June 13, 2000

Ę

*

TO:	Bill McCollum	Bill Foster	Jeff Forbes
	Ron Martin	Mano Nazar	Bentley Jones
	Jim Sites	Anthony Rose	Tim Pettit
	Mike Tuckman	NRC Resident	Luis Reyes
	Linda Conley	David Derrick	Cecil Turner
	Penny Goebel	Jim Morris	Michael Bolch
	Fredda Shaw	Ron Sparks	Clay Little
	Tom Curtis	Glenda Johns	Dean Hubbard
	Lenny Azzarello	Lanny Wilkie	Jim Twiggs
	Bryon Norris	Bob Medlin	Charlie Boyd
	Tom Coutu	Linda Smith (EC05)	P) + 6 copies

Oconee Nuclear Performance Measures Report SUBJECT:

Tommy Hartis FROM:

Attached please find the May, 2000 Oconee Nuclear Performance Measures Report.

Please let me know if you have questions, concerns, need additional information or need additional copies of the report.

/sy

xc: ONS Business Mgt. File

Oconee Nuclear Station Performance Measures Report

May 2000

Compiled and Published by: Oconee Site Business Management Group

Contacts:

Tommy Hartis (TEH9450) 885-4694 Linda Turpin (LDT8274) 885-5190

Indicators of Success • Top Quartile in Nuclear Safety as

- Top Quartile in Nuclear Safety as measured by NRC and INPO
- Top Quartile in Capacity Factor
- Top 10 in Production Cost
- Top Decile in Industrial Safety



SELF

ASSESSMENT

(FOSTER)

HUMAN

PERFORMANCE

(MCCOLLUM)

ONS Performance Measures May 2000

Corporate Measures



Competitive Positioning



Other Performance Data

•	WORK PROCESS MEASURES	(Boyd)	pg 28
-	MOD. EFFECTIVENESS	(Hubbard)	pg 29
-	ENGR. WORK MGMT.	(Edge)	pg 30



OCONEE IMPROVEMENT FOCUS AREAS

SYSTEM EQUIPMENT RELIABILITY (NAZAR)	OPERATIONAL FOCUS (FORBES)
---	----------------------------------



Production

DESIGN

BASIS

(NAZAR)



Other Performance Data

- PRODUCTION HISTORY - FOURPMENT RELIABILITY	(Forbes) (Curtis)	pg 19 pg 20
- RISK ASSESSMENT	(Nazar)	pg 21
- OUTAGE IMPROVEMENT	(Boyd)	pg 22

ONS Improvement Plan Focus Area Annunciator Panel

May 2000



Oconee Nuclear Station 2000 Site Incentive Goals



Oconee Nuclear Station 2000 Site Incentive Goals





Oconee Nuclear Site NRC Performance Indicators Annunciator Panel

1Quarter 2000

	1Quarter 2000	and the second		11-22.0
#	NRC Performance Indicator	Unit 1	Unit 2	Unit 3
	Initiating Events:			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
IE-1	Unplanned Scrams Per 7000 Critical Hours			
	(automatic & manual during previous 4 quarters)			
لــــــا	White > 3.0 Yellow > 6.0 Red > 25.0			
IE-2	Scrams with a Loss of Normal Heat Removal			
l I	White > 2 Yellow > 10 Red > 20			
	Unplanned Power Reductions (Transients) per 7000 Critical Hours			
J	(over previous 4 guarters)			
	White > 6.0			
	Mitigating Systems:			
MS-1	Safety System Unavailability (SSU) - Emergency Power	1.8%		2-2%
	(average of previous 12 Quarters)			
	Threshold values are still being developed for Keowee.			
MS-2	Safety System Unavailability (SSU) - High Pressure Safety Injection			
	(average of previous 12 Quarters)			
110.0	Cofety System Inavailability (SCI) - Auviliany Facturator			
MQ-3	Vaverage of previous 12 Quarters)			
	White > 2.0 Yellow > 6.0 Red > 12.0			
MS-4	Safety System Unavailability (SSU) - Residual Heat Removal			
	(average of previous 12 Quarters)			
	White > 1.5 Yellow > 5.0 Red > 10.0			
MS-5	Safety System Functional Failures			
1	'(over previous 4 Quarters)			
<u> </u>	Barrier Integrity:			
BI-1	Reactor Coolant System (RCS) Specific Activity			
1	White > 50.0 Yellow > 100.0			
BI-2	RCS Identified Leak Rate			
1	'(maximum monthly values, % of Tech. Spec. Limit, during previous 4 Qtrs.)			
	White > 50.0 Yellow > 100.0		and capital on	and the process of the second s
	Emergency Preparedness:		The state of the s	an a
EP-1	Drill/Exercise Performance			
1	(over previous 8 Qtrs.)			
	Virile < 50.0 Tellow < 70.0			
EP-2	KO Drill Participation (% of Key EKO personnel that participated in a			
	White < 80.0 Yellow < 60.0			
EP-3	Alert & Notification System Reliability			
1	(% reliability during previous 4 quarters)			
	White < 94.0 Yellow < 90.0			
	Occupational Radiation Safety:			
OR-1	Occupational Exposure Control Effectiveness			
1	(occurrences during previous 12 Qtrs.)			
┣—	Public Radiation Safatur			· · · · · · · · · · · · · · · · · · ·
PP-1	RETS/ODCM Radiological Effluent Occurrence			
1	(occurrences during previous 4 Qtrs.)			
1	White > 1 Yellow > 3			
	Physical Protection:			
PP-1	Protected Area Security Equipment Performance Index			
1	(over a 4 quarter period)			
00.0	Ivville > 0.000			
1 ²	(reportable events during previous 4 Qtrs.)			
1	White > 2 Yellow > 5			
PP-3	Fitness-For-Duty (FFD)/Personnel Reliability Program Performance			
	(reportable events during previous 4 Qtrs.)			
	White > 2 Yellow > 5			

Increased Regulatory Response Required Regulatory Response

Nuclear Safety **INPO RATING**





The INPO rating is determined through INPO's Evaluation and Assistance (E&A) program. These evaluations, performed every 12 - 24 months assess performance in eight areas: Organization and Administration, Operations, Maintenance, Engineering Support Training and Qualification, Radiation Protection, Chemistry and Operating Experience. These evaluations assess performance of personnel, systems, components, programs/procedures and management effectiveness.

2000 MEASURES SUCCESS CRITERIA:

GREEN:	INPO rating = 2.0
RED:	INPO rating ≥ 3.0

CURRENT MONTH STATUS:

Oconee did not receive an INPO evaluation in 1999. The measure is RED based on our last review completed in October, 1998. This review resulted in a 3.0 (poor) rating. This followed a 2.0 (adequate) rating in 1996. Our 2000 INPÔ evaluation is scheduled **RED**: to take place August 21 - September 1, with the exit scheduled for October 4th.

Nuclear Safety PERFORMANCE INDICATOR INDEX







ក់



ώ



<u>Definition:</u> The number of unplanned automatic scrams that occur per 7,000 hours of critical operation.

<u>Assumptions:</u> Trips were set at 3 for Target .

<u>Unit 1 Notes:</u>	<u>Itipa YID</u> 0	<u>Critical Hours YTD</u> 2521.5	Inter History
<u>Unit 2 Notes:</u>	<u>Iritəs YTD</u> 0	Critical Hours YTD 2903.0	1996 Unit 1 - 2/28/96 Trip due to anticipatory reactor trip on loss of main feedwater Unit 3 - 3/16/96 Loss of Main Feedwater
<u>Unit 3 Notes:</u>	<u>QIY eqini</u> 0	Critical Hours YID 2445.4	1997 Unit 3 - 3/20/97 Pinched wire in connector shorted out.
Data Source ; Al C M Misenheim Data Source ; Ci R A Williams, 38: <u>Contact</u> R H Andemon,	<u>uto Tripa</u> er, 382-6751 <u>ritical Houra</u> 2-5346 382-3817		1998 Unit 2 - 11/3/98 damaged cable during fire stop work. Unit 3 - 12/31/98 broken wire associated with CRD fuse. 1999 Unit 2 - 2/28 main turbine control valves closed quickly causing a reactor trip due to high reactor coolant pressure Unit 2 - 6/19 electrical ground that gave a high water level in the MSR's. Unit 1 - 7/7 loss of aux feedwater. Unit 1 - 8/18 due to control rod group five drop. Unit 2 - 12/21 ground on intercept valve Unit 2 - 12/24 ground on intercept valve



∹ ຄ



V - 6











The total external whole-body dose received by all personnel (including contractors and visitors) coming on site during a time period.

<u>Data Source</u> JR Fox, 382-4376	
Contact RH Anderson, 382-3817	

	History	Per Unit
ontact H Anderson, 382-3817	1997	74.2
	1998	122.0
	1999	67.3

Notes:

V - 11



Definition

The Performance Indicator Index is a measure of overall performance. It is calculated using a weighted combination of the ten performance indicator values and has a range from 0 to 100. A higher index generally represents better overall performance. NOTE: INDUSTRY MEDIAN WILL BE UPDATED QUARTERLY AND WILL LAG BY A QUARTER.

