

GAP 04 SEP 90

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QA CONDITION 1

DUKE POWER COMPANY

OCONEE 3 CYCLE 13

CORE OPERATING LIMITS REPORT

REVISION 0

September 4, 1990

Reference: OSC-3963, 03C13 MA

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Unit 3 Cycle 13
Core Operating Limits Report
Revision 0

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1.0 Core Operating Limits

This Core Operating Limits Report for 03C13 has been prepared in accordance with the requirements of Technical Specification 6.9. The core operating limits have been developed using NRC-approved methodology (Reference 1) and are documented in Reference 2. The Reactor Coolant System design flow used in Reference 2 for 03C13 is 108.5% (of 88,000 gpm per RCP).

The following cycle specific core operating limits are included in this report:

- 1) RPS Safety Limits,
- 2) Steady State Operating Band,
- 3) Operational Power-Imbalance Limits,
- 4) Operational and Shutdown Margin Control Rod Position Limits.

1.1 References

1. Duke Power Company, Oconee Nuclear Station, Reload Design Methodology II, DPC-NE-1002A, October 1985.
2. 03C13 Maneuvering Analysis, Duke Power Company calculational file, OSC-3963, Revision 0, 27AUG90.

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RPS Safety Limit Breakpoints

| | POWER % OF 2568 MW | IMBALANCE LIMITS |
|--------|-----------------------|---------------------|
| 4 PUMP | 0.0 | -48.00 |
| | 100.0 | -48.00 |
| | 112.0 | -31.10 |
| | 112.0 | 31.10 |
| | 100.0 | 48.00 |
| | 0.0 | 48.00 |
| 3 PUMP | 0.0 | -48.00 |
| | 72.9 | -48.00 |
| | 84.9 | -31.10 |
| | 84.9 | 31.10 |
| | 72.9 | 48.00 |
| | 0.0 | 48.00 |

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Steady State Operating Band

| RI, % WD | |
|----------|-----|
| MIN | MAX |
| --- | --- |
| 292 | 300 |

| APSR, % WD | |
|------------|-----|
| MIN | MAX |
| --- | --- |
| 30 | 40 |

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Operational Power Imbalance Breakpoints

| | POWER % OF 2568 MW | IMBALANCE LIMITS |
|--------|-----------------------|---------------------|
| 4 PUMP | 0.0 | -39.25 |
| | 80.0 | -39.25 |
| | 90.0 | -36.04 |
| | 102.0 | -25.92 |
| | 102.0 | 28.31 |
| | 90.0 | 35.80 |
| | 80.0 | 35.76 |
| | 0.0 | 35.76 |
| 3 PUMP | 0.0 | -39.25 |
| | 77.0 | -39.25 |
| | 77.0 | 35.76 |
| | 0.0 | 35.76 |

Referred to by Tech. Spec. 3.5.2.6

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ROD INDEX OPERATIONAL LIMITS

0 EFPD to EOC

| | POWER % OF 2568 MW | RI, % WD | |
|--------|-----------------------|----------|-------|
| | | MIN | MAX |
| 4 PUMP | 102 | 260.0 | 300.0 |
| | 90 | 260.0 | 300.0 |
| | 80 | 240.0 | 300.0 |
| | 50 | 200.0 | 300.0 |
| | 15 | 90.0 | 300.0 |
| | 5 | 0.0 | 300.0 |
| 3 PUMP | 77 | 236.0 | 300.0 |
| | 50 | 200.0 | 300.0 |
| | 15 | 90.0 | 300.0 |
| | 5 | 0.0 | 300.0 |
| | | | |

Referred to by Tech. Spec.

3.1.3.5

3.1.11

3.5.2.1.b

3.5.2.2.d.2.c

3.5.2.3

3.5.2.5.c

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ROD INDEX SHUTDOWN MARGIN LIMITS

0 EFPD to EOC

| | POWER % OF 2568 MW | RI, % WD | |
|--------|-----------------------|----------|-------|
| | | MIN | MAX |
| 4 PUMP | 102 | 220.0 | 300.0 |
| | 50 | 160.0 | 300.0 |
| | 15 | 90.0 | 300.0 |
| | 5 | 0.0 | 300.0 |
| 3 PUMP | 77 | 210.0 | 300.0 |
| | 50 | 160.0 | 300.0 |
| | 15 | 90.0 | 300.0 |
| | 5 | 0.0 | 300.0 |

Referred to by Tech. Spec.:

3.1.3.5

3.1.11

3.5.2.1.b

3.5.2.2.d.2.c

3.5.2.3

3.5.2.5.c