



**Northeast  
Nuclear Energy**

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The Northeast Utilities System

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Docket Nos. 50-336  
50-423  
B17982

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

**Millstone Nuclear Power Station, Unit Nos. 2 and 3  
Fourth Quarter Backlog Performance Update for 1999 and  
Revision to Associated Commitments**

Northeast Nuclear Energy Company (NNECO) herein provides the fourth quarter backlog performance update for 1999. The baseline of backlog items for the initial post recovery entry into Mode 2 for each unit and the quarterly status, as of December 31, 1999, are summarized in Tables 1 and 2 in Attachment 2. Attachment 3 contains performance indicators that capture details associated with progress achieved in the disposition of backlog work items for both units. Backlog performance is evaluated two ways - reduction of recovery related backlog that existed as the units entered into Mode 2, as well as additional post restart backlog that has accumulated. Both perspectives are presented in the attached performance indicators, where appropriate.

More than eighteen months have passed since Unit No. 3 restarted and eight months have passed since Unit No. 2 restarted. During that time, Millstone Station has reduced the backlog of corrective actions associated with Unit No. 3 Independent Corrective Action Verification Program (ICAVP) Discrepancy Reports (DRs) by 97% and corrective actions associated with the Unit No. 2 ICAVP DRs by 13%. Our previous commitment is to have these closed out by March 31, 2000<sup>(1)</sup>, for Unit No. 3 and December 31, 2001<sup>(1)</sup>, for Unit No. 2. In addition our overall backlog reduction efforts reflect consistent positive progress. On the basis of this progress assessment, NNECO concludes that backlog reduction goals continue to be met. Furthermore, the operational performance of the units leads us to conclude that backlog reduction resources have been appropriately balanced to ensure that safe and efficient unit operation remains our number one priority.

<sup>(1)</sup> NNECO Letter from R. P. Necci, "Millstone Nuclear Power Station, Unit Nos. 2 and 3 - Backlog Management Plan Commitment Change," dated March 30, 1999. (B17690).

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For these reasons, NNECO is revising our commitments (B17596-03<sup>(2)</sup>, B17010-01<sup>(3)</sup> and B17010-02<sup>(3)</sup>) to issue quarterly reports on these efforts by closing them out. As such, this report will be the last quarterly submittal on backlog performance. Backlog reduction performance data will continue to be available for management use and for NRC review. Additionally, NNECO will provide notification to the NRC upon final disposition of outstanding ICAVP DRs for each unit. This notification will be specific to the status of corrective actions associated with ICAVP DRs. Other backlog status will be available on site. Accordingly, our commitment B17690-03<sup>(1)</sup> associated with docketing our entire backlog status is also being closed.

The regulatory commitments contained within this letter are located in Attachment 1.

Should you have any questions regarding this submittal, please contact Mr. David A. Smith at (860) 437-5840.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



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Stephen E. Scace  
Director - Nuclear Oversight and  
Regulatory Affairs

Attachments (3)

cc: H. J. Miller, Region I Administrator  
J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2  
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2  
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3  
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

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<sup>(2)</sup> NNECO Letter from M. L. Bowling, Jr., "Millstone Nuclear Power Station, Unit No. 2 -Restart Backlog Management Plan," dated December 22, 1998. (B17596).

<sup>(3)</sup> NNECO Letter from M. L. Bowling, Jr., "Millstone Nuclear Power Station Unit Nos. 2 and 3 - Proposed Treatment of Level 4 Discrepancy Reports from Independent Corrective Action Verification Program," dated February 9, 1998. (B17010).

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Attachment 1

Millstone Nuclear Power Station, Unit Nos. 2 and 3

List of Regulatory Commitments

February 2000

List of Regulatory Commitments

The following table identifies actions committed to by NNECO in this document.

Number	Commitment	Due
B17982-01	NNECO will provide notification to the NRC upon final disposition of the Unit No. 3 backlog associated with the outstanding ICAVP DRs.	May 15, 2000
B17982-02	NNECO will provide notification to the NRC upon final disposition of the Unit No. 2 backlog associated with the outstanding ICAVP DRs.	February 14, 2002
B17596-03	Provide quarterly restart backlog management performance updates.	Closed
B17010-01	Submit quarterly, reports on the status of open Level 4 [ICAVP] DRs on Millstone Unit No. 3 from the time the unit returns to operation.	Closed
B17010-02	Submit at least quarterly, reports on the status of open Level 4 [ICAVP] DRs on Millstone Unit No. 2 from the time the unit returns to operation.	Closed
B17690-03	A final report containing a backlog management performance update will be submitted approximately 30 days after the Units' respective disposition of ICAVP DRs. (The report will be issued once for Unit No. 3, and then for Unit No. 2, upon completion of disposition of the ICAVP DRs.)	Closed

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**Attachment 2**

**Millstone Nuclear Power Station, Unit Nos. 2 and 3**

**Recovery Backlog Quarterly Status**

**February 2000**

**Table 1**

**Unit No. 2 Backlog Items Baseline and Quarterly Status**

<b>Work Management Category Bins</b>	<b>As of 5/9/99</b>	<b>As of 12/31/99</b>
<b>Configuration Management Discovery (UIRs)</b>	<b>128</b>	<b>89</b>
<b>Engineering Backlog</b>	<b>992 <sup>(1)</sup></b>	<b>753</b>
<b>Corrective Action Assignments (non-DR)</b>	<b>2620</b>	<b>1666</b>
<b>ICAVP DR Corrective Action Assignments</b>	<b>638</b>	<b>555</b>
<b>Corrective Maintenance Work Orders (AWOs)</b>	<b>519 <sup>(2)</sup></b>	<b>60</b>
<b>Operability Determinations</b>	<b>18</b>	<b>9</b>
<b>Operator Work Arouns (OWAs)</b>	<b>12</b>	<b>8</b>
<b>Non-Conformance Reports (NCRs)</b>	<b>0</b>	<b>0</b>
<b>Control Room Panel Deficiencies</b>	<b>24</b>	<b>2</b>
<b>Temporary Modifications</b>	<b>10</b>	<b>3</b>
<b><i>Total Recovery Backlog Items</i></b>	<b><i>4961</i></b>	<b><i>3145</i></b>

- (1) Unit No. 2 Engineering Backlog was re-evaluated to ensure all the work items were adequately captured. The Station Corrective Action Program has tracked this issue and the baseline was changed from 644 to 992 items.
- (2) Previous reporting showed that baseline for Corrective Maintenance Work Orders was 502 items. The additional 17 items come from a new tracking methodology.

**Table 2**

**Unit No. 3 Backlog Items Baseline and Quarterly Status**

<b>Work Management Category Bins</b>	<b>As of 6/29/98</b>	<b>As of 12/31/99</b>
<b>Configuration Management Discovery</b>	<b>864</b>	<b>85</b>
<b>Engineering Backlog</b>	<b>777</b>	<b>307</b>
<b>Corrective Action Assignments (non-DR)</b>	<b>3915</b>	<b>904</b>
<b>ICAVP DR Corrective Action Assignments</b>	<b>904</b>	<b>28</b>
<b>Corrective Maintenance Work Orders (AWOs)</b>	<b>583</b>	<b>57</b>
<b>Operability Determinations</b>	<b>28</b>	<b>6</b>
<b>Operator Work Arouns (OWAs)</b>	<b>15</b>	<b>4</b>
<b>Temporary Modifications</b>	<b>15</b>	<b>3</b>
<b>Non-Conformance Reports (NCRs)</b>	<b>57</b>	<b>19</b>
<b>Control Room Panel Deficiencies</b>	<b>5</b>	<b>0</b>
<b><i>Total Deferrable Items</i></b>	<b><i>7163</i></b>	<b><i>1413</i></b>

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**Attachment 3**

**Millstone Nuclear Power Station, Unit Nos. 2 and 3**

**Backlog Performance Indicators**

February 2000



## **Backlog Performance Report, Fourth Quarter 1999**

### **Performance Indicators**

#### **Millstone Unit No. 2**

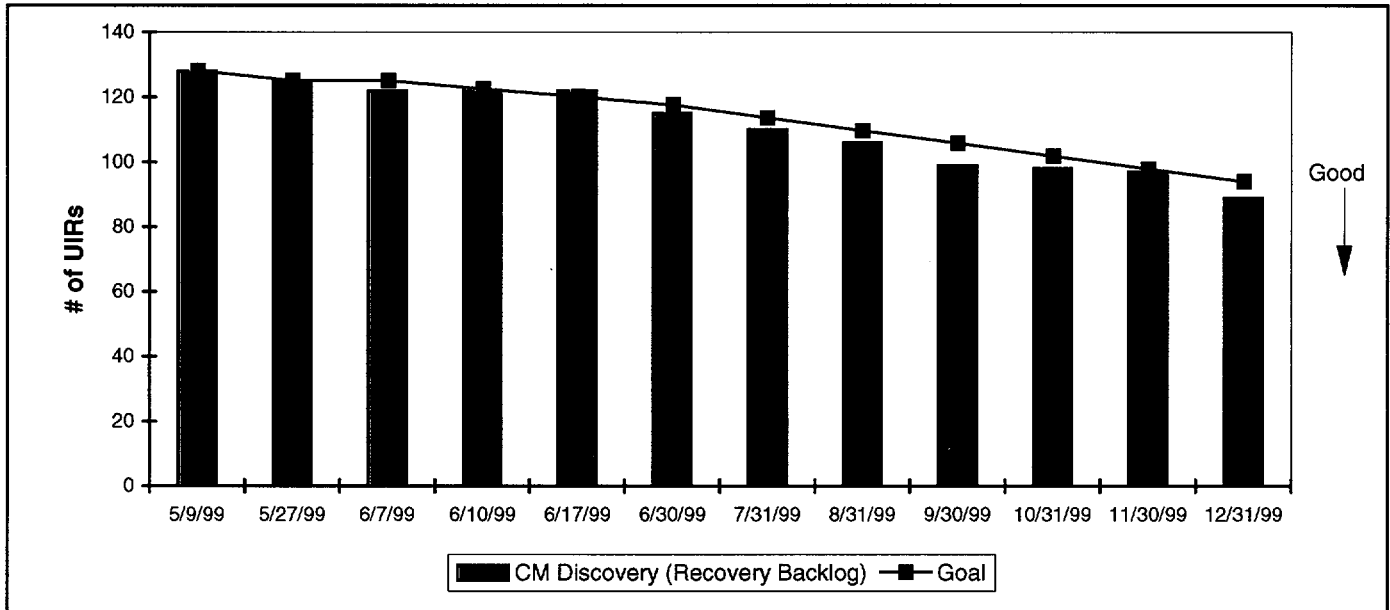
- A-1 ..... Configuration Management Discovery
- A-2 ..... Engineering Backlog Management
- A-3 ..... Corrective Action Assignments
- A-4 ..... DR Corrective Action Assignments
- A-5 ..... Corrective Maintenance AWOs
- A-6 ..... Open Operability Determinations
- A-7 ..... Operator Work Arounds
- A-8 ..... Control Room Panel Deficiencies
- A-9 ..... Temporary Modifications