	Individual	Indicator w	ith Index l	ess than 92	2		
Indicators	ONS1	ONS2	ONS3	MNS1	MNS2	CNS1	CNS2 82.19
Unplanned Capability Loss Factor Safety System Performance:	53.24	69.86	70.76	90.35		67.53	41.65
Auxiliary Feedwater Emergency AC Power	85.78	85.78 62.57	85.78	90.24	90.24	81.72	91.77 81.72
Collective Radiation Exposure Fuel Reliability		02.01					
Thermal Performance Chemistry Industrial Safety Accident Rate							

April, 2000	
ONS	91.95
MNS	
CNS	90.60
SYS	The second

4Q99 Industry Median - 91.0



ll - 2a



II - 2b



, 20

Nuclear Safety PERFORMANCE INDICATOR INDEX

DEFINITION:

The Performance Indicator Index is a weighted summation of scaled indicator point values based on the following 11 factors INPO has identified for safe and successful plant operation:

Unit Capability Factor - 2 year average Unplanned Capability Loss Factor - 2 year average Unplanned Automatic Scrams per 7000 hours of Reactor Critical Operation - 2 year average HPI Safety Injection System Unavailability - 2 year average Emergency Feedwater System Unavailability - 2 year average Emergency AC Power System Unavailability - 2 year average Thermal Performance - 1 year average Fuel Reliability - 3 month average Chemistry Index - 1 year average Collective Radiation Exposure - 2 year average person rem/per unit Industrial Safety Accident Rate - 1 year average rate per 200,000 work hours

2000 MEASURES SUCCESS CRITERIA:

GREEN:Index Value ≥ 92.0 (Target Incentive Performance)YELLOW:Index Value ≥ 89.0 (Minimum Incentive Performance)RED:Index Value < 89.0

CURRENT MONTH STATUS: GREEN

Unit 1: 91.62 Unit 2: 90.55 Unit 3: 93.67 ONS Total: 91.95

MNS Total: 97.93 CNS Total: 90.60 SYSTEM Total: 93.27 INDUSTRY Median: 91.0

NOTE: - Measure is typically reported one month behind due to data gathering requirements.

Nuclear Safety NUCLEAR SYSTEM EVENTS



Date Unit Description of Event 1/3/00 Urit 3 Urit 3 Automatic Trip after manual main turbine trip due to instrument failure (NAS) 3/9/00 1,2,3 Loss of Control Room Chilled Water (3 NSFs - 1 per unit)

જેશનું છે. ગામને આપ્યું છે. ગામને

Nuclear Safety NUCLEAR SYSTEM EVENTS (cont'd)

McGUIRE Date

5/25,00

<u>Unit</u> Unit 1 Description Automatic Reactor Trip (NAS)

<u>CATAWBA</u>		
Date	Unit	Description of Event
2/13/00	Unit 1	Unit 1 Reactor Trip Caused by turbine trip (NAS)
2/29/00	Unit 2	2B D/G Breaker Failure (NSF)
5,00	Unit 2	Safety System Failure (NSF)

Nuclear Safety NUCLEAR SYSTEM EVENTS

DEFINITION:

Combined events for ONS, MNS and CNS defined as follows

NRC - Automatic SCRAMs while critical, Safety System Actuation's, Safety System Failures and Significant Events,

INPO - Significant Events

DUKE - Precursor Events, Significant Shutdown Events and LERs due to Personnel Error.

2000 MEASURES SUCCESS CRITERIA:

- YTD Actual and 3-month trend indicate Target (≤ 25 events) is likely to be achieved. GREEN:
- YTD Actual and 3-month trend indicate $Minimum (\leq 35 \text{ events})$ is likely to be achieved. YELLOW:
- YTD Actual and 3-month trend indicate Minimum is unlikely to be achieved (> 35 events). RED:

CURRENT MONTH STATUS

Duke's nuclear system recorded 2 new events in May bringing the system total to 8 YTD compared to the target of 10. GREEN:

Nuclear Safety NUCLEAR SAFETY INDEX

(GREEN)



ONS UNIT 1 DATA SHEET

	Range		
Parameter	(0-100)	Weight	2000 YTD Actuals
Reactor Trips	40-00	20%	0
Precursors	10-10	25%	Õ
SSE	10-00	25%	0
HP Injection	.030045	10%	0,00671
Aux. Feedwir.	.040045	10%	0.00542
Emer. AC Pwr.	.050045	10%	0.0192
Index Value			97.70

ONS UNIT 2 DATA SHEET

	Range		
Parameter	<u>(0-100</u>	Weight	2000 YTD Actuals
Reactor Trips	40-00	20%	0
Precursors	10-10	25 %	Ō
SSE	10-00	25%	Ő
HP Injection	.030045	10%	00417
Aux. Feedwir.	.040045	10%	0.00362
Emer. AC Pwr.	.05~.0045	10%	0.0192
Index Value			97.70

ONS UNIT 3 DATA SHEET

	Range		
Parameter	<u>(0-100</u>	Weight	2000 YTD Actuals
Reactor Trips	40-00	20%	1
Precursors	10-10	25%	Ô
SSE	1.0-0.0	25%	0
HP Injection	.030045	10%	0 Magao
Aux. Feedwir.	.040045	10%	00015
Emer. AC Pwr.	.050045	10%	0.0192
Index Value			81.98

Nuclear Safety NUCLEAR SAFETY INDEX

DEFINITION:

The Nuclear Safety Index is a weighted index designed to objectively track the performance of each individual nuclear unit. The objective is to focus on those aspects of plant operation which directly relate to the prevention of significant plant incidents related to Nuclear Safety and maintain a high level of readiness to mitigate plant accidents.

The index is calculated by obtaining the number of reactor trips requiring a scram, accident precursor events, significant shutdown events, and the safety system unavailability per unit. For each of these parameters, the range of the scoring index is selected to represent the expected span of the parameter. The scoring index is calculated for each parameter and multiplied by a weighting factor since the parameters do not all have the same nuclear safety significance. The sum of these weighted indexes for each parameter becomes the total unit Nuclear Safety Index.

2000 MEASURES SUCCESS CRITERIA:

GREEN:Nuclear Safety Index greater than or equal to 92.00%YELLOW:Not applicableRED:Nuclear Safety Index less than 92.00%

CURRENT MONTH STATUS

<u>GREEN:</u> Through May, the Oconee site (93.7) is meeting the target (92.0). Individually, Unit 1 (97.7) has had no events. Unit Unit 2 (97.7) has had no events. Unit 3 (85.7) had a reactor trip in January. Keowee unavailability greater than 1.0% has reduced the score of each unit and is broken down as follows:

In January, KHU-1 was unavailable for 8.9 hours due to PMs and KHU-2 was unavailable for 34.0 hours (5.0 unplanned) due to ACB-2 work. In February, KHU-1 was unavailable for 17.8 hours due to change out of CX transformer taps. In March KHU-1 (24.2 hours) and KHU-2 (11.6 hours) were unavailable due to planned quarterly maintenance and mod work. And finally in April, KHU-1 had 8.9 planned unavailable hours due to Main Transformer PMs and KHU-2 had 2.3 planned unavailable hours due to Main Transformer emulsifier testing.

Nuclear Safety INDUSTRIAL SAFETY INDEX





Nuclear Safety INDUSTRIAL SAFETY INDEX

DEFINITION:

The Industrial Safety Index is measured at the site level and is calculated as follows

(Total Severity Rate + OSHA Recordable Case Rate) /2 where:

Severity Rate = [{ Lost Work Days + (Restricted Work Days x 0.33) + (Fatalities x 6000)} x 200,000] /Total Cumulative Work Hours OSHA Case Rate = (Total Cases x 200,000) /Total Cum Work Hours

2000 MEASURES SUCCESS CRITERIA:

- Safety Index under target with no adverse trends indicated. GREEN:
- Safety Index under target but trend indicates year-end achievement in doubt OR YELLOW:
- Safety Index over target but trend indicates year-end goal is recoverable.
- Safety Index over target and year-end goal is unrecoverable or unlikely to be achieved. RED:

CURRENT MONTH STATUS:

GREEN - ONS has 3 recordables YTD May.

Nuclear Safety RADIATION EXPOSURE

.







Nuclear Safety **RADIATION EXPOSURE**

Actual whole-body EFPD (TEDE) received by all personnel at ONS in 2000 (including contractors and visitors) .. The 2000 goal is 235 rem.

2000 MEASURES SUCCESS CRITERIA:

- Dose under YTD goal with no adverse trends indicated. GREEN:
- Dose under YTD goal but trend indicates year-end goal in doubt OR YELLOW:
- Dose over YTD goal but trend indicates year-end goal recoverable.
- Dose trending over YTD goal with year-end goal unrecoverable or unlikely to be achieved. RED:

NOTE: Site RP, in setting the 2000 dose goals assumed non-outage dose as linear throughout the year. In actuality, the monthly dose goal will be periodically adjusted to reflect movement of significant non-outge dose jobs from month-to-month.

CURRENT MONTH STATUS GREEN

Total site exposure for May was 47.256 rem. The estimate for May was 64.759 rem.

The Unit 3 EOC-18 Refueling Outage was completed in May with a total electronic dosimeter recorded exposure of 108 rem - the lowest exposure EVER for Unit 3. This beat the long-standing record established in 1977 by 12 rem.

Total exposure for year-to-date is 132.6 rem out of an estimate for this period of 139.6 rem. Unit 3's recent success in meeting or "besting" all outage goals brought Oconee back into Site Measures "Green".

