{E}-04$ |
| 1 | $3.44 \mathrm{E}-04$ | $2.91 \mathrm{E}-04$ | $2.91 \mathrm{E}-04$ |
| 2 | $3.10 \mathrm{E}-04$ | $2.56 \mathrm{E}-04$ | $2.56 \mathrm{E}-04$ |
| 4 | $2.69 \mathrm{E}-04$ | $2.43 \mathrm{E}-04$ | $2.43 \mathrm{E}-04$ |
| 8 | $2.33 \mathrm{E}-04$ | $2.29 \mathrm{E}-04$ | $2.29 \mathrm{E}-04$ |
| 24 | $2.07 \mathrm{E}-04$ | $2.09 \mathrm{E}-04$ | $2.09 \mathrm{E}-04$ |
| 48 | $2.02 \mathrm{E}-04$ | $2.03 \mathrm{E}-04$ | $2.03 \mathrm{E}-04$ |
| 100 | $2.00 \mathrm{E}-04$ | $2.01 \mathrm{E}-04$ | $2.01 \mathrm{E}-04$ |
| 250 | $2.00 \mathrm{E}-04$ | $2.00 \mathrm{E}-04$ | $2.00 \mathrm{E}-04$ |
| 500 | $2.00 \mathrm{E}-04$ | $2.00 \mathrm{E}-04$ | $2.00 \mathrm{E}-04$ |
| 720 | $2.00 \mathrm{E}-04$ | $2.00 \mathrm{E}-04$ | $2.00 \mathrm{E}-04$ |

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b) C1E0263 (EMF49L Waste liquid Discharge) ${ }^{3}=2.9 \mathrm{E}-9$ ( $\mu \mathrm{Ci} / \mathrm{cpm}-\mathrm{ml}$ )
C) C1E0259 (EMF49H Waste Liquid Discharge) ${ }^{5}=2.9 \mathrm{E}-4$ ( $\mu \mathrm{Ci} / \mathrm{cpm}-\mathrm{ml}$ )
d) C1E0115 (EMF34H Steam Generator Water Sample High) ${ }^{5}$ $=2.9 \mathrm{E}-4(\mu \mathrm{Ci} / \mathrm{cpm}-\mathrm{ml})$
5. For point ID number C1P0250D2 (Wind Direction) Is this point measured in the to or from direction?

This point is measured in the FROM direction. Upper Wind Direction 15 Min Run Avg (DL*) ${ }^{6}$ - Data Link

## REFERENCES:

1. CN 1680-122-01, Reactor Coolant System (NC) Elevation View vs. Instrument Percent Scale for NC Level Instrumentation, Rev 6A
2. $O P / 1 / A / 6700 / 01$, Unit One Data Book, Figure 2.6.1, RVLIS Indications
3. DPC-1552.08-00-0169, Wide Range S/G Level Cuntrol Setpoints, Approved 02/29/96
4. Calculation MCC-1227.00-00-0015
5. $\mathrm{OP} / 1 / \mathrm{A} / 6700 / 01$, Unit One Data Book, Table 4.1, Process Radiation Monitors Correlation Factor Table
6. IP/0/B/3343/13, Meterological Monitoring System (EED) Calibration and Maintenance Procedure