#### **Millstone Unit No. 3**

- B-1 ..... Configuration Management Discovery
- B-2 ..... Engineering Backlog Management
- B-3 ..... Corrective Action Assignments
- B-4 ..... DR Corrective Action Assignments
- B-5 ..... Corrective Maintenance AWOs
- B-6 ..... Open Operability Determinations
- B-7 ..... Operator Work Arounds
- B-8 ..... Temporary Modifications
- B-9 ..... Nonconformance Reports NCRs
- B-10 ..... Control Room Panel Deficiencies

# Backlog Management Configuration Management Discovery Millstone 2

**Progress:** *Performance is satisfactory.*



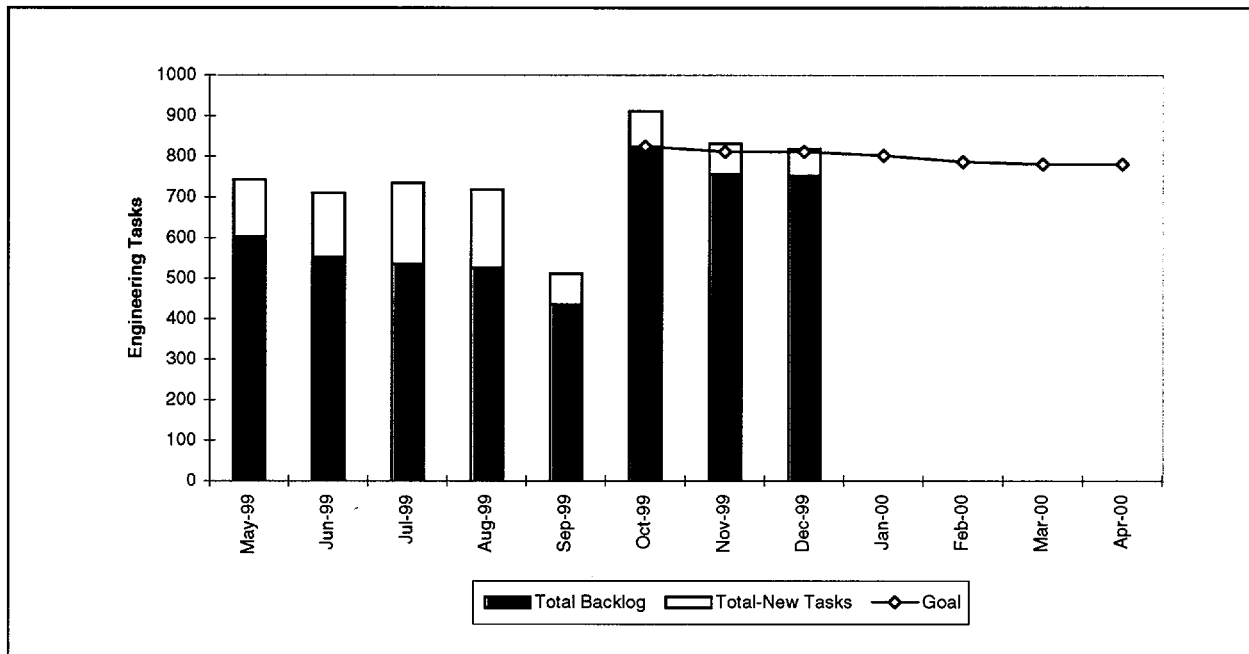
<b>Raw Data</b>												
	9-May	27-May	7-Jun	10-Jun	17-Jun	30-Jun	31-Jul	31-Aug	30-Sep	31-Oct	30-Nov	31-Dec
CM Discovery (Recovery Backlog)	128	125	122	122	122	115	110	106	99	98	97	89
Goal	128	125	125	123	120	118	114	110	106	102	98	94

<b>Definition</b>	<b>Analysis/Action</b>
<p>This indicator depicts the number of open Unresolved Item Report (UIR) corrective actions. UIRs were generated by the 10CFR50.54(f) Design Basis Review Program.</p>	<p>The restart target of no open licensing or design issues in the UIR subset of corrective actions was met for the unit transition to mode 2.</p> <p>The Configuration Management recovery backlog has been reduced by 30% from the initial count of 128 items.</p>

<b>Goal</b>	<b>Comments</b>
<p>The goal is to disposition all UIR corrective action assignments prior to December 31, 2001.</p>	<p>End of July data not available, used estimate.</p>

# Millstone 2 Engineering Backlog Management

**Progress:** *Performance is satisfactory.*



## Raw Data

	May-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00
EWRs/EWAs-New	141	152	192	187	65	63	64	61	0	0	0	0
DCRs/MMODs-New	0	6	8	6	11	23	11	5	0	0	0	0
Total-New Tasks	141	158	200	193	76	86	75	66	0	0	0	0
EWRs/EWAs-Bklog	365	355	338	333	333	726	664	661	0	0	0	0
PAs-Bklog	17	17	17	17	30	2	2	1	0	0	0	0
DCR/MMOD-Backlog	174	135	135	130	27	15	12	12	0	0	0	0
PDCEs/PDCRs-Bklog	47	46	46	46	46	82	79	79	0	0	0	0
Total Backlog	603	553	536	526	436	825	757	753	0	0	0	0
Total MP2 Tasks	744	711	736	719	512	911	832	819	0	0	0	0
Goal						825	812	812	802	788	782	782

## Definition

This indicator depicts the quantity of open engineering work document types. These types include Engineering Work Requests (EWRs), Engineering Work Assignments (EWAs), Design Change Records (DCRs), Minor Modifications (MMODs), Plant Design Change Evaluations (PDCEs), Plant Design Change Records (PDCRs), and Project Assignments (PAs). Maintenance Support Engineering Evaluations (MSEEs), Design Change Notices (DCNs), and Item Equivalency Evaluations (IEEs) were not included as backlog items reported to the NRC via NU letter B17786, and are therefore not tracked by this KPI.

## Analysis/Action

MP2 Engineering has recently completed a review of the open Engineering Work Request/Engineering Work Authorizations (EWR/EWAs), and has begun canceling those EWR/EWAs not selected for the MP2 5-year plan. Based on this, the current progress is satisfactory, and future evaluations will be based on the established work-off curve above.

## Goal

The MP2 Engineering backlog reduction goal has been established to be consistent with MP2's commitment to disposition Engineering backlog items by 12/31/01. Based on the recently identified Engineering backlog items and the number of completed items between 5/99 and 9/99, the Eng. backlog baseline is approximated to be 992.

## Comments

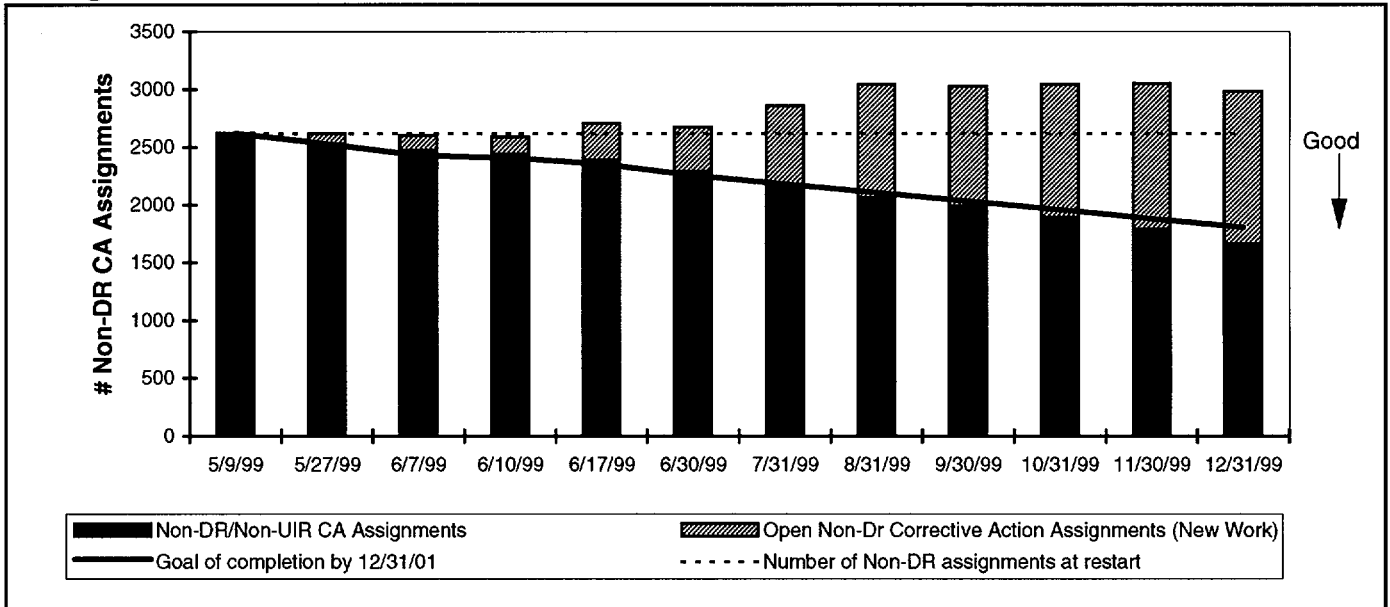
The number of EWR/EWAs and PDCR/PDCEs has increased dramatically based on consolidating multiple databases. The recently identified backlog included in this KPI is conservative, and it is expected that many of the items will require only administrative closure. Condition Report M2-99-2837 was initiated to identify this discrepancy. Memo MP-ENGPROG-99-184 lists the current backlog items by record number.

# Backlog Management

## Corrective Action Assignments

### Millstone 2

**Progress:** *Performance is satisfactory.*



**Raw Data**

	9-May	27-May	7-Jun	10-Jun	17-Jun	30-Jun	31-Jul	31-Aug	30-Sep	31-Oct	30-Nov	31-Dec
Non-DR/Non-UJR CA Assignments	2620	2530	2477	2442	2390	2292	2178	2063	1991	1894	1791	1666
Open Non-Dr Corrective Action Assignments (New Work)		87	125	146	315	379	678	977	1034	1147	1259	1315
Goal of completion by 12/31/01	2620	2530	2430	2409	2359	2259	2183	2108	2033	1957	1882	1807

**Definition**

This indicator depicts the total number of open deferred AITTS assignments linked to Condition Reports (CRs). Deficiency Reports (DRs) and Unresolved Item Reports (UIRs), which are tracked within the Corrective Action Program, are not included in this indicator. DRs and UIRs are tracked by separate indicators.

**Analysis/Action**

Recovery backlog is being worked per schedule while the total open CA backlog is holding steady.

For the past 4 months the total number of open corrective actions has remained essentially steady.

The corrective action recovery backlog has been reduced by 36 % from the initial count of 2620 items.