Contaminated areas of the plant decreased after U3's refueling outage to 2,856 sq. ft.

Source Term Reduction Status: Reduced by four from the previous month, the present number of posted hot spots is 39.

Oconee's INPO standing is 93.6 rem/init thru May. INPO First Quartile ("Best") is 86 rem/init. (Information from INPO is thru the first quarter, 2000.

Nuclear Safety RADIATION RELEASES



(GREEN)



Nuclear Safety RADIATION RELEASES

DEFINITION:

Radiation Releases is a measure of the exposure (mem) received by the public ("Maximum Exposed Individual") as a result of gaseous and liquid radioactive releases made from the plant due to routine operations. It is imperative that we keep this specific measure and results in front of us to ensure optimum performance. Exposure to the public is a critical item. Oconee's annual goal is 9 mem which equates to 5% of the Total Annual (ALARA) Exposure Limit to the public as defined in 10CFR50 Appendix I.

2000 MEASURES SUCCESS CRITERIA:

 GREEN:
 Radiation releases less than YTD goal with no adverse trends noted

 YELLOW:
 Radiation releases exceed YTD goal but trend indicates year-end goal achievable **OR**

 less than YTD goal but trend indicates year-end goal is in doubt.

 RED:
 Radiation releases exceed YTD goal and year-end goal appears unrecoverable or unlikely to be achieved.

CURRENT MONTH STATUS

GREEN : YTD Radiation Releases total 260E-01 mrem, well below our year end goal of 9 mrem. The YTD total dose is comprised of the following:

Liquid Total Body Dose:1.00E-01 mremLiquid Max Organ Dose:1.46E-01 mremGas Air Gamma Dose:1.41E-04 mradGas Air Beta Dose:4.72E-04 mradGas Max Organ Dose:1.34E-02 mrem

Nuclear Safety REACTOR CORE SAFETY





Nuclear Safety REACTOR CORE SAFETY

DEFINITION: The Reactor Core Safety measure is based on the desire to make use of risk-informed decision making to the extent reasonable and practical in the safe and reliable operations of the nuclear power plants. The intent is to avoid accidents of concern and to maintain high readiness of safety systems and operator response capability, thereby achieving a high level of safety margin with respect to potential accidents resulting in core damage.

Proper planning of equipment and unit outages, integrated safety assessments by the ORAM-SENTINEL tool, recognizing and minimizing operation at high risk conditions, and appropriately balancing outage and image work are considered to be the key elements of operational strategy to maintain the desired level of core damage safety margin.

A value for each individual reactor unit based on that unit's average baseline core damage frequency (excluding seismic events) will be used as the target value, considering both at power and shutdown conditions. This goal results in a very high safety margin (less than one chance in 10,000) of core damage accidents of concern and permits prudent actions to maintain power production capability and risk management.

Using the ORAM-SENTINEL tool, the core damage risk profile of each reactor unit will be evaluated based on actual out of service hours of the vital plant equipment. Calculations will be performed for both image conditions and shutdown conditions to capture the total core damage risk. In addition to the ORAM-SENTINEL values of the core damage risk profile, any contribution from a core damage precursor event will be added to obtain the total risk value.

The Reactor Core Safety measure for each unit will be computed as the total of: <u>Image</u> Core Damage Probability (excl. seismic) + <u>Outage</u> Core Damage Probability + <u>Precursor</u> Core Damage Probability The year-to-date values will be compiled and reported on a monthly basis.

2000 MEASURES SUCCESS CRITERIA:

GREEN:Core Damage Probability < 6.0E-5 (6/100,000) per year.YELLOW:Core Damage Probability $\geq 6.0E-5$ and $\leq 7.5E-5$ per year

RED: Core Damage Probability > 7.5E-5 (7.5/100,000) per year

CURRENT STATUS: GREEN

Unit 1: 5.52E-05 Unit 2: 5.59E-05 Unit 3: 5.62E-05
Nuclear Safety ENVIRONMENTAL INDEX







Nuclear Safety ENVIRONMENTAL INDEX

DEFINITION:

Environmental Performance is evaluated based on seven success measures of minimized impact to the environment due to plant operations.

1999 MEASURES SUCCESS CRITERIA:

≥5 of 6 Measures on target GREEN: \geq 4 of 6 Measures on target YELLOW: < 4 of 6 measures on target RED:

CURRENT MONTH STATUS

All Environmental Index sub-measures are on target YTD Mayl. GREEN:

OVERALL CRITERIA	GREEN	TELLOW	RED	ACTUAL
Sub-Measures On Target	≥ 5	≥ 4	< 4	6-Green
SUB-MEASURES	CRITE	CRIA	ACTUAL	ON/OFF
Environmental Fines	0 Fines		0	ON
Hazardous Waste Generation	< 12,6171	×8.	2,136 lbs	ON
Environmental Incidents	≤ 1 per ye	er	0	ON
Environmental Assessment Score	90-95%		98.9	ON
Assessment Process Rating	Rating of 1	Lor 2	2	ON
Environmental Events	< 10 per y	car.	0	ON
YTD Near Misses	2000 Tren	ding Only	55	NA

Nuclear Safety HUMAN PERFORMANCE INDEX





Nuclear Safety HUMAN PERFORMANCE INDEX

DEFINITION:

The Human Performance index is a weighted summation of point values for the following factors:

- -- Site Culture Index (conducted annually)
- -- No. of Human Performance LERs 4 Qtr. rolling average
- -- Ratio of LSEs vs. MSEs Human Performance PIPs 4 Qtr. rolling average

2000 MEASURES SUCCESS CRITERIA:

Overall Measure = (Site Culture Index points x .20) + (H.P. LER points x .40) + (LSE/MSE PIP points x .40)

SUB- MEASURES	SITE CULTURE INDEX (20% of total weight)	HUMAN PERFORMANCE LERs (40% of total weight)	LSE vs. MSE HP PIPs (40% of total weight) Goal: 25 :1 ratio	
2 points 1 point	Goal: 14.5 by 12/31/99 > 14.5 > 13.5 < 13.5	≤ 0.50 ≤ 1.50 > 1.50	> 25 :1 > 20 :1 < 20 :1	

CURRENT QUARTER STATUS:

	Actual	Points		Weight	<u>t</u>	Index
Site Culture Index	13.80	1 point	х	.20	=	0.20
	.25	2 point	х	.40	=	0.80
I SE vs. MSE PIP Ratio	30:1	2 point	х	.40	=	0.80
LOE IVINO						

CURRENT INDEX = 1.80

Red: < 0.95 pts.

Nuclear Safety CONFIGURATION MGMT. HEALTH



Document PIPs - MSE/LSE Ratio Missed Tech Spec Surveillance 12 month rolling average 12 month rolling average 4.00% 0.5 3.50% 0.4 3.00% 2.50% 0.3 2.00% 0.2 1.50% 1.00% 0.1 0.50% 0.00% 0.0 May-Jun-Jul-Aug-May-Jun-Jul-Aug-Sep-Sep-Oct-Nov-Oct-Nov-Dec-Jan-Feb-Mar-Dec-Jan- Feb-Apr- May-Mar- Apr- May-99 99 99 99 99 99 99 99 99 99 99 99 99 99 99 99 00 00 00 00 00 00 00 00 00 00 Mispositions Temporary Mods Outstanding 12 month rolling average end of month totals 3 7 40 35 30 2 25 20 15 1 10 5 ٥ 0 May-Jun-Jul-Aug- Sep-Oct- Nov- Dec- Jan- Feb-May. Jun- Jul-99 Aug- Sep-Oct-Nov- Dec-Jan-Feb. Mar-Apr-May-Mar-Apr-May-99 99 99 99 99 99 99 99 99 99 99 99 99 99 99 00 00 00 00 00 00 00 00 00 00

Nuclear Safety CONFIGURATION MGMT. HEALTH

DEFINITIONS:

Configuration Management is evaluated based on four (4) sub-measures

- Document Related PIPs Ratio of MSEs to LSEs Number of MSE PIPs divided by number of LSE PIPs with event codes D (Document Issues).
- Number of Missed Tech Spec Surveillances (PIPs) PIPS with Event Code A4, A4a, A4b and A4c (not necessarily listed as Primary event code - MSE only
- Number of Mispos PIPs with Event Code J (excluding the near misses).
- Temporary Mods Outstanding Number of Temporary Mods outstanding (snapshot at end of month).

