

SAP-CENTRIC EAM 2010

Inspiring Individuals – Empowering Enterprises



SAP WCM at PSEG

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Public Service Enterprise Group

SAP WCM at PSEG

- **Brian Falla**

- PSEG Nuclear
- SAP Go-Live Date: July 1999



SAP WCM at PSEG

Key SAP Functionality Implemented

- HR
 - Qualification Tracking (Nuclear)
 - Training and Event Management (Nuclear)
- FI,CO,AM, CATTs
- SEM / BW/ BI
- MM, QM, WM
- PM, PS
- Work Efficiency Component (WEC)
 - Tagging (Fossil & Nuclear)
 - Permitting (Nuclear)

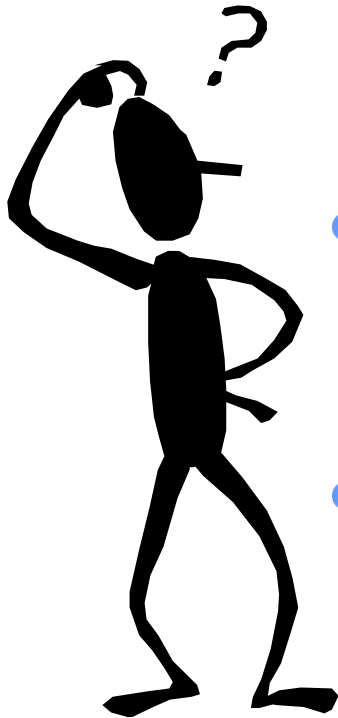
SAP WCM at PSEG

Scope of Organization / Users

- All Nuclear company personnel access SAP
- All staff augmentation personnel access SAP
- Selected contractor resources access SAP
 - Engineering vendors doing plant support / design work
 - Maintenance Support vendors doing refueling outage work and major plant modification work
- All corporate organizations access SAP. SAP is our Enterprise EAM / ERP application
- SAP access is provided by “role” depending on specific work being performed (change order by order type)

Why SAP WCM ?

- One Safety Tagging System for PSEG
- Further Leverage of SAP Investment
- Cost of Operating Two Systems



What can WCM do ?

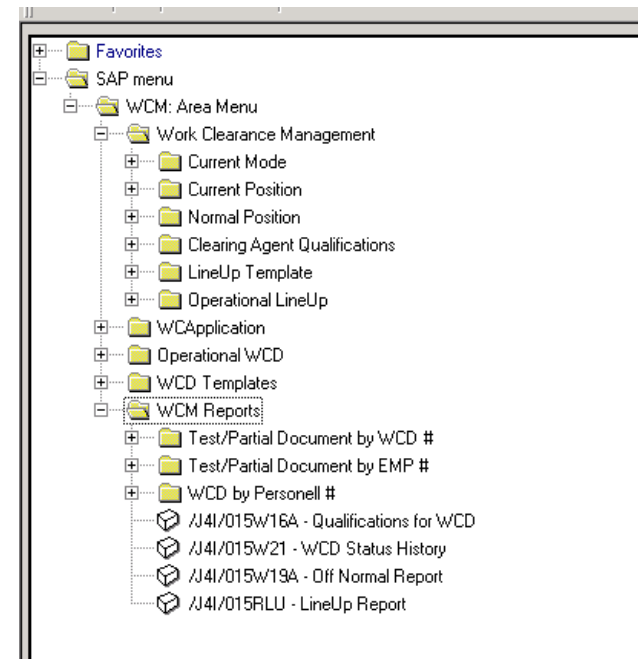
SAP WCM Supports

- **Individual WCDs**
- **Group WCDs**
- **Conflict Analysis**
- **Standard Tag outs**
- **Linking to Orders and/or Operations**
- **Restorations**
- **Lineups**
- **Plant Component Configuration**

What can WCM do ?