**Goal**

The goal is to disposition all deferred corrective action assignments prior to December 31, 2001.

**Comments**

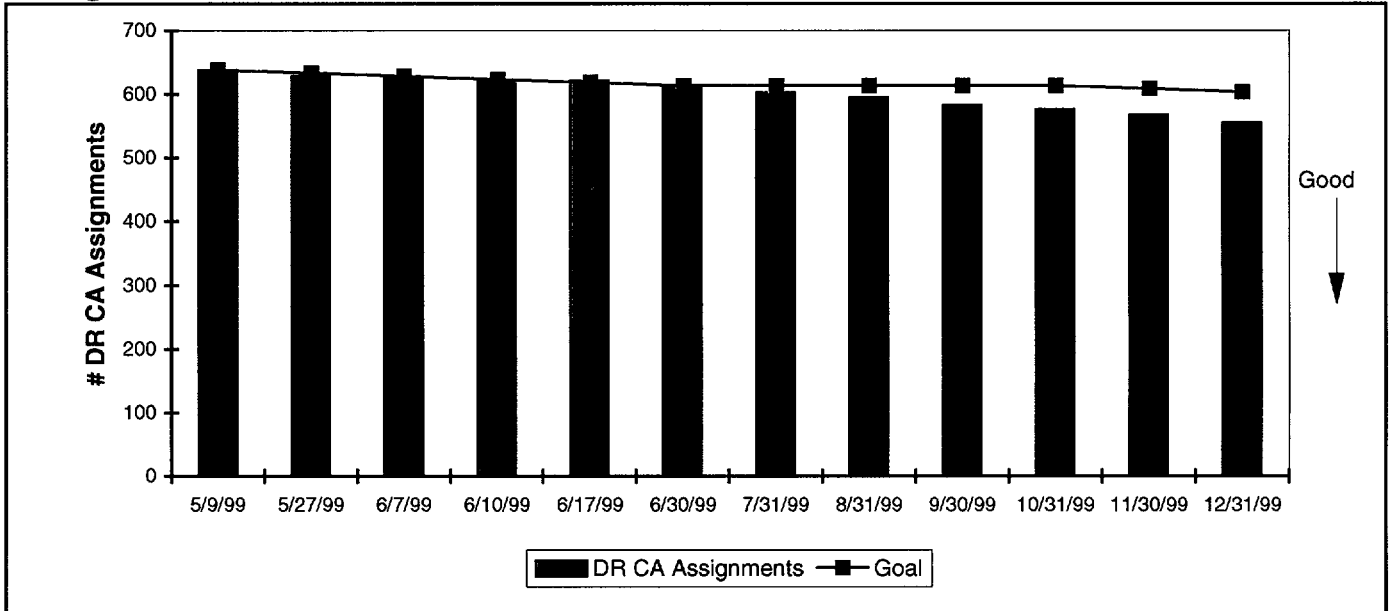
End of July data not available, used estimate.

# Backlog Management

## DR Corrective Action Assignments

### Millstone 2

**Progress:** *Performance is satisfactory.*



**Raw Data**

	9-May	27-May	7-Jun	10-Jun	17-Jun	30-Jun	31-Jul	31-Aug	30-Sep	31-Oct	30-Nov	31-Dec
DR CA Assignments	638	629	624	622	621	609	602	595	583	576	567	555
Goal	638	633	628	623	618	613	613	613	613	613	608	603

**Definition**

This indicator depicts the total number of open AITTS assignments tracking resolution of Deficiency Reports (DRs) produced during the Independent Corrective Action Verification Process (ICAVP).

**Analysis/Action**

The number of DR corrective actions is on schedule towards meeting the goal.

The DR recovery backlog has been reduced by 13% from the initial count of 638 items.

**Goal**

The goal is to disposition all ICAVP DR corrective actions by December 31, 2001 (commitment B 17690.020).

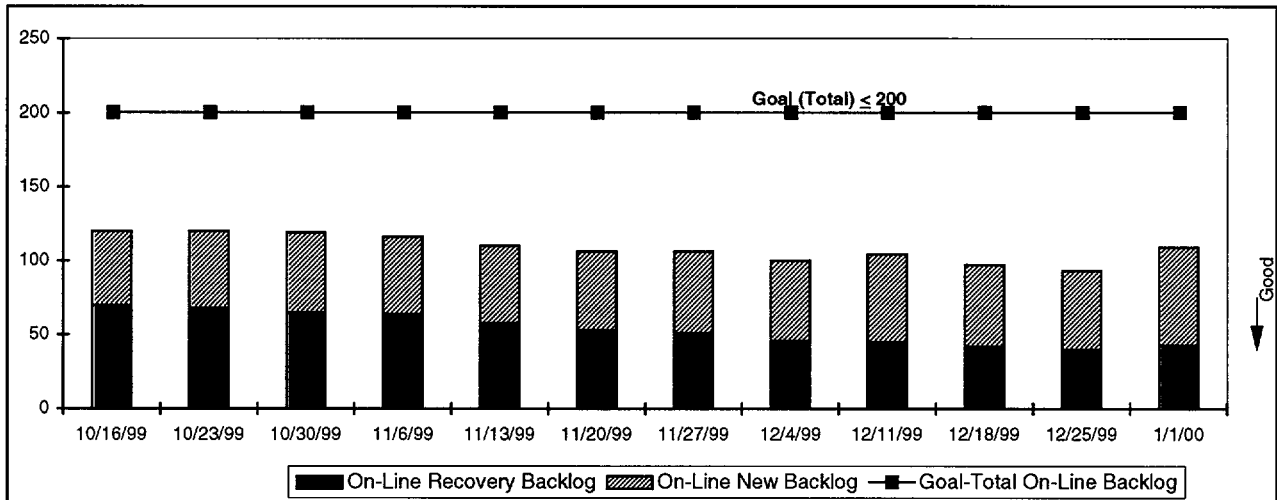
**Comments**

End of July data not available, used estimate.

# Backlog Management: Corrective Maintenance AWOs

## Millstone 2

**Progress: Performance is satisfactory.**



**Raw Data**

Work Week	9942	9943	9944	9945	9946	9947	9948	9949	9950	9951	9952	9953
Report Date	10/16/99	10/23/99	10/30/99	11/6/99	11/13/99	11/20/99	11/27/99	12/4/99	12/11/99	12/18/99	12/25/99	1/1/00
Total Recovery Backlog	86	83	80	79	73	68	66	60	59	56	54	60
Future Outage Recovery Backlog	16	15	15	15	15	15	15	14	14	14	14	17
On-Line Recovery Backlog	70	68	65	64	58	53	51	46	45	42	40	43
On-Line New Backlog	50	52	54	52	52	53	55	54	59	55	53	66
Total On-Line Backlog	120	120	119	116	110	106	106	100	104	97	93	109
Goal-Total On-Line Backlog	200	200	200	200	200	200	200	200	200	200	200	200
Workoff - Total On-Line Backlog	0	0	0	0	0	0	0	0	0	0	0	0
PRA Risk Sig Backlog	57	57	57	57	52	51	48	57	49	48	47	54
Goal-PRA Risk Sig Backlog	100	100	100	100	100	100	100	100	100	100	100	100

**Definition**

This indicator depicts the number of on line Corrective Maintenance Automated Work Orders (AWOs), and the portion of those associated with Probabilistic Risk Assessment (PRA) risk significant systems.

PRA Risk Significant systems are systems required to protect the reactor core or mitigate the consequences of an accident.

Work awaiting post maintenance testing or closure is not included in this KPI. Also excluded are AWOs for support work, such as insulation removal, outage work, and Preventive Maintenance or Surveillance AWOs, as well as AWOs not associated with power block equipment.

**Analysis/Action**

Efforts will continue to focus engineering support, procurement support and planning support further out in front in the planning preparation process to increase the amount of AWOs which make it through from T12 to implementation.

**Goal**

The goal is to have  $\leq 200$  total on-line AWOs. Of these, no more than 100 shall be PRA Risk Significant.

Goals are under review by management.

**Comments**

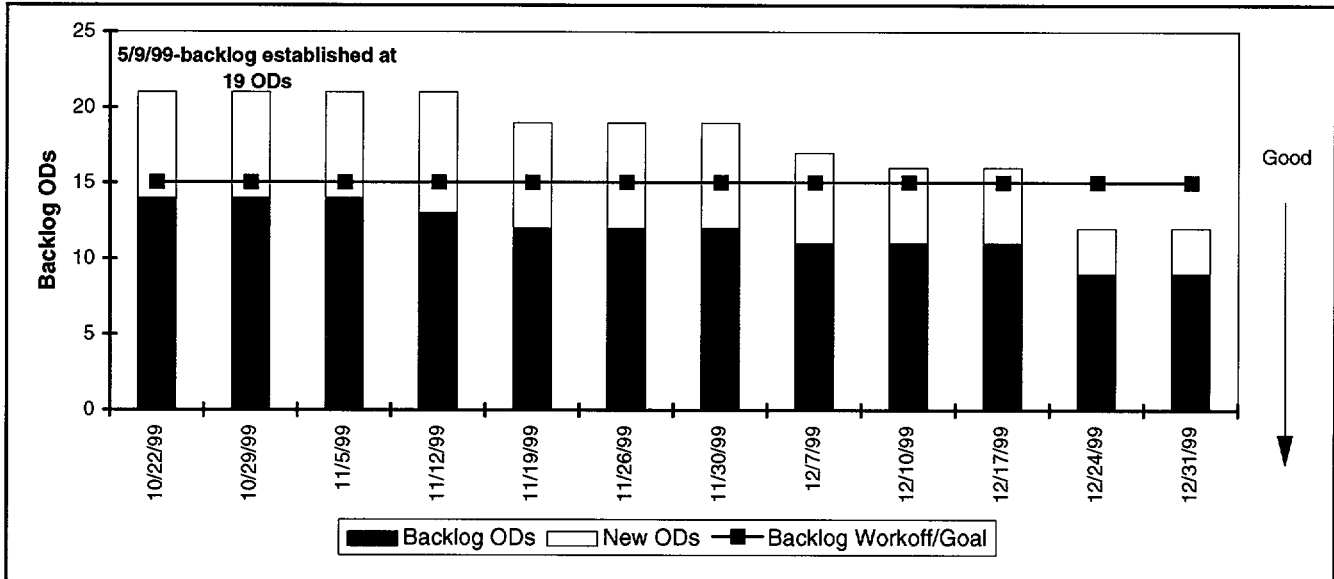
Previous reporting showed that, as of 5/9/99, baseline for Corrective Maintenance Work Orders was 502 items. A new baseline has been established of 519 items based upon a new and more accurate tracking methodology.