2000 MEASURES SUCCESS CRITERIA:

GREEN: \geq 6 sub-measure pointsYELLOW:3 - 5 sub-measure pointsRED:< 3 sub-measure points</td>

CURRENT MONTH STATUS GREEN

	Configuration	Management Ind	lex	for period	d ending:	May-00
CRITERIA	GREEN (2 points)	YELLOW	RED House	Actual	POINTS	Color
Document Related PIPs - MSE/LSE ratio	< 1.25 %	1.25% - 2.5%	> 2.5 %	1.13%	2	411.181-123ge
Number of Missed Tech Spec Surveillances (PIPs)	< 0.1	0.1 - 0.2	> 0.2	0.1	2	e Bornorie
Number of Mispos	< 1.33 per month (cumulative)	1.33-2.67 per month (cumulative)	>2.67 per month (cumulative)	1.0	2	nter tura. L
Temporary Mods Outstanding	< 15	15-25	> 25	9	2	n Alter warden alter Alter warden alter a
TOTAL		3 - 5	<3		8	la diperta
			CMI			



SELF ASSESSMENT PROCRAM (YELLOW)



Nuclear Safety SELF ASSESSMENT PROGRAM

MAY 2000

CRITERIA	POSSIBLE SCORE	MONTH ACTUAL	MONTH STATUS	YTD AVG.	ON OFF TARGET
GUALITY MEASURE: Appropriate Assessment Topic Scope Assessment Plan Documentation/Results Appropriate Findings/Conective Actions	20 points 15 points 40 points 25 points	20 13 40 25	Green Green Green Green	18 12 39 22	ON OFF ON ON
Total QUALITY	100 points	98	GREEN	91	ON
RESOURCE MEASURE: Level 1 and 2 Group Assessments MOP SRG Level 1 (2) Assessments G.O. Level 2 (3) Assessments Site-Wide Benchmarking	25 points 25 points 25 points 15 points 10 points	0 0 25 15 10	Red Red Green Green Green	14 3 24 11 6	OFF OFF ON OFF OFF
Total RESOURCE	100 points	50	RED	58	OFF
EFFECTIVENESS MEASURE: INPO Identified Significant Event (SER or SOER) for the Site Level 1 MSE PIPs Discovered During the Month Acceptance of Assessment Conective Actions Assigned 3 Months Ago	Threshold 50 points 50 points	0 50 50	Green Green Green	0 50 50	ON ON ON
Total EFFECTIVENESS	100 points	100	GREEN	100	ON
TOTAL SELF ASSESSMENT	300 points	248	YELLOW	249	OFF

Nuclear Safety SELF ASSESSMENT PROGRAM

DEFINITION:

The Self Assessment Program measure is evaluated in three parts: (1) a <u>Quality Measure</u> -- how good are our assessments, are we looking at the right things, getting good results and identifying appropriate connective actions. (2) a <u>Resource Measure</u> -- are we doing enough Assessments, Manager Observations, SRG, and NAID activities and benchmarking to identify and improve on our short comings, and (3) an <u>Effectiveness Measure</u> -- are we preventing events, are the connective actions identified in assessments being accepted by the appropriate groups.

Quality Measure (100 possible points): NOTE: All Group Assessments and MOPs will be averaged to determine the monthly total.

Appropriate Assessment Well-defined Plan, Purpose, Scope, Coursilance with NSD 977	 Meets NSD 607 guidance = 20 points; Does not meet NSD 607 guidance = 0 points, OEP driven = 5 bonus points. Detailed Plan, Concise Purpose, & Scope, and followed NSD 607 = 15 points; Marginal Plan, Purpose, & Scope, and Followed NSD 607 =
Compliance with NSD 607	= 10 points; No Plan, Vague Purpose and Scope, and Partial Compliance With NSD 607 = 5 points; No Plan, Purpose, and Scope, and No Compliance With NSD 607 = 0 points.
Documentation and Results	 Clear and Concise Document With All Objectives Met = 40 points; Vague and Confusing Document With Some Objectives Met = 20 points; Poorty Written Document With No Objectives Met = 0 points;
Appropriate Findings, Areas of Improvement and/or Corrective Action	 All Identified Items Are Appropriate With Supporting Information Provided = 25 points; Most Identified Items Are Appropriate With Some Supporting Information Provided = 10; Few Identified Items Are Appropriate With No Supporting Information Provided = 0 points

Resource Measure (100 possible points):

Level 1 and 2 Group Assessments	≥ 90 % Completed vs. Scheduled = 25 points ≥ 80 % Completed vs. Scheduled = 20 points ≥ 70 % Completed vs. Scheduled = 15 points. 25 points mædmum
MOP:	≥ 90 % Completed vs. Scheduled = 25 points ≥ 80 % Completed vs. Scheduled = 20 points ≥ 70 % Completed vs. Scheduled = 15 points. 25 points madmum
~ SRG Level 1 (2):	\geq 90% Completed vs. Scheduled = 10 (15) points \geq 80% Completed vs. Scheduled = 7 (10) points \geq 70% Completed vs. Scheduled = 5 (7) points. (Add results of Level 1 and 2 assessments for total score). 25 points maximum.
GO Level 2 (3):	\geq 90% Completed vs. Scheduled = 5 (10) points, \geq 80% Completed vs. Scheduled = 3 (7) points, \geq 70% Completed vs. Scheduled =1 (5) points. (Add results of Level 2 and 3 assessments for total score). 15 points maximum.
Site Wide Benchmarking:	Site maintains an average of ≥ 2 documented benchmaiking efforts per month = 10 points; average of ≥ 1 documented benchmarking effort per month = 5 points; 10 points; maximum

Effectiveness Measure (100 possible points):

- -- INPO identified Significant Event (SER or SOER):
 - 1 = ZERO for measure 1 = ZERO for measure
- -- Level 1 MSE PIPs Discovered During the Month: $\leq 1/\text{month} = 50 \text{ points} \leq 2/\text{month} = 30 \text{ points} \leq 3/\text{month} = 20 \text{ points} \leq 4/\text{month} = 10 \text{ points} > 4/\text{month} = 0.$
- -- Acceptance of Assessment Corrective Actions Assigned 3 Months Ago: > 90% CA accepted = 50 points; > 80% = 30 points; > 70% = 20 points; < 70% = 0 points;

2000 MEASURES SUCCESS CRITERIA:

- GREEN: > 255 total points (86% of total) with no sub-measures RED
- YELLOW: > 210 total points (70% of total) with no more than one sub measure RED
- RED: < 210 total points

CURRENT MONTH STATUS YELLOW

•For May, the Self Assessment measure stands at 248 of a possible 300 points. The Quality and Effectiveness sub-measures were GREEN, while the Resource sub-measure was RED. The reason for the RED is that a sufficient number of assessments are not being completed as scheduled.

•Through May, the Year To Date Points Average for this measurement is 249, which is OFF Target for meeting the year end goal.

Nuclear Safety CORRECTIVE ACTION PROGRAM





(GREEN)

Nuclear Safety CORRECTIVE ACTION PROGRAM

DEFINITION:

Corrective Action Program Health is evaluated based on how well PIPs are addressed at the site. Each PIP is evaluated based on three broad categories weighted as follows: <u>Problem Evaluation Effectiveness</u> (40%), <u>Corrective Action Effectiveness</u> (40%) and <u>Trending Effectiveness</u> (20%). The Problem Evaluation and Corrective Action categories are evaluated as to Quality and Timeliness while the Trending category is evaluated solely on Timeliness.

The overall score of the Corrective Action Program measure is based on the YTD average results for all PIPs included in the measure with 80% of possible points required to meet expectations. This overall score can be further reduced by multipliers for <u>Repeat Events</u> (0.8) and <u>Similar Events</u> (0.9). These multipliers are applied cumulatively.

2000 MEASURES SUCCESS CRITERIA:

GREEN: $\geq 80\%$ YTD Average Evaluation ScoreYELLOW: $\geq 60\%$ YTD Average Evaluation Score

RED: < 59% YTD Average Evaluation Score

<u>CURRENT MONTH STATUS:</u> GREEN. Although the measure was met, root cause is an area where improvements can and need to be made. Additionally, there were two recurring events this month.

SUB-MEASURES	POSSIBLE	YTD AVG. SCORE
PROBLEM EVALUATION (40%):		
Ouality - Root Cause	10	9.4
Quality - Apparent Cause	10	10
Timeliness - Root Cause	10	0
Timeliness - Apparent Cause	10	9
CORRECTIVE ACTION (40%):		
Quality of Corrective Actions	20	9.7
Timeliness of Corrective Actions	20	9.5
TRENDING (20%):		
Work Group Trending	10	8.6
Safety Review Group Trending	10	10
INITIAL CORRECTIVE ACTION SCORE - Repeat/Similar Event Multiplier	100	89 -3
FINAL CORRECTIVE ACTION SCORE		86

Nuclear Safety CORRECTIVE ACTION PROGRAM (PIP TRENDS)



Nuclear Safety REGULATORY HEALTH



NAL TRACK CONTRACTOR OF THE OWNER

2000

Nuclear Safety TRAINING TRENDS





Nuclear Safety HUMAN PERFORMANCE TRENDS





Production EFFECTIVE FULL POWER DAYS



2000 YTD RESULTS



Production EFFECTIVE FULL POWER DAYS

DEFINITION:

Effective full-power days for Oconee based on actual fuel core burn. The 2000 target is based on 40 scheduled outage days for both Unit 1 and Unit 3 and a refueling-to-refueling capacity factor of 95.0% for these two units plus 95% capacity factor for Unit 2. Our 2000 target of 954.45 allows for 55.5 forced outage days.

2000 MEASURES SUCCESS CRITERIA:

- GREEN: YTD Actual and Year-end projection ≥ Target performance
- YELLOW: YTD Actual and Year-end projection ≥ Minimum performance
- **RED:** YTD Actual and Year-end projection < Minimum performance

<u>CURRENT MONTH STATUS</u> GREEN. For May, ONS EFPDs totaled 67.77 exceeding our maximum goal of 63.99. Capacity factor for May was 72.79% compared to the target of 73.61. Generation for the month was 1,374,549 MWHs compared to the target of 1,390,005 MWHs.