# Backlog Management

## Open Operability Determinations

### Millstone 2

**Progress:** *Performance Is satisfactory.*



**Raw Data**

	22-Oct	29-Oct	5-Nov	12-Nov	19-Nov	26-Nov	30-Nov	7-Dec	10-Dec	17-Dec	24-Dec	31-Dec
Backlog ODs	14	14	14	13	12	12	12	11	11	11	9	9
New ODs	7	7	7	8	7	7	7	6	5	5	3	3
Closed ODs	0	0	0	1	1	0	0	1	0	0	2	0
Backlog Workoff/Goal	15	15	15	15	15	15	15	15	15	15	15	15

**Definition**

This indicator depicts the number of Operability Determinations (ODs) open when Unit 2 reached Mode 2.

An OD is an evaluation performed on a degraded Structure, System, or Component (SSC) to determine that the SSC is able to perform its safety functions. New ODs on degraded conditions are closed when the condition is restored to fully qualified requirements.

**Analysis/Action**

Three backlog ODs were resolved this month. There are 9 open backlog ODs on Unit 2.

Three backlog ODs have compensatory actions associated with them. These compensatory actions consist of guidance in an AOP and Surveillance Testing (administrative actions).

Ten of the ODs have been in place over 6 months. One OD has been in place greater than 2 years.

**Goal**

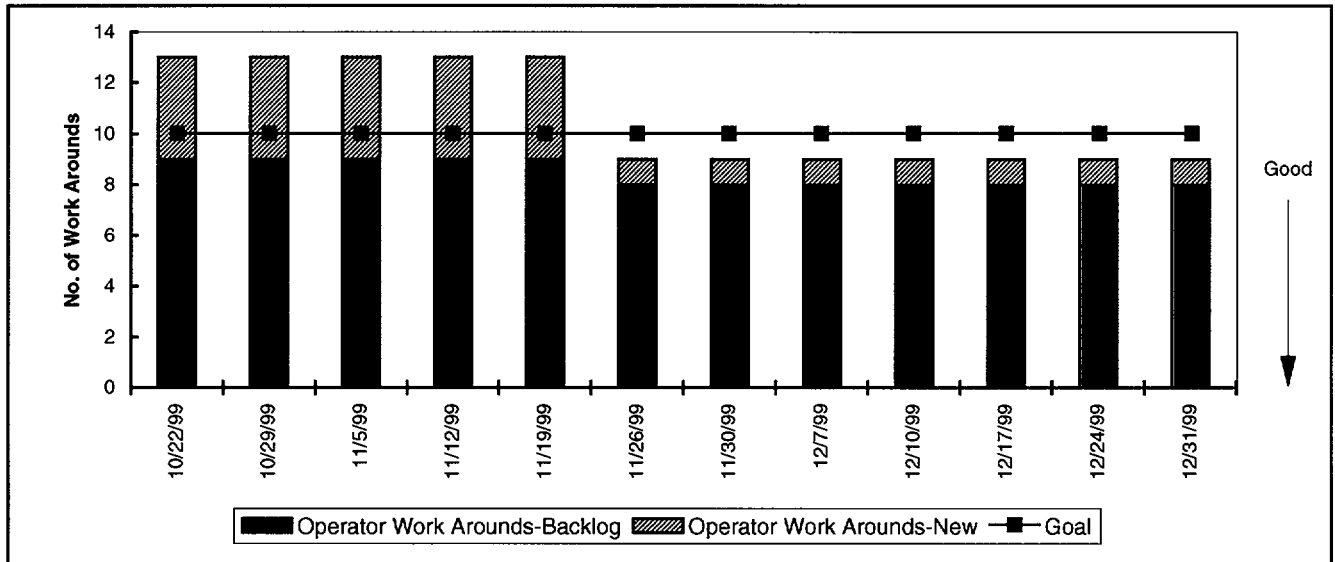
The open OD backlog will be dispositioned by December 31, 2001.

**Comments**

When Unit 2 reached Mode 2 on 5/9/99, there were 18 open ODs.

# Backlog Management Operator Work Arounds Millstone 2

**Progress:** *Performance is satisfactory.*



<b>Raw Data</b>												
	22-Oct	29-Oct	5-Nov	12-Nov	19-Nov	26-Nov	30-Nov	7-Dec	10-Dec	17-Dec	24-Dec	31-Dec
Operator Work Arounds-Backlog	9	9	9	9	9	8	8	8	8	8	8	8
Operator Work Arounds-New	4	4	4	4	4	1	1	1	1	1	1	1
Total Operator WAs	13	13	13	13	13	9	9	9	9	9	9	9
Goal	10	10	10	10	10	10	10	10	10	10	10	10

<b>Definition</b>	<b>Analysis/Action</b>
<p>This indicator depicts the number of Operator Work Arounds. These are broken down into two categories: deferred and new.</p> <p>Operator Work Arounds are conditions which require an operator to work with equipment in a manner other than original design intended.</p> <p>Operator Work Arounds can:</p> <ol style="list-style-type: none"> <li>1. Potentially impact safe operation during a plant transient</li> <li>2. Potentially impose significant burden during normal operation</li> <li>3. Create nuisance condition due to recurring equipment deficiency</li> <li>4. Distract an operator from noticing a recurring condition</li> </ol> <p>It is desirable to have a small number of operator workarounds, and to limit the time such workarounds persist.</p>	<p>One backlog operator burden was resolved this past month. Eight of the 9 open operator burdens identified have been on the list for greater than 6 months.</p> <p>Management will continue to analyze the aggregate of all the items on the Operator Burden List and their affect on the safe operation of the plant.</p> <p>Actions to improve performance indicator are to implement requested programs and processes and allocate the resources to perform the physical work.</p>

<b>Goal</b>	<b>Comments</b>
The goal is to have $\leq 10$ Operator Work Arounds.	The number of Operator Burdens on Unit 2 at the time of entry into Mode 2 was 12. Therefore, Operator Burden Backlog was frozen at 12.

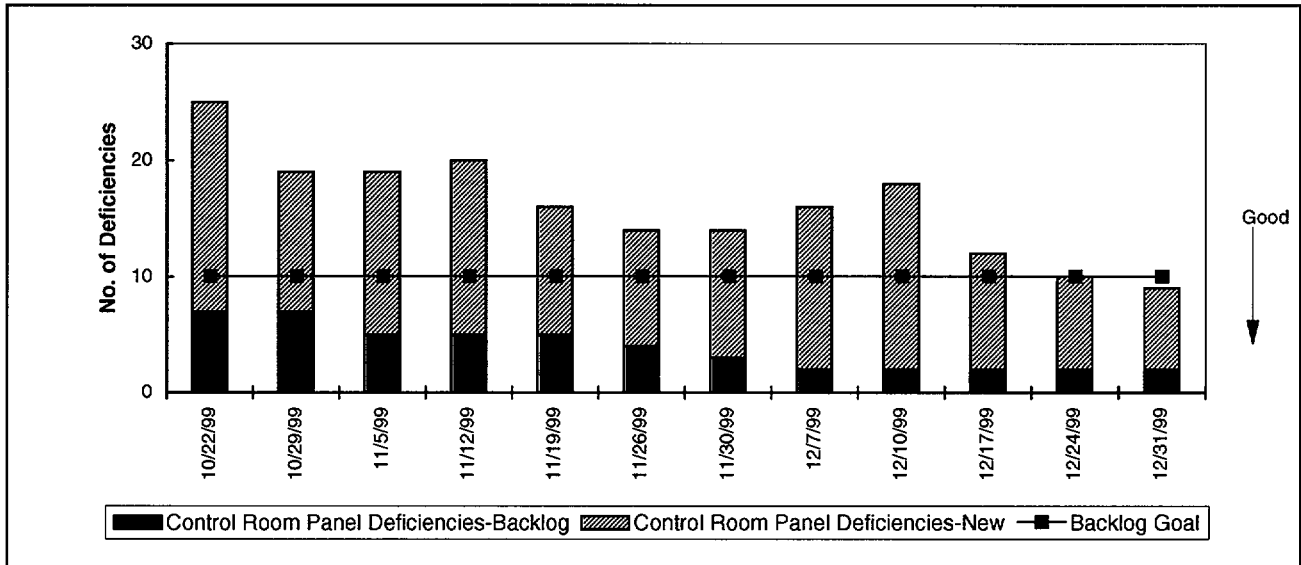


# Backlog Management

## Control Room Panel Deficiencies

### Millstone 2

**Progress:** *Performance is satisfactory.*



**Raw Data**

	10/22/99	10/29/99	11/5/99	11/12/99	11/19/99	11/26/99	11/30/99	12/7/99	12/10/99	12/17/99	12/24/99	12/31/99
Control Room Panel Deficiencies-Backlog	7	7	5	5	5	4	3	2	2	2	2	2
Control Room Panel Deficiencies-New	18	12	14	15	11	10	11	14	16	10	8	7
Awaiting Retest	0	0	0	0	0	0	0	0	0	0	0	0
Waiting Solution	25	19	19	20	16	14	14	16	18	12	10	9
Total Deficiencies	25	19	19	20	16	14	14	16	18	12	10	9
Backlog Goal	10	10	10	10	10	10	10	10	10	10	10	10

**Definition**

This indicator depicts the number of Control Room and Annunciator Panel (CRP) deficiencies. These are broken down into two categories: deferred and new.

CRP deficiencies are control room instruments, recorders, indicators, and annunciators that function improperly and could affect the ability of the operators to monitor and control plant conditions.

**Analysis/Action**

The backlog of CRP Deficiencies is being worked, and is now meeting the goal. The two remaining Backlog CRP Deficiencies can not be worked until RFO 13.

**Goals**

The goal is to have  $\leq 10$  CRP deficiencies open.

**Comments**

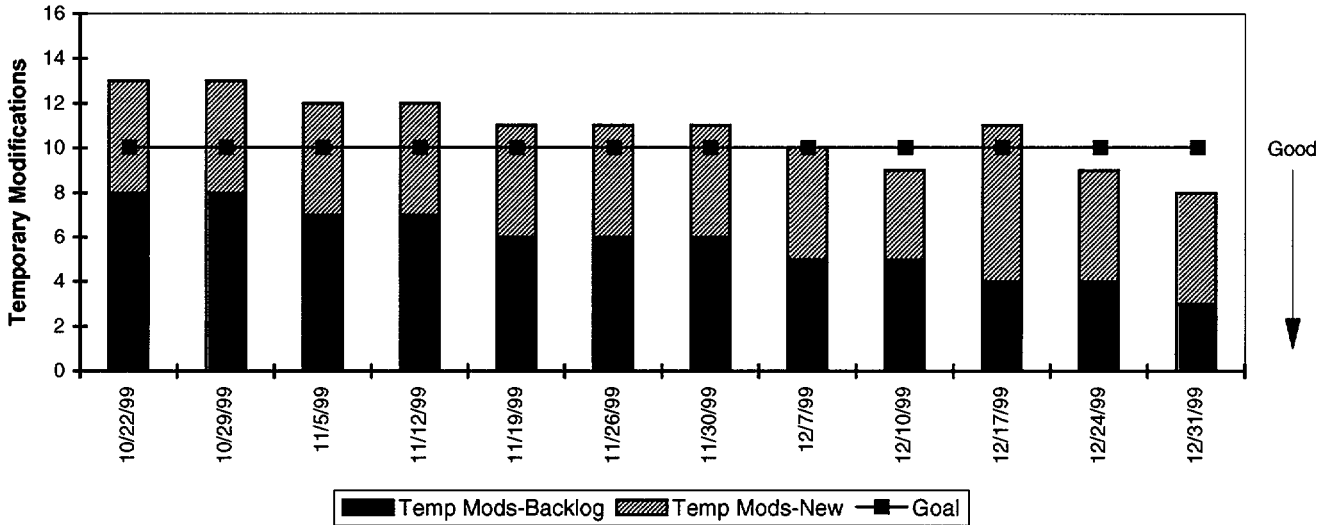
The number of CRP Deficiencies in place on Unit 2 at the time of entry into Mode 2 was 24. Therefore, CRP Deficiency Backlog was frozen at 24.

# Backlog Management

## Temporary Modifications

### Millstone 2

**Progress:** *Performance is satisfactory.*



**Raw Data**

	22-Oct	29-Oct	5-Nov	12-Nov	19-Nov	26-Nov	30-Nov	7-Dec	10-Dec	17-Dec	24-Dec	31-Dec
Temp Mods-Backlog	8	8	7	7	6	6	6	5	5	4	4	3
Temp Mods-New	5	5	5	5	5	5	5	5	4	7	5	5
Goal	10	10	10	10	10	10	10	10	10	10	10	10

**Definition**

This indicator depicts the total number of Temporary Modifications (TMs) to permanent plant design. These are broken down into two categories: deferred and new. Deferred TMs are those that were in place when Unit 2 reached Mode 2. New TMs are those that have been installed since restart.

A temporary modification is a modification to the plant that is short-term in nature and not part of the permanent plant design change process.

**Analysis/Action**

Of the 3 backlog TMs, 2 are scheduled for removal during 2R13 and one is currently scheduled for removal.

One of the open TMs has been in place > 3.5 years.

**Goal**

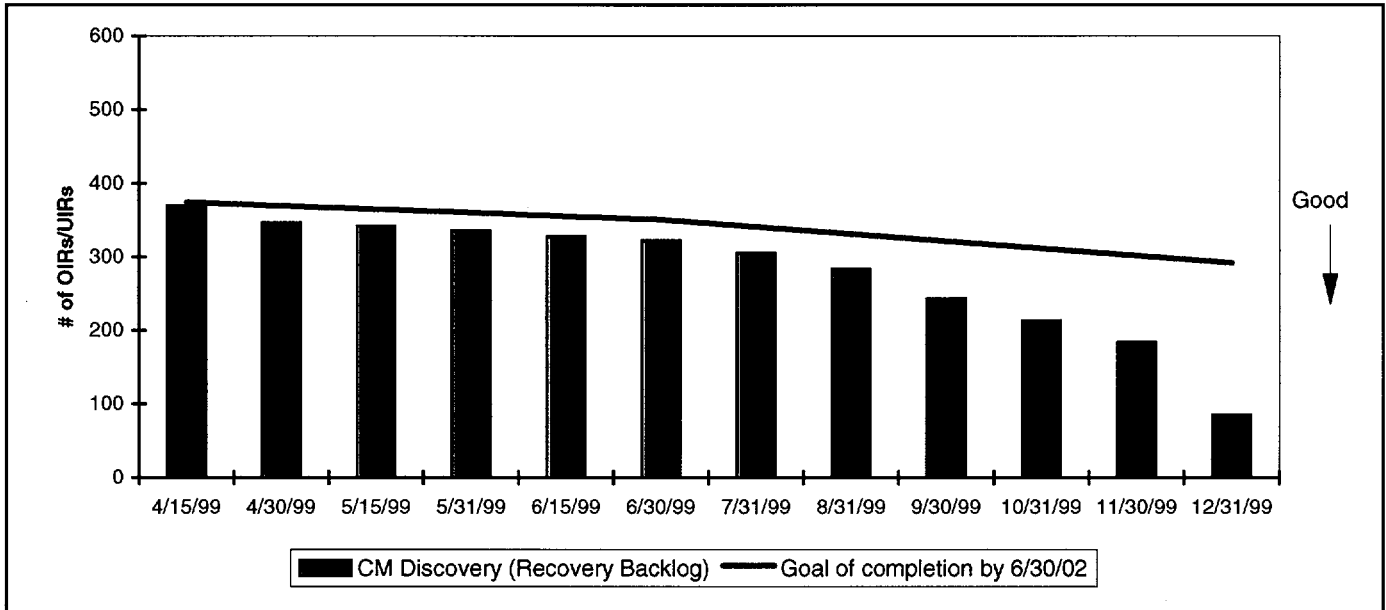
The goal is to have  $\leq 10$  TMs.

**Comments**

The number of TMs installed on Unit 2 at the time of entry into Mode 2 was 10. Therefore, TM Backlog was frozen at 10.

# Backlog Management Configuration Management Discovery Millstone 3

**Progress:** *Performance is satisfactory.*



**Raw Data**

	15-Apr	30-Apr	15-May	31-May	15-Jun	30-Jun	31-Jul	31-Aug	30-Sep	31-Oct	30-Nov	31-Dec
CM Discovery (Recovery Backlog)	369	346	341	335	327	322	305	283	243	213	184	85
Goal of completion by 6/30/02	374	369	365	360	355	350	340	331	321	311	302	292

**Definition**

This indicator depicts the number of Open Item Reports (OIRs) and Unresolved Item Reports (UIRs) for which the corrective actions are not yet complete. These items are in the Corrective Action Program for tracking and close-out purposes.

**Analysis/Action**

Engineering and other departments are continuing to work off items in parallel with resource loading efforts.

A new workoff schedule has been established. The backlog is expected to be completed by 6/30/02.

The configuration management recovery backlog has been reduced by 90% from the initial count of 864 items.

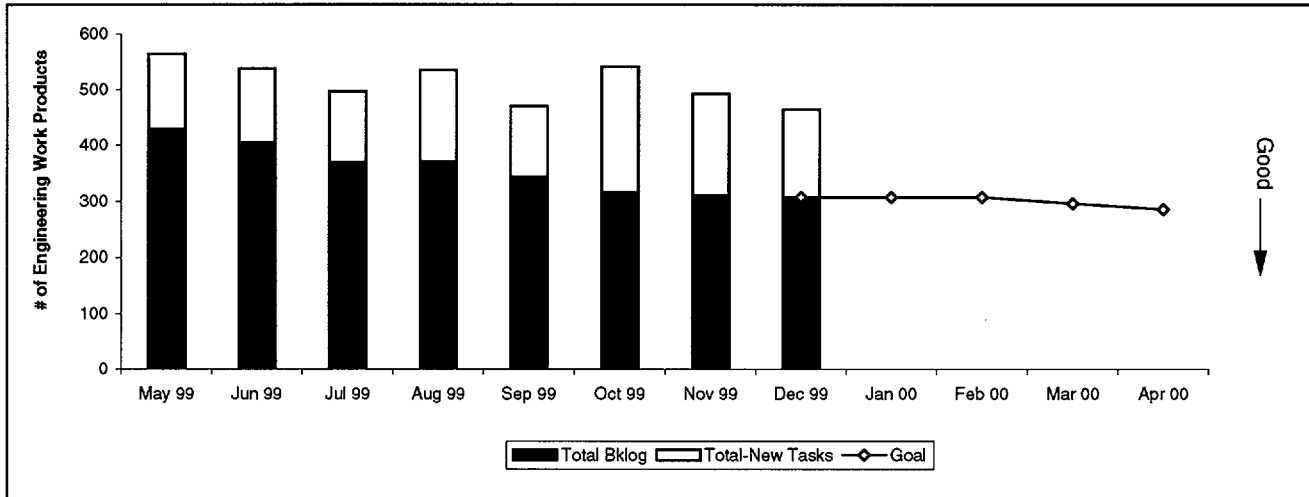
**Goal**

The Configuration Management backlog will be dispositioned by 6/30/02.

**Comments**

# Millstone 3 Engineering Backlog Management

**Progress:** *Performance is satisfactory.*



## Raw Data

	May 99	Jun 99	Jul 99	Aug 99	Sep 99	Oct 99	Nov 99	Dec 99	Jan 00	Feb 00	Mar 00	Apr 00
EWRs/EWAs-New						185	143	144				
DCRs/MMODs-New						41	39	13				
Total-New Tasks	136	133	127	165	126	226	182	157				
EWRs/EWAs-Bklog						253	252	251				
PAs-Bklog						5	5	5				
DCRs/MMODs-Bklog						8	7	7				
PDCEs/PDCRs-Bklog						12	12	12				
MSEEs - Bklog						15	15	13				
NCRs - Bklog						23	20	19				
Total Bklog	429	405	370	371	344	316	311	307				
Total MP3 Tasks	565	538	497	536	470	542	493	464				
Goal								307	307	307	296	286

## Definition

This indicator depicts the quantity of open engineering work document types, both deferred and new. These types include Engineering Work Requests (EWRs), Engineering Work Assignments (EWAs), Design Change Records (DCRs), Minor Modifications (MMODs), Plant Design Change Evaluations (PDCEs), Plant Design Change Records (PDCRs), and Project Assignments (PAs). Maintenance Support Engineering Evaluation (MSEEs) are not included in the backlog quantities above except for tracking completion of the 75 originally identified at restart. Design Change Notices (DCNs) and Replace Item Evaluations (RIEs) are not included in the above quantities.

## Goal

The Engineering Backlog work-off curve has been established to coincide with MP3's internal goal to disposition backlog items by 6/30/02. The quantity of backlog items depicted above represents the remaining items from a baseline of 777 items, as indicated on NU letter B17626 dated 2/19/99.

## Analysis/Action

The MP3 selection of Engineering Work Requests/Engineering Work Authorizations (EWR/EWAs) to be incorporated into the 5-year plan has recently been completed. The cancellation of those not selected will result in a significant reduction of MP3 Engineering backlog items, which coincides with the long term backlog reduction goals recently established, therefore current performance is satisfactory. Future evaluations will be measured against the established work-off curve above.