 YTD STATUS:
 GREEN. YTD through May, EFPDs totaled 392 compared to the target of 389.34. Capacity Factor YTD is 87.57

 compared to the target of 88.39%. YTD Generation totaled 8,105,849 mwhs compared to the target of 8,180,326.

 This is due to the Unit 1 17 day forced outage.



Production

NUCLEAR GENER. MARKET MEASURE

DEFINITION:

The Nuclear Generation Market Measure (NGMM) is a measure of our Nuclear System's operational impact on total Duke System operating costs. The measure is presented in both Lost Dollar Impact as well as in Optimum to Actual %. Using the Post Analysis Costing Evaluator (PACE) costing tool, an optimum system operating cost is calculated on a weekly basis. This optimum case is based on forecasted system load (includes Native Load plus Sales), planned outages (both nuclear and fossil) and fixed and variable production costs for each fossil and nuclear unit. The fossil system generation is presumed to be held constant. Against this "optimum" cost line, the actual system operating cost is compared and the delta between the two costs is the essence of this measure -- stated in terms of either actual "lost" dollars or optimum to actual percentage.

Nuclear can best impact this measure through good operating performance. Forced outages or power reductions will result in the measured cost, being higher as baseline nuclear units (with high fixed but low variable costs) are replaced by fossil units with much higher marginal costs. In deriving the optimal cost line the following items are "excused":

- 1) Refueling outages as scheduled in the monthly Maintenance Outage Co-ordination meeting,
- 2) Core coastdowns as scheduled in the monthly Maintenance Outage Co-ordination meeting,
- 3) Reductions and outages for Generation Management as scheduled in the monthly Maintenance Outage Co-ordination meeting or as called for by the SOC,
- and 4) SOC requested dispatch reductions

The following times are specifically NOT "excused" from this measure:

- 1) Refueling outages that occur early due to a "forced outage" on the unit (the outage itself will be excused after the "scheduled" date),
- 2) Scheduled Refueling Outage days that extend past the scheduled date listed in the Maintenance Outage Co-ordination meeting (i.e. outage ovenums -- these will not be excused even if reported in a subsequent Maintenance Outage Co-ordination meeting),
- 3) All other forced and scheduled outages and reductions.

The Target for 2000 is set at achieving 97% of optimum performance. The threshold for meeting Minimum expectations is 95% of optimum

2000 MEASURES SUCCESS CRITERIA:

- **GREEN:** YTD Optimum cost /YTD Actual cost \geq 97%
- **YELLOW:** YTD Optimum cost /YTD Actual cost \geq 95%
- **RED:** YTD Optimum cost /YTD Actual cost < 95%

<u>CURRENT MONTH STATUS</u> GREEN Y-T-D is 97.81% Y-T-D cost is \$8,068,998

Production PRODUCTION HISTORY





Production PRODUCTION HISTORY









^{20 - 2}

Production RISK ASSESSMENT



Production OUTAGE IMPROVEMENT





Competitive Positioning PRODUCTION COST PER NET KWH





2000 RESULTS (Cost/Generation)

	9	<u> 0&M/ (\$</u>	<u>mil)</u>	Gene	eration (Mwh)	
	<u>Actual</u>	<u>Budget</u>	<u>Var</u>	<u>Actual</u>	<u>Target</u> Var.	
January	19.890	22.682	2.79	1885.47	1827.85 57.62	
February	38.634	44.501	5.87	3412.37	3542.66 (130.29)
March	61.562	67.422	5.86	5262.83	5375.92 (113.09))
April	86.017	95.661	9.64	6731.30	6810.12 (78.82)	
May	116.617	122.793	6.17	8105.85	8180.38 (74.53)	
June						
July						
August						
Septembe	r					
October						
Novembe	r					
Decembe	r					



Competitive Positioning PRODUCTION COST PER NET KWH

DEFINITION:

This is a standard industry measure of the station's total production cost per net kWh generated. The numerator is the sum of Oconee functional Non-Fuel Operating and Maintenance (O&M) costs and fuel costs for the site. The denominator is actual net generation for the site. This measure is an incentive goal for the Employee and Management Incentive plans. The 2000 target of 1.52 cents/kWh is based on achieving Top Quartile industry ranking based on two scheduled refueling outages (3EOC18 & 1EOC19) for the year.

<u>NOTE</u>: For incentive purposes, reported generation will be adjusted upward by adding back any "SOC"-related generation losses (loadfollow or reduced power operations to conserve fuel).

2000 MEASURES SUCCESS CRITERIA:

- GREEN: YTD Production Cost and Year-end Projection < Target performance.
- YELLOW: YTD Production Cost and Year-end Projection < Minimum performance.
- RED: YTD Production Cost and Year-end Projection > Minimum performance.

CURRENT MONTH STATUS:

<u>GREEN:</u> YTD May 2000 Production Cost per Net kWh was 1.44 cents against a YTD target of 1.50 cents. Year-to-date generation is 74.53 mWh (1%) under target. In addition, YTD Production costs are \$6.176 million (5%) under target.

Competitive Positioning NON FUEL O&M BUDGET



(GREEN)



	2000 I	RESU	LTS (<u>\$</u>	millior	<u>is</u>)	
	Cui	rent Mor	<u>nth</u>	Year-to-Date		
	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>
January	11.520	14.183	2.663	11.520	14.183	2.663
February	11.839	13.845	2.006	23.359	28.028	4.669
March	15.361	14.396	(.965)	38.720	42.424	3.704
April	18.085	21.570	3.485	56.805	63.994	7.189
May	24.438	20.760	(3.678)	81.243	84.754	3.511
June						
July						
August						
September						
October						
November						
December						



Competitive Positioning NON FUEL O&M BUDGET

DEFINITION:

Oconee Non Fuel O&M budget performance for 2000. Measure includes functional non-fuel O&M cost. It does not include fuel costs or allocated A&G costs.

2000 MEASURES SUCCESS CRITERIA:

GREEN:Total Spending under YTD target and projected to be under year-end target.YELLOW:Total Spending under YTD target but projected to be over year-end target OR over YTD target but projected to be under year-end targetRED:Total Spending over YTD target with projection indicating year-end goal unlikely to be achieved or unrecoverable.

CURRENT MONTH STATUS: GREEN

Year to date actual through May, the ONS/Keowee business unit is \$3.511 million under our non fuel operating (O&M) budget.

Competitive Positioning CAPITAL BUDGET





	2000 RESULTS (<u>\$ millions</u>)						50	2000 YTD RESULTS
January February March April May June July August September October November December	<u>Cur</u> <u>Actual</u> 2.534 5.340 -4.059 2.399 4.811	rent Mor Budget 7.942 4.857 5.540 5.602 5.963	nth Variance 5.408 (0.483) 9.599 3.203 1.152	<u>Ye</u> <u>Actual</u> 2.534 7.874 3.815 6.214 11.025	ar-to-Da <u>Budget</u> 7.942 12.799 18.339 23.941 29.904	te Variance 5.408 4.925 14.524 17.727 18.879	Capital Spending (5 mil)	A WOLTARGET YTD TARGET YTD ACTUAL

Competitive Positioning CAPITAL BUDGET

DEFINITION:

Capital expenditures for Oconee in capital classes BB (Nuclear Betterment's), BE (Nuclear Environmental), SA (Buildings) and AB and AA (Refurbishment).

Goal is to complete the 2000 approved capital plan within +/- 10%.

2000 MEASURES SUCCESS CRITERIA:

GREEN: YTD capital expenditures are within +/- 10% of YTD budget and projected to be within 10% of year-end budget YELLOW: YTD capital within +/- 10% but projected to be off Year-end target OR

YTD expenditures are outside +/-10% but are projected to be on target by year-end.

RED: YTD capital expenditures are outside +/- 10% of YTD budget and are projected to be outside +/- 10% at year-end.

CURRENT MONTH STATUS: YELLOW

Year-to-date actual capital expenditures of \$11.025 million are 63% under the YTD budget of \$29.904 million.

Competitive Positioning SYSTEM INVENTORY LEVEL





Competitive Positioning SYSTEM INVENTORY LEVEL

OBJECTIVE: For the Nuclear Team to manage overall inventory through initiatives aimed at increasing % planned inventory.

DEFINITION:

Adjusted Inventory = Total NGD O&M Inventory dollars minus Total NGD Planned Inventory Dollars. Goal is to increase percent planned inventory. Planned Inventory = WMS Reservations (\$), Surplus \$, Direct Stock \$ and Emergency Inventory. The 2000 goal is based on the 12/31/99 ending inventory (\$115,340,908).

Total Inventory represents all inventory: O&M, Capital and Planned.

2000 MEASURES SUCCESS CRITERIA:

GREEN:Adjusted O&M Inventory Level ≤ \$115,340,908 (no increase from 12/31/99)YELLOW:Adjusted O&M Inventory Level ≤ \$117,647,726 (no more than 2% increase)RED:Adjusted O&M Inventory Level > \$117,647,726 (greater than 2% increase)

CURRENT MONTH STATUS:

<u>YELLOW:</u> NGD Adjusted O&M Inventory was \$115.67 million through May, a net increase of \$33K (.003%) from December, 1999. <u>Total Inventory</u> decreased \$2.06 million (1.7%) compared to April.