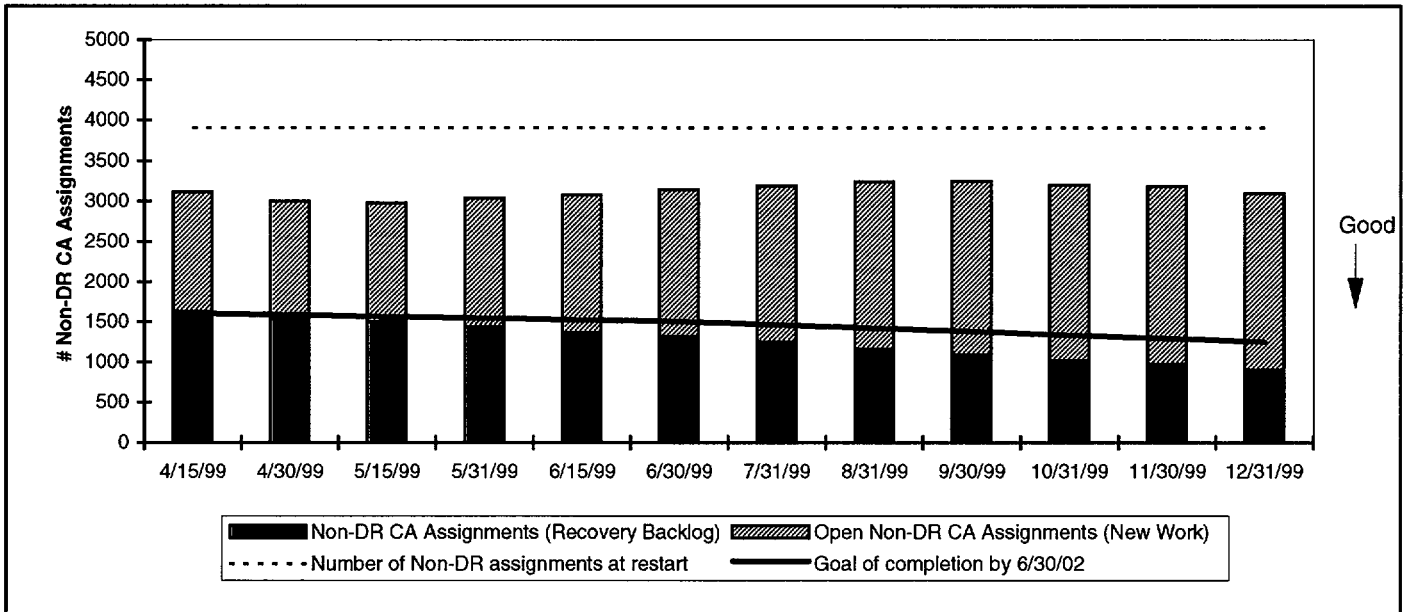
## Comments

This KPI format was modified to be consistent with MP2 format, as well as provide more useful information regarding backlog management. Additionally, Non-Conformance Reports (NCRs) are now reported by this KPI to provide a common KPI to address MP3 engineering backlog.

Reference memo MP-ENGPORG-99-184 for a list of MP3 engineering backlog by record number.

# Backlog Management Corrective Action Assignments Millstone 3

**Progress:** *Performance is satisfactory.*



**Raw Data**

	15-Apr	30-Apr	15-May	31-May	15-Jun	30-Jun	31-Jul	31-Aug	30-Sep	31-Oct	30-Nov	31-Dec
Non-DR CA Assignments (Recovery Backlog)	1635	1539	1501	1442	1364	1320	1254	1162	1090	1018	971	904
Open Non-DR CA Assignments (New Work)	1474	1461	1472	1591	1712	1819	1932	2080	2157	2181	2211	2189

**Definition**

This indicator depicts the total number of open AITTS assignments linked to Condition Reports (CRs), Deficiency Reports (DRs), which are tracked within the Corrective Action Program, are not included in this indicator. These are broken down into two categories, deferred and new. DRs are tracked by a separate indicator.

**Analysis/Action**

The Corrective Action backlog was frozen with the unit's entry into mode 2. The data indicates that the current backlog of recovery plus new work is slightly decreasing from the backlog frozen at mode 2.

The corrective action recovery backlog has been reduced by 77% from the initial count of 3915 items.

**Goal**

The Corrective Action Assignments backlog will be dispositioned by 6/30/02.

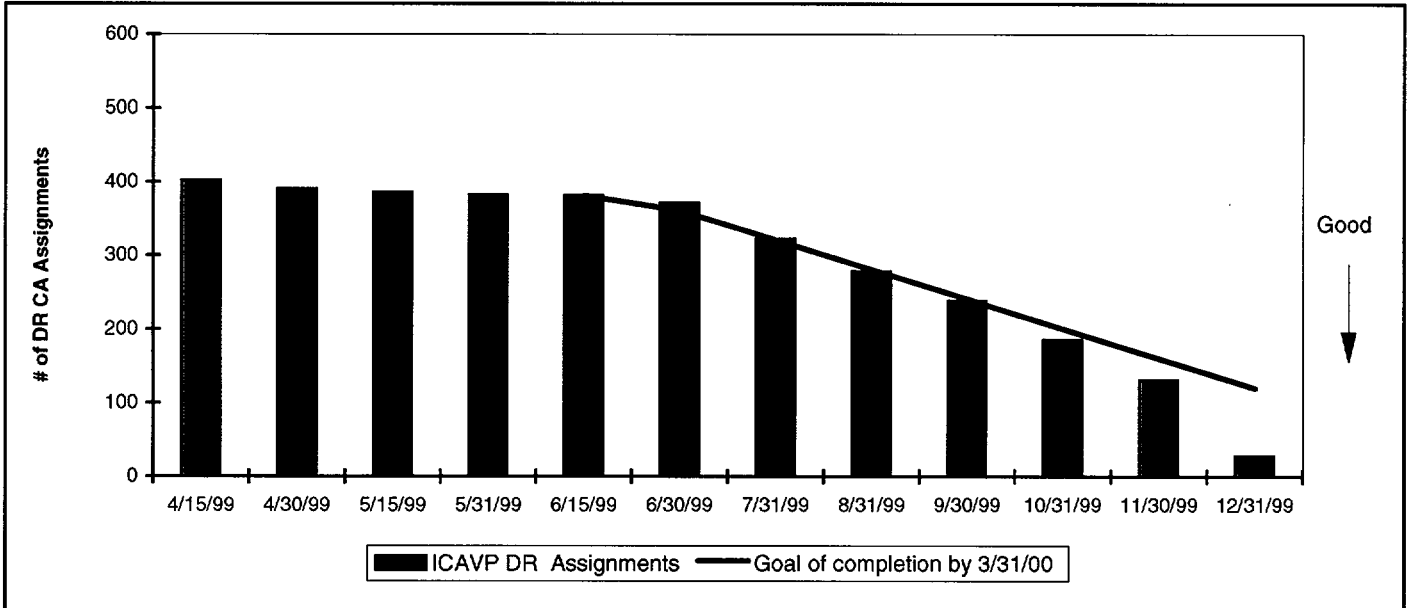
**Comments**

# Backlog Management

## DR Corrective Action Assignments

### Millstone 3

**Progress:** *Performance is satisfactory.*



<b>Raw Data</b>												
	15-Apr	30-Apr	15-May	31-May	15-Jun	30-Jun	31-Jul	31-Aug	30-Sep	31-Oct	30-Nov	31-Dec
ICAVP DR Assignments	402	390	386	382	381	371	322	278	238	186	131	28
Goal of completion by 3/31/00	0	0	0	0	381	361	321	281	241	201	160	120

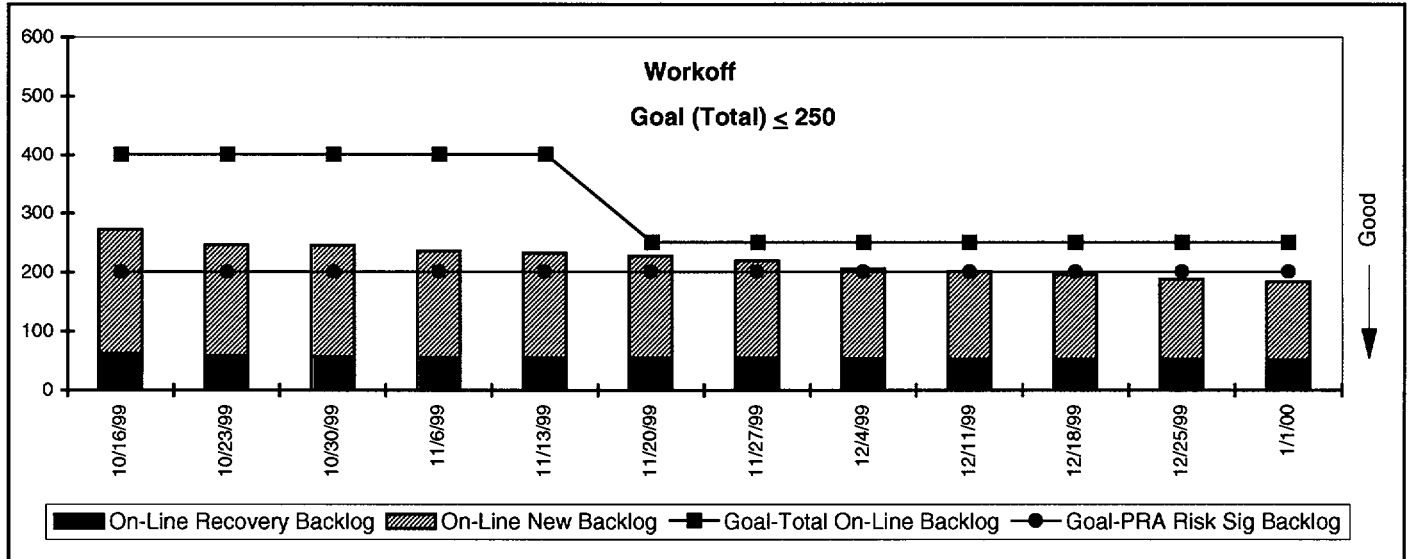
<b>Definition</b>	<b>Analysis/Action</b>
This indicator depicts the total number of open AITTS assignments linked to Deficiency Reports (DRs) resulting from ICAVP Condition Reports (CRs) .	<p>The DR Corrective Action backlog was frozen with the unit's entry into mode 2. The number of assignments has increased slightly due to new assignments being created to facilitate/manage closure of the issues(s).</p> <p>The DR recovery backlog has been reduced by 97% from the initial count of 904 items.</p>

<b>Goal</b>	<b>Comments</b>
The DR Corrective Action backlog will be dispositioned by 3/31/00. Reference NRC Commitment B17690.010.	

# Backlog Management Corrective Maintenance AWOs

## Millstone 3

**Progress:** *Progress is satisfactory*



**Raw Data**

Work Week	9942	9943	9944	9945	9946	9947	9948	9949	9950	9951	9952	9953
Report Date	10/16/99	10/23/99	10/30/99	11/6/99	11/13/99	11/20/99	11/27/99	12/4/99	12/11/99	12/18/99	12/25/99	1/1/00
Total Recovery Backlog	69	65	63	62	62	62	62	61	60	60	59	57
Future Outage Recovery Backlog	6	6	6	6	7	7	7	7	7	7	7	6
On-Line Recovery Backlog	63	59	57	55	55	55	55	54	53	53	53	51
On-Line New Backlog	210	188	189	181	178	173	165	152	148	143	135	133
Total On-Line Backlog	273	247	246	236	233	228	220	206	201	196	188	184
Goal-Total On-Line Backlog	400	400	400	400	400	250	250	250	250	250	250	250
Workoff-Total On-Line Backlog												
PRA Risk Sig Backlog	126	116	115	113	111	109	109	108	108	103	101	101
Goal-PRA Risk Sig Backlog	200	200	200	200	200	200	200	200	200	200	200	200

**Definition**

This indicator depicts the number of on-line Corrective Maintenance (CD and CM type) Automated Work Orders (AWOs), the portion of those associated with Probabilistic Risk Assessment (PRA) risk significant systems, and Corrective Maintenance (CD and CM type) work scheduled in future outage(s). PRA Risk Significant systems are systems required to protect the reactor core or mitigate the consequences of an accident.

Work awaiting post maintenance testing or closure is not included in this KPI. Also excluded are AWOs for support work, such as insulation removal, outage work, and Preventative Maintenance (PM) or Surveillance AWOs, as well as AWOs not associated with power block equipment. All CM work scheduled in future outages does not include support AWOs, PM AWOs or Surveillance AWOs.

**Analysis/Action**

Backlog for PRA risk significant systems is presently 101, meeting the goal of 200. Total backlog is currently 184 meeting the goal of 250. Backlog performance is meeting management expectations.

**Goal**

The goal is ≤ 250 Total On-line CM AWOs per unit. Of these, ≤ 200 will be PRA risk significant AWOs.

**Comments**

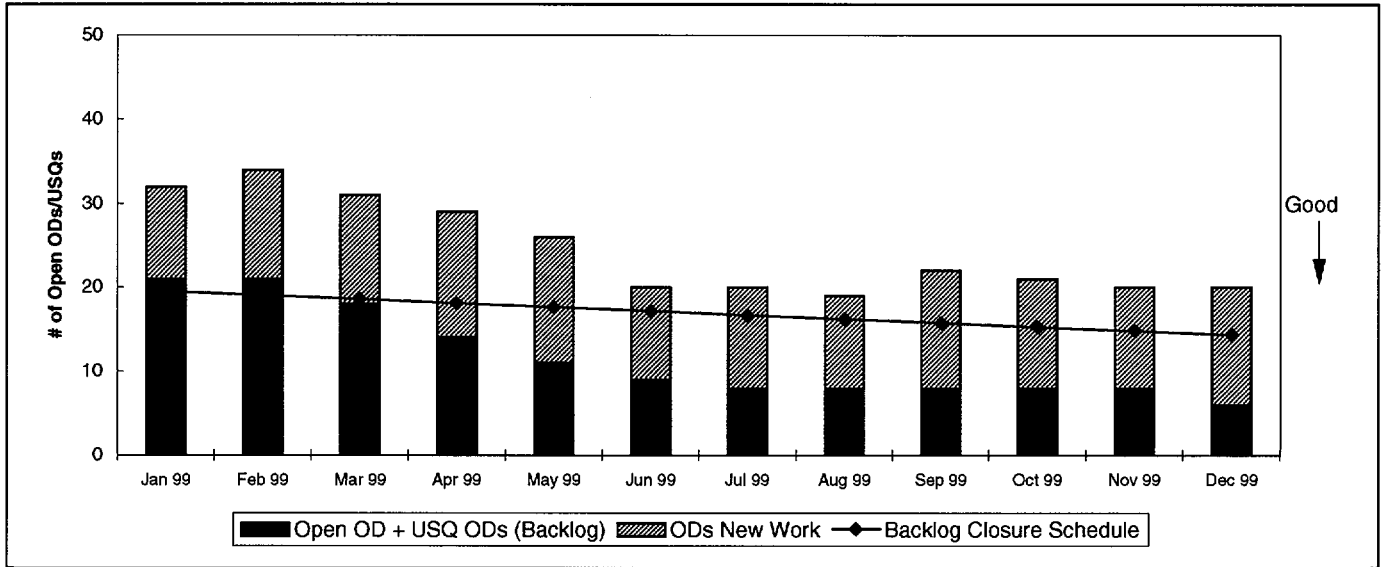
The AWO recovery backlog was frozen at 583 at restart.

# Backlog Management

## Open Operability Determinations

### Millstone Unit 3

**Progress:**     *Performance is satisfactory.*



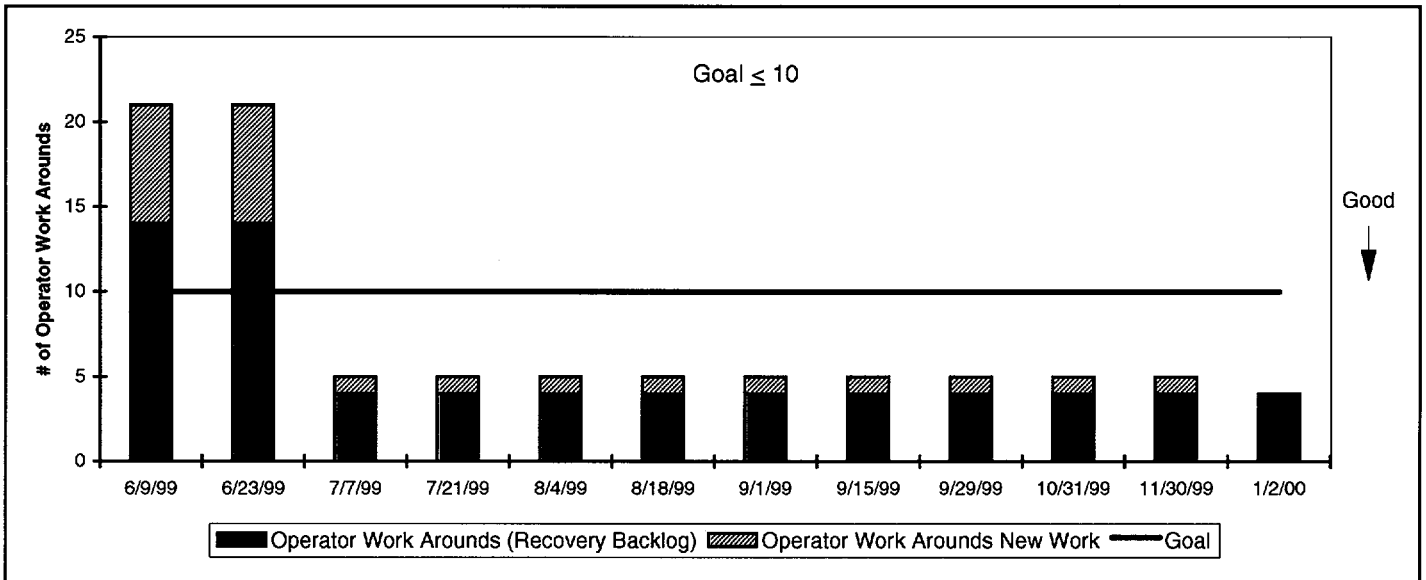
<b>Raw Data</b>												
	Jan 99	Feb 99	Mar 99	Apr 99	May 99	Jun 99	Jul 99	Aug 99	Sep 99	Oct 99	Nov 99	Dec 99
<b>Open OD + USQ ODs (Backlog)</b>	21	21	18	14	11	9	8	8	8	8	8	6
<b>Backlog Closure Schedule</b>	19	19	19	18	18	17	17	16	16	15	15	14
<b>ODs New Work</b>	11	13	13	15	15	11	12	11	14	13	12	14
<b>USQ ODs (Backlog)</b>	6	6	5	3	2	3	2	2	2	2	2	1
<b>ODs Open &lt; 6 Mth.</b>	6	7	6	9	10	9	8	6	8	6	5	7
<b>ODs Open 6 Mth to 1 Yr</b>	26	25	20	13	9	2	4	5	4	6	6	5
<b>ODs Open 1 to 2 Yrs.</b>	0	2	5	7	7	9	8	8	9	9	9	8
<b>ODs Open &gt; 2 Yrs.</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Open ODs</b>	32	34	31	29	26	20	20	19	22	21	20	20

<b>Definition</b>	<b>Analysis/Action</b>
<p>This indicator depicts the number of open Operability Determinations (ODs), and also open ODs with Unreviewed Safety Questions (USQs). Open ODs tied to USQs remain open until approved by NRC.</p> <p>An OD is an evaluation performed on a degraded Structure, System or Component (SSC) to determine if the SSC is able to perform its safety functions. ODs are closed when the degraded condition is restored to fully qualified requirements.</p>	<p><b>Analysis</b></p> <p>There are a total of 20 ODs-two new ODs were opened and two closed resulting in the same total since the last KPI report. The two ODs closed were backlog ODs reducing the number of backlog ODs to 6.</p> <p>OD Backlog reduction is satisfactory. Three backlog ODs were scheduled to be closed in Dec 99 but one requires additional engineering work and is now scheduled to be closed by end of January. However, its revised schedule does not impact meeting the goal to close all backlog ODs by 6/30/02.</p> <p>The current workdown schedule for backlog ODs are as follows:            January 2000 - 1 ( MP3-024-98 )            February 2000 - 1 ( MP3-034-98)            July 2000 - 2 (MP3-081-98 &amp; MP3-003-99)            3R7 - 2 (MP3-070-98 &amp; MP3-071-98)</p>
<b>Goal</b>	<b>Comments</b>
The Open OD Backlog will be dispositioned by June 30, 2002.	