Adjusted O&M Inventory	\$ 115.34	\$ 115.67
Less: Total Planned Inventory	<u>(31.95)</u>	(35.54)
O&M Inventory \$ On Hand	\$ 147.29	\$ 151.21
Total adjusted inventory is calculated as follows:	<u>12/31/99</u>	<u>5/30/00</u>

RECOVERY PLAN:

Actions include the following:

- * Partnering with Maintenance for review/approvals on surplus and new orders.
- * Monitoring reorders to assure optimum levels are being procured based on known demands.
- * New Stock Code request are being monitored to validate need and to assure superseded items are excessed.
- * Excess Inventory items are being circulated to Fossil and Power Delivery locations for their use vs purchase.
- * Consignment negotiations are in progress now for Bolting, Piping, RP Clothing.
- * Disposal of unused or reallocation of "5866" subclass inventory (one time purchases) to owners or surplused.
- * Contracts with suppliers such as Westinghouse to "buy back" certain inventories (ie Turbine Valve parts).

The Commodities Management BEST is sponsoring these initiatives which will help assure inventory targets are met.



ONS Projects Measured - Open / Active Projects Trended in Year 2000

			Current Project Scores						
Project #	Туре	Project Name	PM	Spon	Quality	Schedule	<u>Cost</u>	Average	Annunciator
12980M	08M	U1 MSRH Feed Forward	LJB	WBE	3.00	1.00	2.25	2.08	Yellow
12981M	08M	U1 Powdex Controls Upgrade	LJB	MCB	3.00	3.00	3.00	3.00	Green
12998C	Cap	U1 Repl Vital I&C Batteries	ECG	MCB	2.17	2.33	1.50	2.00	Yellow
13016CN	Cap	U1 Alterex Voltage Hegulator	JK	MCB	3.00	3.00	3.00	3.00	Green
13020C	Cap	Init 1 PB Aux, Cooler Coil		MCB	3.00	3.00	3.00	3.00	Green
13054M	O8M	U1 MS Line Supports		WBE	3.00	3.00	3.00	3.00	Green
13056M	O&M	MDEFWP Pump Arc Valve Strainers	ESF	WBE	3.00	3.00	3.00	3.00	Green
13060M	08M	Replace 1ESV-1 and 1ESV-2	ESF	WBE	3.00	3.00	3.00	3.00	Green
13066M	08M	U1RCP Seal Leakage Instrumentation	LJB	WBE	3.00	2.00	3.00	2.67	Green
13067CN	Cap	U1UpgradeGL89-10 Main Steam Valve and	AWB	MCB	3.00	2.50	3.00	2.83	Green
1354C	Сар	Repl Bldg Spray Pump Motor U3	KW	TDM	3.00	3.00	3.00	3.00	Green
1361CN	Cap	Keowee ACB's 3 & 4	AWB	MCB	3.00	3.00	3.00	3.00	Green
1392CN	Cap	Complex Rerooting	SC	JES	2.83	3.0D	2.67	2.83	Green
13960	Cap		GO	TDM	2.75	2.50	2.50	2.58	Green
13970	Cap	I I 2 RCP Beturb		TDM	3.00	3.00	3.00	3.00	Green
14210	Cap	E Heater Drain Pump Benl	KW	TDM	3.00	3.00	2 33	2.07	Green
1425CN	Cap	600 Volt Breakers and Belays	EF	MCB	3.00	2.00	3.00	2.67	Green
1426CN	Cap	Refurbish 4kv and 7kv Breakers	EF	MCB	3.00	3.00	3.00	3.00	Green
1431CN	Сар	Aux Bldg U2 Reroofing Bldg 8078.10	sc	JES	3.00	3.00	3.00	3.00	Green
1433CN	Сар	Aux Bldg U3 Reroofing Bldg 8082.10,11	SC	JES	3.00	3.00	3.00	3.00	Green
1438CN	Сар	Westinghouse Relay Replacement	EF	MCB	3.00	2.67	3.00	2.89	Green
1441CN	Cap	U2 Cutler Hammer Relay Replacement	KR	MCB	2.75	3.00	3.00	2.92	Green
1441CN1	Cap	U1 Cutler Hammer Relay Replacement	KR	MCB	3.00	3.00	3.00	3.00	Green
1441CN3	Cap	U3 Cutler Hammer Relay Replacement	KR	MCB	3.0D	3.00	3.00	3.00	Green
1441CNK1	Cap	Kel Cutler Hammer Helay Replacement	KH	MCB	3.00	3.00	3.00	3.00	Green
1444CN	Cap	Small Bore Baw Water Pining	FGG	MCB	3.00	3.00	2.00	3.00	Green
1486CN	Cap	Control Boom Habitability Upgrade	RB	LJA	3.00	3.00	3.00	3.00	Green
1490CN	Cap	U2 Westinghouse Relay Replacement	EF	MCB	3.00	2.67	3.00	2.89	Green
1491CN	Cap	U1 Westinghouse Relay Replacement	EF	MCB	3.00	2.67	3.00	2.89	Green
22865M	0&M	U2 RTD Replacements	ESF	WBE	3.00	3.00	3.00	3.00	Green
22980M	08M	U2 MSRH Feed Forward	ωB	WBE	3.00	3.00	2.50	2.83	Green
22981CN	Cap	U2 Powdex Control	ШB	MCB	3.00	3.00	3.00	3.00	Green
23016CN	Cap	U2 Alterex Voltage Regulator	JK	MCB	3.00	3.00	3.00	3.00	Green
23060M	ORM	MDEF WP Pump Arc valve Strainers	ESF	WBE	3.00	3.00	3.00	3.00	Green
23067CN	Can	U2 Ingrade GL 89-10 Main Steam Valve and	AWR	MCB	3.00	3.00	3.00	3.00	Green
2914C	Cap	Fuel Handling Cranes	LCA	MCB	3.00	3.00	2.33	2.78	Green
3027CN	Cap	CY Starters	LC	MCB	2.60	3.00	2.50	2.70	Green
32980M	O&M	U3 MSRH Feed Forward	ШB	WBE	3.00	3.00	3.00	3.00	Green
32981M	0&M	U3 Powdex Controls Upgrade	LJB	MCB	3.00	2.33	3.00	2.78	Green
32998CN	Cap	Replace U3 Vital I&C Batteries	ECG	MCB	3.00	3.00	3.00	3.00	Green
33016CN	Cap	U3 Alterex Voltage Regulator	JK	MCB	3.00	3.00	3.00	3.00	Green
33043M	O&M	U3 Reactor Building Isolation	ESF	WBE	3.00	2.50	3.00	2.83	Green
3305614	ORM	MDEEWP Pump Are Volus Charles		WBE	2.75	3.00	2.20	2.65	Green
33060M	ORM	Replace 3FSV-1 and 3FSV-2	FOL	WRE	3.00	3.00	3.00	3.00	Green
33067CN	Can	U3UpgradeGL89-10 Main Steam Valve and	AWR	MCR	3.00	2.00	3.00	2 67	Green
53014M	O&M	Keowee Undervoltage Under Frequency	ШB	WBE	2.67	2.33	2.50	2.50	Yellow
53049CN	Cap	Keowee SV Relay Replacement	LC	MCB	3.00	2.00	2.00	2.33	Yellow
53052CN	Cap	Keowee U2 Load Center DB Breakers	LC	MCB	3.00	3.00	3.00	3.00	Green
53064CN	Cap	Keowee Penstock	AWB	MCB	3.00	3.00	3.00	3.00	Green
53065CN	Cap	Keowee Underground Cable Replace	AWB	MCB	2.50	2.25	2.67	2.47	Yellow
6101M	MAU	GL 96_06 Code Compliance Analysis	TB	<u>LJA</u>	3.00	2.75	3.00	2.92	Green
	Can	Control Rod Drive System Deal (2000)	GM		3.00	3.00	3.00 }	3.00	Green
DOMECOAT	Cap	Dome Coatings	ESF DI LI	MCB	3.00	3.00	2.00	2.07	Green
EOPRWP2	O8M	EOP Rewrite Phase 2	KM	<u>nic</u>	2.75	2.50	2.00	2.42	Yellow
HELB	08M	High Energy Line Break	TB	LIA	2.75	1.50	2.33	2.19	Yellow
MTLCDCAP	Cap	2000 Materiel Condition Upgrade	JK	MCB	3.00	3.00	3.00	3.00	Green
MTURLPNC	Cap	3LPC Turbine Rotor Repl	JK	MCB	3.00	2.00	3.00	2.67	Green
OSRDCQA5	0&M	OSRDC	HH	LJA	3.00	2.60	2.67	2.76	Green
SQUGKE	08M	SQUG Keowee	RM	RBT	3.00	3.00	2.83	Green]	Green
SCUGOUT	08M	SQUG - Oconee	RM	RBT	3.00	3.00	2.83	Green	Green
VALVEPUN	Cap	valve LP 17 & 18 Repl	FCS	MCB	2.00	2.33	2.20	2.18	Yellow
		Summary of all managed available	67				9 00 7		Groop
		Summary of an measured projects:	0/					State of the second	ereen