# Backlog Management Operator Work Arounds Millstone 3

**Progress:**     *Performance is satisfactory.*



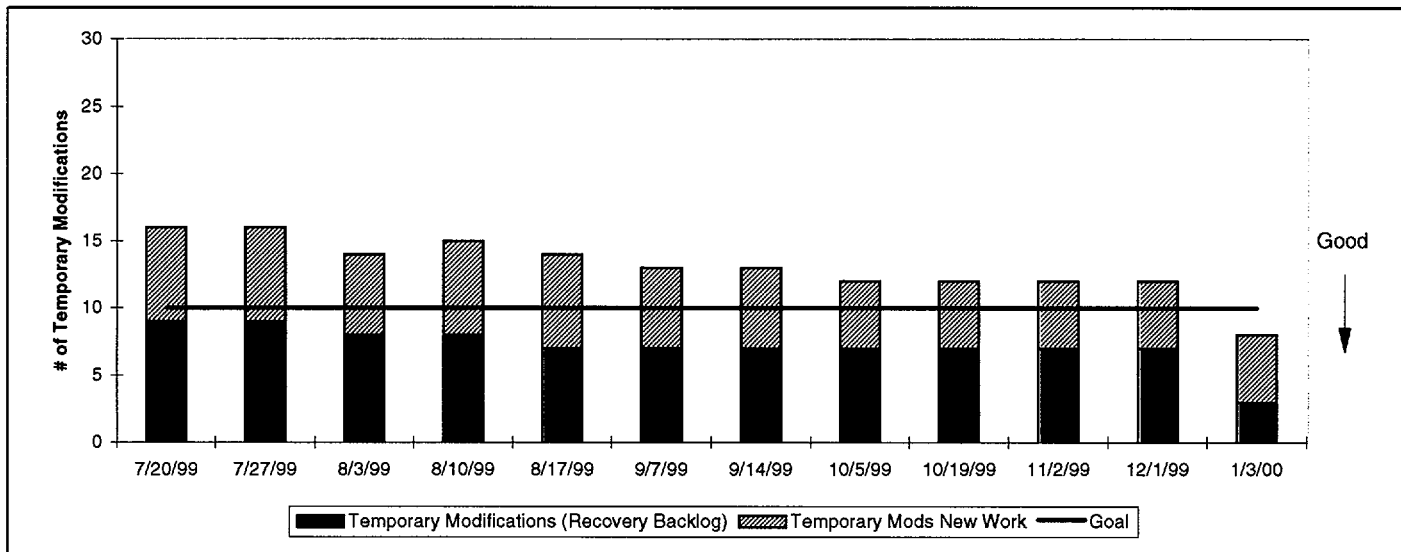
<b>Raw Data</b>												
	6/9/99	6/23/99	7/7/99	7/21/99	8/4/99	8/18/99	9/1/99	9/15/99	9/29/99	10/31/99	11/30/99	1/2/00
<b>Operator Work Arounds (Recovery Backlog)</b>	14	14	4	4	4	4	4	4	4	4	4	4
<b>Operator Work Arounds New Work</b>	7	7	1	1	1	1	1	1	1	1	1	0
<b>Operator Work Arounds &gt; 1 Year in Age</b>	14	14	5	5	5	5	5	5	5	5	5	4

<b>Definition</b>	<b>Analysis/Action</b>
<p>This indicator depicts the number of Operator Work Arounds (OWA) broken down into two categories, deferred and new. Operator Work Arounds (OWA) are conditions which require Operator compensatory actions such that the cumulative impact of those actions could compromise the ability of the normal, on-shift operations staff to monitor the plant or respond to plant transients.</p> <p>Operator Work Arounds have potential to:</p> <ul style="list-style-type: none"> <li>+ Impact safe operation during a plant transient,</li> <li>+ Impose significant burdens during normal operation,</li> <li>+ Create nuisance conditions due to recurring equipment deficiencies,</li> <li>+ Distract operators from noticing recurring conditions.</li> </ul>	<p>Performance is satisfactory.</p>

<b>Goal</b>	<b>Comments</b>
<p>The goal is to have <math>\leq 10</math> OWAs.</p>	

# Backlog Management Temporary Modifications

**Progress:** *Performance is satisfactory.*



**Raw Data**

	7/20/99	7/27/99	8/3/99	8/10/99	8/17/99	9/7/99	9/14/99	10/5/99	10/19/99	11/2/99	12/1/99	1/3/00
Temporary Modifications (Recovery Backlog)	9	9	8	8	7	7	7	7	7	7	7	3
Temporary Mods New Work	7	7	6	7	7	6	6	5	5	5	5	5
Goal	10	10	10	10	10	10	10	10	10	10	10	10

**Definition**

This indicator depicts the total number of Temporary Modifications (TMs) to permanent plant design. These are broken down into two categories, deferred and new. Deferred TMs are those that were in place when MP3 went back on line in July 1998. New TMs refers to those that have been installed since July 1998.

A temporary modification is a modification to the plant that is short-term in nature and not part of the permanent plant design change process.

**Analysis/Action**

Performance is satisfactory.

There are 8 total TMs presently installed at MP3. There was a net reduction of 4 TMs since the last reporting period (actually 5 TMs were removed but one additional TM has been installed leaving a net reduction of 4).

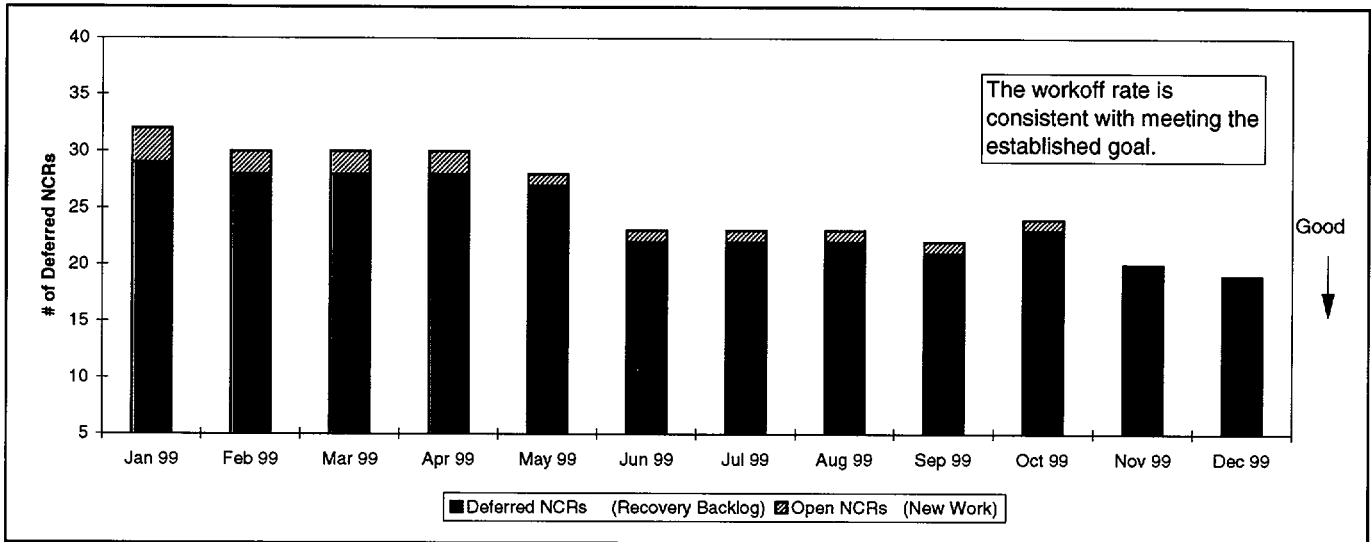
**Goal**

The goal is to have  $\leq 10$  TMs.

**Comments**

# Backlog Management NCRs

**Progress:** *Performance is satisfactory*



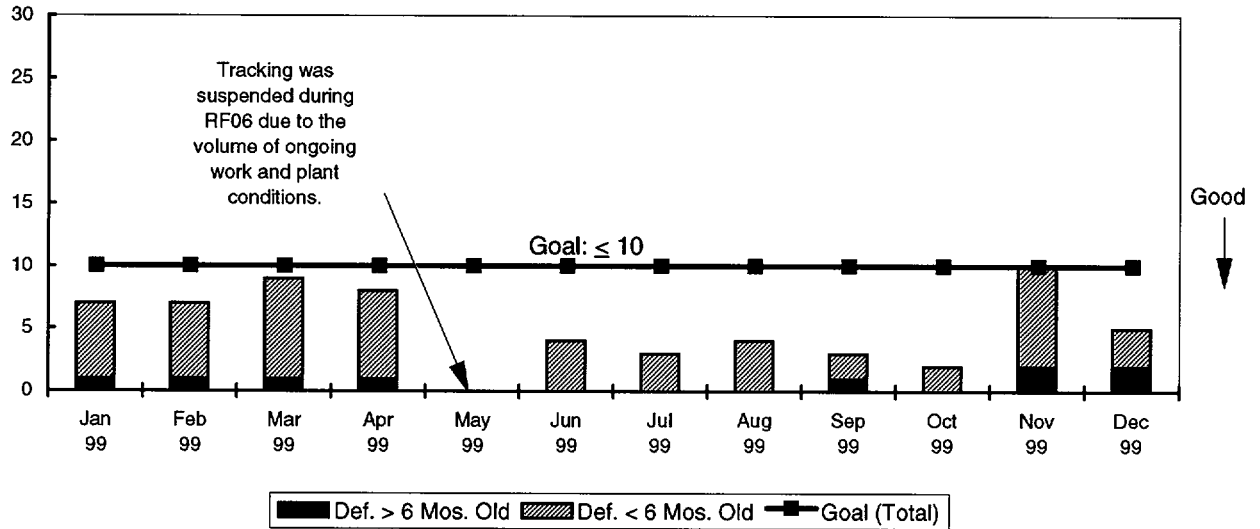
<b>Raw Data</b>												
	Jan 99	Feb 99	Mar 99	Apr 99	May 99	Jun 99	Jul 99	Aug 99	Sep 99	Oct 99	Nov 99	Dec 99
Deferred NCRs (Recovery Backlog)	29	28	28	28	27	22	22	22	21	23	20	19
Open NCRs (New Work)	3	2	2	2	1	1	1	1	1	1	0	0
Overdue NCR Assignments	0	0	0	0	0	0	0	0	0	0	3	0

<b>Definition</b>	<b>Analysis/Action</b>
<p>This indicator depicts the number of open dispositioned Non-conformance Reports (NCRs) that have been determined by Engineering to be deferrable as well as new NCRs. Overdue NCR Assignments: number of NCR tracking assignments past their completion due date.</p>	<p>The open NCRs will be superceded by new CRED dispositions. This will be completed in the first quarter of 2000. The backlog reduction goal is tracked in aggregate by the MP3 Engineering Backlog Management Performance Indicator.</p>

<b>Goal</b>	<b>Comments</b>
<p>The NCR backlog will be dispositioned by 6/30/02.</p>	<p>On 9/15/98 Revision 7 of RP4 (Corrective Action Program) enveloped the NCR process so that no new NCRs will be generated on field conditions as they will be handled under the CR Process.</p>

# Backlog Management Control Room Panel Deficiencies

**Progress:** *Performance is satisfactory.*



**Raw Data**

	Jan 99	Feb 99	Mar 99	Apr 99	May 99	Jun 99	Jul 99	Aug 99	Sep 99	Oct 99	Nov 99	Dec 99
<b>Def. &gt; 6 Mos. Old</b>	1	1	1	1	*	0	0	0	1	0	2	2
<b>Def. &lt; 6 Mos. Old</b>	6	6	8	7	*	4	3	4	2	2	8	3
<b>Goal (Total)</b>	10	10	10	10	10	10	10	10	10	10	10	10

**Definition**

This indicator depicts the number of Control Room Panel (CRP) Deficiencies.

Control panel and annunciator deficiencies are control room instruments, recorders, indicators, and annunciators that function improperly and could challenge the ability of operators to monitor and control plant conditions.

**Analysis/Action**

Performance is satisfactory. There are no recovery backlog items remaining (recovery backlog completed 4/99).

\* Tracking was suspended during RF06 due to the volume of ongoing work and plant conditions.

**Goals**

The goal is to have  $\leq 10$  CRP deficiencies open.

**Comments**

Repairs that are complete, but awaiting documentation close-out or retest under specific plant conditions are not included in the total.