6/7/00 5:31 PM

Open Projects

ONS Projects Measured(Total Closed and Active) for Year 2000

Current Project Scores

				_		<u></u>	0	Augure 1	muncieter
Project #	Туре	Project Name	PM	Spon 1	Quality S	chedule 3'00	Cost 3 nn J3	Averaçe A	Green
1284C	Cap	Repl of 1A Bidg Spray Pump Motor	KW DOE	NDE	3.00 2.	3.00	3.00	3.00	Green
12885M	08M	J1 RTD Replacements	ESP	WRE	3.00	3.00	2.00	2.67	Green
12885M	O&MII	Hept U-1 NV Pump Cold Leg iso. Valves	1 18	WBE	3.00	1.00	2.25	2.08	Yellow
12980M	OBM	UT MSHH Feed Forward	UB	MCB	3.00	3.00	3.00	3.00	Green
12961M	Can	11 Beni Vital I&C Batteries	ECG	MCB	2.17	2.33	1.50	2.00	Yellow
12990C	Cap	11 Alterex Voltage Begulator	JK	MCB .	3.00	3.00	3.00	3.00	Green
130260	Cap	Main Generator Disconnect Switch	JM	MCB	3.00	3.00	3.00	3.00	Green
13031CN	Cap	Unit 1 BB Aux, Cooler Coil	KR	MCB	3.00	2.50	3.00	2.83	Green
13043M	O&M	U1 Reactor Building Isolation	ESF	WBE	3.00	3.00	3.00	3.00	Green
13054M	O&M	U1 MS Line Supports	LJB	WBE	3.00	3.00	3.00	3.00	Green
13056M	O&M	MDEFWP Pump Arc Valve Strainers	ESF	WBE	3.00	3.00	3.00 3	3.00	Green
13060M	O&M	Replace 1ESV-1 and 1ESV-2	ESF	WBE	3.00	2.00	3.00	267	Green
13066M	08M	U1RCP Seal Leakage Instrumentation	LJB	WBE	3.00	2.00	3.00	2.83	Green
13067CN	Cap	U1UpgradeGL89-10 Main Steam Valve and	AWB	MCD	3.00	3.00	3.00	2.89	Green
1331C	Cap	Turbine Seed Hotor (part of MTUHLPNC)	AWR	WRE	2 50	2.75	2.00	2.42	Yellow
1338CN	Cap	Keowee ACBS 1 & 2 (Not Herurb)	XW	TDM	3.00	3.00	3.00	3.00	Green
1354C	Cap	Hepi Blog Spray Fump Motor CS	AWB	MCB	3.00	3.00	3.00	3.00	Green
1301CN	Cap	Complex Remoting	SC	JES	2.83	3.00	2.67	2.83	Green
1392CN	Cap	Berroof Auriliary Building U1	SC	JES	2.63	2.75	3.00	2.86	Green
1395CN	Cap	Beroof Auriliary Building U2	SC	JES	3.00	3.00	3.00	3.00	Green
1396C	Cap	U1 BCP Refurb	GO	TDM	2.75	2.50	2.50	2.58	Green
1397C	Cap	1C LPSW Replacement	K₩	TDM	3.00	3.00	_ 3.00	3.00	Green
1398C	Cap	U2 RCP Refurb	GO	TDM	2.75	2.25	3.00	2.67	Green
1421C	Cap	E Heater Drain Pump Repl	KW	TDM	3.00	3.00	2.33	2.78	Green
1425CN	Cap	600 Volt Breakers and Relays	EF	MCB	3.00	2.00	3.00	2.07	Green
1426CN	Cap	Refurbish 4kv and 7kv Breakers	EF	MCB	3.00	2.00	3.00	2 67	Green
1428C	Cap	Oconee County Eoc Equip Installation	HW	WWF	3.00	2.00	3.00	3.00	Greeo
1431CN	Cap	Aux Bidg U2 Reroofing Bidg 8078.10	50	JES	3.00	3.00	3.00	3.00	Green
1433CN	Cap	Aux Bidg U3 Herooning Bidg 8082.10,11	EF	MCB	3.00	2.67	3.00	2.89	Green
1438CN	Cap	Westinghouse Helay Heplacement	KB	MCB	2.75	3.00	3.00	2.92	Green
1441CN	Cap	U2 Cutler Hammer Helay Hepacement	KR	MCR	3.00	3.00.	3.00	3.00	Green
1441CN1	Cap	U1 Cutler Hammer Relay Replacement	KB	MCB	3.00	3.00	3.00	3.00	Green
1441CN3	Cap	Vot Cutter Hammer Belay Benlacement	KB	MCB	3.00	3.00	3.00	3.00	Green
1441CNKT	Cap	Ker Cutter Hammer Belay Beplacement	KR	MCB	3.00	3.00	3.00	3.00	Green
144 ICINICZ	Cap	Small Bore Baw Water Piping	EGS	MCB	2.75	3.00	2.00	2.58	Green
1486CN	Can	Control Boorn Habitability Upgrade	RB	LJA	3.00	3.00	3.00	3.00	Green
1488CN	Cap	1B RBCU Motor	RR	MCB	3.00	3.00	3.00	3.00	Green
1490CN	Cap	U2 Westinghouse Relay Replacement	EF	MCB	3.00	2.67	3.00	2.89	Green
1491CN	Cap	U1 Westinghouse Relay Replacement	EF	MCB	3.00	2.67	3.00	2.89	Green
1493CN	Cap	2B Reactor Building Spray Pump Motor Rep	RR	MCB	2.75	3.00	3.00	2.92	Green
22865M	O&M	U2 RTD Replacements	ESF	WBE	3.00	3.00	3.00	2.00	Green
22885M	O&M	Rept U-2 NV Pump Cold Leg Iso. Valves	ECG	WBE	3.00	3.00	2.50	2.83	Green
22980M	08M	U2 MSRH Feed Forward	LJB	WBE	3.00	3.00	3.00	3.00	Green
22981CN	Cap	U2 Powdex Control	ECG	MCB	2 83	2.67	2.00	2.50	Yellow
22998C	Cap	U2 Hepi Vital I&C Battenes	LECO	MCB	3.00	3.00	3.00	3.00	Green
23016CN	Cap	U2 Anerex Vonage Hegulator	ESE	WBE	3.00	3.00	3.00	3.00	Green
230439	OTH	U2 NS Line Supports	LJB	WBE	3.00	2.67	2.00	2.56	Green
23054M	ON	MDEEWP Pump Are Valve Strainers	ESF	WBE	3.00	3.00	3.00	3.00	Green
23060M	OLM.	Benlace 2ESV-1 and 2ESV-2	ESF	WBE	3.00	3.00	3.00	3.00	Green
23067CN	Can	12UppradeGL89-10 Main Steam Valve and	AWB	MCB	3.00	3.00	3.00	- 3.00	Green
2914C	Cap	Fuel Handling Cranes	LCA	MCB	3.00	3.00	2.33	2.78	Green
3027CN	Cap	CY Starters	LC	MCB	2.60	3.00	2.50	2.70	Green
32980M	M8O	U3 MSRH Feed Forward	LJB	WBE	3.00	3.00	3.00	3.00	Green
32981M	OaM	U3 Powdex Controls Upgrade	LJB	MCB	3.00	2.33	3.00	2.78	Green
32998CN	Cap	Replace U3 Vital I&C Batteries	ECG	MCB	3.00	3.00	3.00	3.00	Green
32999C	Cap	U3 Rept Power Batteries	ECG	MCB	3.00	3.00	2.67	2.59	Green
33016CN	Cap	U3 Alterex Voltage Regulator		I MCB	3.00	2.50	3.00	2 83	Green
33043M	08M	U3 Heactor Building Isolation	LIP	WDE	3.00	3.00	2.20	2.65	Green
33054M	O&M	US MS Line Supports	LJB	WRE	3.00	3.00	3.00	3.00	Green
33056M	108M	IMDERWP Pump Arc valve Strainers	FOF	WRF	3.00	3.00	3,00	3.00	Green
33060M	10am	Hepace JEDY-1 AND JEDY-2	AWR	MCB	3.00	2.00	3.00	2.67	Green
3306/UN		Independent Spent Fuel Storage Installation	JES	WBE	2.75	2.75	2.00	2.50	Yellow
52050	1 Cap	Keowee Lindervoltage Linder Frequency	T LIB	WBE	2.67	2.33	2.50	2.50	Yellow
530/9/N	Can	Keowee SV Belay Beplacement	LC	MCB	3.00	2.00	2.00	2.33	Yellow
53052CN	Cap	Keowee U2 Load Center DB Breakers	LC	MCB	3.00	3.00	3.00	3.00_	Green
53064CN	Can	Keowee Penstock	AWB	MCB	3.00	3.00	3.00	3.00	Green
53065CN	Cap	Keowee Underground Cable Replace	AWB	MCB	2.50	2.25	2.67	2.47	Yellow
6100M	O&M	GL 96_06 Code Compliance Analysis	TB	LJA	3.00 3	2.75	3.00	2.92	Green
6101M	O&M	UFSAR Single Failure Calcs	GM	LJA	. 3.00	3.00	3.00	3.00	Green
CRDS	Cap	Control Rod Drive System Repl (3032)	ESF	MCB	3.00	3.00	2.00	2.67	Green
DOMECOAT	Cap	Dome Coatings	RUH	MCB	2.71	2.82	2.75	2.76	Green
EOPINSPP	O&M	EOP Inspection	LK	WWF	2.50	2.57	0000	2.12	Valleur
EOPRWP2	O&M	EOP Rewrite Phase 2	KM	1 DJC	2.75	2.50	2.00	2.42	Green
FIRESEAL	O&M	ONS Intrusive Inspection and Repair	누먚	JSF	3.00	1.50	2 33	2 19	Yellow
HELB	O&M	High Energy Line Break	118	LJA	2./3.	3.00	3.00	3.00	Green
MTLCDCAP	Cap	2000 Materiel Condition Upgrade			3.00	2.00	3.00	2.67	Green
MIURLPNC	Cap	ISLPG TURDING HOTOF Hepi		1.14	3.00	2.60	2.67	2.75	Green
CSHDCOA5	108M		BM	BRT	3.00	3.00	2.83	Green	Green
SUUGKE	108M	SOUG + Oconee	BM	RBT	3.00	3.00	2.83	Green	Green
	1 Can	Valve LP 17 & 18 Beni	EGS	MCB	2.00	2.33	2.20	2.18	Yellow
- TALID ON	1								
	+	Summary of all measured projects	85		2.91	2.17	2.78	2.82	Green

Total Projects
ONS Projects Measured - Total Closed during last 12 Months (5/99 - 4/00)

Current Project Scores

Project #	Type	Project Name	РМ	Spon	Quality	Schedule	Cost	Average	Annunciator
1284C	Cap	Repl of 1A Bldg Spray Pump Motor	KW	TDM	3.00	3.00	3.00	3.00	Green
12865M	0&M	U1 RTD Replacements	ESF	WBE	3.00	3.00	3.00	3.00	Green
12885M	0&M	Repl. U-1 NV Pump Cold Leg Iso. Valves	ECG	WBE	3.00	3.00	2.00	2.67	Green
13043M	0&M	U1 Reactor Building Isolation	ESF	WBE	3.00	3.00	3.00	3.00	Green
1331C	Cap	Turbine Seed Rotor (part of MTURLPNC)	JK	MCB	2.67	3.00	3.00	2.89	Green
1338CN	Cap	Keowee ACBs 1 & 2 (Not Refurb)	AWB	WBE	2.50	2.75	2.00	2 42	Yellow
1393CN	Сар	Reroof Auxiliary Building U1	SC	JES	2.83	2.75	3.00	2.86	Green
1395CN	Cap	Reroof Auxiliary Building U2	SC	JES	3.00	3.00	3.00	3.00	Green
1428C	Сар	Oconee County Eoc Equip Installation	BW	WWF	3.00	2.00	3.00	267	Green
1488CN	Cap	1B RBCU Motor	BB	MCB	3.00	3.00	3.00	2.00	Green
1493CN	Cap	2B Reactor Building Spray Pump Motor Repl	BB	MCB	2.75	3.00	3.00	202	Green
22885M	O&M	Repl. U-2 NV Pump Cold Leg Iso, Valves	ECG	WBE	3.00	3.00	3 00	2.52	Green
22998C	Сар	U2 Repl Vital I&C Batteries	ECG	MCB	2.83	2.67	2.00	2.50	Vellow
23043M	O&M	U2 Reactor Building Isolation	ESF	WBE	3.00	3.00	3.00	3.00	Groop
23054M	O&M	U2 MS Line Supports	LJB	WBE	3.00	2.67	2.00	2 56	Green
32999C	Сар	U3 Repl Power Batteries	ECG	MCB	3.00	3.00	2.67	2.00	Green
52959C	Cap	Independent Spent Fuel Storage InstallationO	JES	WBF	275	2 75	2.00	2.50	Vollow
EOPINSPP	O&M	EOP Inspection	LK	WWF	2.60	2 57	3.00	2.00	Green
FIRESEAL	O&M	ONS Intrusive Inspection and Repair	DL	JSF	3.00	2.67	3 00	- 2 20	Green
			- 4			E.C.	_0.00	- C-05	Green
		Summary of all measured projects:	19		2.89	_2.83	2.72	2.81	Green

Competitive Positioning PROJECTS

DEFINITION:

This measure is for 201 level projects greater than \$100,000, excluding projects for hardware purchases only, that complete during the year. The project performance measure for 2000, will consist of three components weighted equally: <u>Quality</u>, <u>Schedule</u>, and <u>Cost</u>.

The Quality portion of this measure will focus on how well the project management objectives are met. Because each project is unique, deliverables will be adjusted for the project specific needs. <u>Performance rating</u>: A project evaluation report will be completed by the Primary Customer, the Project sponsor, and the Project Manager. Each evaluator will rate how well each deliverable met their expectations using the following ratings:

1 = Failed to meet expectations 2 = Partially met expectations 3 = Met expectations The average of the three evaluators scores will be the performance rating.

The Schedule measure will focus on how well project milestones are met. Project milestones will be defined in the scope and plan when the project is launched. <u>Performance rating</u>: The performance rating for milestones met will be supplied by the Project Manager and Business Group. This can be extracted from the project schedule and performance package used to manage the project. The rating will be based on the following scale for each milestone:

1 = > 28 days late 2 = 1-28 days late 3 = 0n time or early The average score for the milestones will be the performance rating

The Cost measure will focus on how we manage total project costs. <u>Performance Rating</u>: The performance rating for cost met will be supplied by the Business Group. This can be extracted from the project cost and performance package used to manage the project. The rating will be based on the following scale:

1 =Greater than 110% of estimate 2 = Within 110% of estimate

3 = Within 100% of estimate

The average of all three sub-components, Quality, Schedule and Cost will represent the overall score for the Project Measure

2000 MEASURE SUCCESS CRITERIA:

GREEN:	\geq 2.50 YTD average score for all projects
YELLOW:	\geq 1.75 YTD average score for all projects
RED:	< 1.75 YTD average score for all projects

- · · ·

CURRENT MONTH STATUS:

GREEN: The May measure is based on the status of 19 COMPLETED projects. These are projects completed during the last 12 months.

Quality 2.89 Schedule 2.83 Cost 2.72 Average 2.81

We are also currently measuring 67 additional active open projects. The current status of these projects is also green.

•

Competitive Positioning WORK PROCESS MEASURES



Competitive Positioning WORK PROCESS MEASURES





Competitive Positioning MODIFICATION EFFECTIVENESS - ACTIVATION





Competitive Positioning MODIFICATION EFFECTIVENESS - QUALITY





Competitive Positioning MODIFICATION EFFECTIVENESS - WORK MANAGEMENT



Competitive Positioning MODIFICATION EFFECTIVENESS - WORK MANAGEMENT



Competitive Positioning MODIFICATION EFFECTIVENESS - COST





Competitive Positioning MODIFICATION EFFECTIVENESS CONFIGURATION MANAGEMENT



Competitive Positioning ENGINEERING WORK MANAGEMENT

Storestownski (* 1997) Storestownski (* 1997)	ر دا به	MODIFICATIONS	WORK ORDERS
(tojr=1 4a)	(relation	(yellow)	(yellow)



Schedule Effectiveness						
CRITERIA	GREEN (2 pts)	YELLOW (1 pt)	RED (0 pts)	MONTH ACTUAL		
Measures on Target	2	1	0	2		
MEASURE		CRITERIA	ACTUAL	ON/OFF	YTD	
Weekly Avg. Schedule Effectiveness Weekly Avg. Engr. Support Program (ESP) Health		>= 90%	96%	ON	95%	
		>≖ 90%	93%	ON	91%	

	l	PIPs				
CRITERIA GREEN (2 pts)		YELLOW (1 pt)			RED (0 pts)	MONTH ACTUAL
	All ≥ Meets or 2 Exceeds w/1 Needs	Any other combination ≥		2 Needs	0	
MEASURE		EXCEEDS	ME	ETS NEEDS		ACTUAL
Problem Evaluation > 30 Days 12 month rolling average		< 6	6 - 8		> 8	7.73
Corrective Actions > 6 months * 12 month rolling average		Plan Meets Goal and Actual < Goal	Plan Meets Goals and Actual No		Plan Does Not Meet Gosl or	Needs
Mgmt Exception Corrective Actions 12 month rolling average		Plan Meets Goal and Actual < Goal	Plan Meets Goals and Actual No		Plan Does Not Meet Goal or	Needs

* Excludes PIPs with Management Exception

Work Orders								
CRITERIA	GREEN (2 pts)	YELLOW (1 pt)	RED (0 pts)	MONTH ACTUAL				
Measures on Target	1	0	1					
MEASURE	CRITERIA	ACTUAL	ON/OFF					
Eng. Hold WO's > 30 Days (Innage/Corrective Only)	<= 25	10	ON					
Eng. Rescheduled WO Tas	<= 2 / mo	9	OFF					

** Rescheduled for T-2 Schedule due to Engineering

SUCCESS CRITERIA:

GREEN: ≥ 3 Green and ≤ 1 Red Windows

YELLOW: Any other combination

CRITERIA	GREEN (2 pts)	YELLOW (1 pt)	RED (0 pts)	MONTH		
Measures on Target	2	1	0	1		
MEASURE		CRITERIA	ACTUAL	ON/OFF	YTD ***	
% NSM's Meeting WO's Ac Milestone	tive	>= 90%	n/a ^{***}	ON	13%	
% MM to WC Milestone		>≖ 90%	63%	OFF	69%	

Modifications

*** No outage NSM WO's scheduled to be activated this month

**** Percentage of Mods complete for the work window (i.e., 1EOC19)