SAP WCM Supports

WCM Custom Menu



Work Clearance Documents

- **Identify Blocking Points From Your Master Data**

Work Clearance Documents

Change Operational WCD: Switching Operation

Operational WCD Edit Extras Goto Switch System Help

Tagged Untag Untagged Temporarily untag Temporarily untagged

W/C document: **4029229** Service building AC unit inspections

Status: PREP PROC UNT PA

CONF	ITG	PTAG	ETG	BTUG	ETUG	BUG	EUG	INAK
0	0	0	3	0	1	0	0	0

Technical object	OG	Tag. cond.	TT	ST	Ph	T	PF	Untag. cond.	UT	SU
Short text								LT DL	Tag	
System status										
<input type="checkbox"/> 10 F S1460-1HX1TB25X-1	M	0	WBT	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRF0	X	N/T	10
SERV BLDG ROOF AC UNITS								<input type="checkbox"/>	<input type="checkbox"/>	101194
ETG										
<input type="checkbox"/> 20 F S1460-1HX1TB25X	M	D1	RBT	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRF0	X	N/T	5
SRV BDG 460 PWR PNL SBPP1/140T AIR CHILL								<input type="checkbox"/>	<input type="checkbox"/>	101228
ETUG										
<input type="checkbox"/> 30 F S1460-1HX1TB25X-7C	M	0	RBT	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRF0	X	N/T	0
SVC BDG 140-N CHILL CMPRSR MTR #3								<input type="checkbox"/>	<input type="checkbox"/>	108829
ETG										
<input type="checkbox"/> 40 F S1460-1HX1TB25X-7A	M	0	RBT	20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRF0	X	N/T	1
SVC BDG 140-N CHILL CMPRSR MTR 1								<input type="checkbox"/>	<input type="checkbox"/>	133702
ETG										
<input type="checkbox"/>										
<input type="checkbox"/>										

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Each blocking point listed includes tag type and status.

Work Clearance Documents

- ✓ Identify Blocking Points From Your Master Data

- **Identify Clearing Agents (Partners)**

Work Clearance Documents

WCM: Assign Clearing Agent

Partners Goto System Help

New Entries Qualifications Group/Ind Verify Act./Deac.

Plant: **NNUC** WCD: **4029229** Service building AC unit inspections GRP ☐

<input type="checkbox"/> CL.Agent	JOB SUP	JOB SUPERVISOR	Act <input checked="" type="checkbox"/>	Ver <input checked="" type="checkbox"/>	Mngr <input checked="" type="checkbox"/>
Partner	5146	ARMANDO F FERNANDEZ	CHBY	NUAFF	
<input type="checkbox"/> CL.Agent	WORKER	WORKER	Act <input checked="" type="checkbox"/>	Ver <input type="checkbox"/>	Mngr <input type="checkbox"/>
Partner	12342	STEPHEN E NEFF	CHBY	NUAFF	

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Clearing Agent type and status are displayed.

Work Clearance Documents

- ✓ Identify Blocking Points From Your Master Data
- ✓ Identify Clearing Agents (Partners)
- **Ensures Clearing Agents Possess Proper Qualifications**

Work Clearance Documents

WCM: Assign Clearing Agent

Partners Goto System Help

New Entries Qualifications Group/Ind Verify Act./Deac.

Plant **NNUC** WCD **4029229** Service building AC unit inspections GRP ☐

<input type="checkbox"/> CL.Agent	WORKER	WORKER	Act <input checked="" type="checkbox"/> Ver <input type="checkbox"/> Mngr <input type="checkbox"/>
Partner	12342	STEPHEN E NEFF	CHBY NUAFF
<input type="checkbox"/> CL.Agent	J0BSUP		
Partner	9040		
<input type="checkbox"/> CL.Agent			
Partner			
<input type="checkbox"/> CL.Agent			
Partner			
<input type="checkbox"/> CL.Agent			Act <input type="checkbox"/> Ver <input type="checkbox"/> Mngr <input type="checkbox"/>
Partner			CHBY

Invalid Partner..

OK Help

Invalid Partner..

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Attempts to add personnel that do not possess the proper qualifications will result in an error.

Work Clearance Documents

- ✓ Identify Blocking Points From Your Master Data
- ✓ Identify Clearing Agents (Partners)
- ✓ Ensures Clearing Agents Possess Proper Qualifications

➤ **Allows Partial/Temporary Releases**

Work Clearance Documents

WCM: Display Documents

Available Documents

Document	Description
000004029229T01	TEMP RELEASE FOR TESTING

Temporarily Untag

Temporary and Partial documents are similar in functionality to the master document.

WCM: Display Documents

System Help

Untagging-List Tagging-List

W/C Document 000004029229T01 TEMP RELEASE FOR TESTING

Technical Object S1460-1HX1TB25X

SRU BDG 460 PWR PNL SBPP1/140T AIR CHILL

G	Tag. Cond.	TT	SNT	PF	Untag.Cnd.	UT	SNU		
20	F	M	DI	RBT	10	PRF0	X	N/T	5

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Work Clearance Documents

- ✓ **Identify Blocking Points From Your Master Data**
- ✓ **Identify Clearing Agents (Partners)**
- ✓ **Ensures Clearing Agents Possess Proper Qualifications**
- ✓ **Allows Partial/Temporary Releases**

➤ Special Instructions Text

Work Clearance Documents

TAGGING WORK LIST

Plant Nuclear Business Unit
 Document No 4027867
 Header Description 23 VACUUM PUMP
 Tagged For Group
 ESO #:

Printed By NUB0F
 Date 10/28/2001
 Time 10:44:55
 Page 1 of 3

Shop Papers list WCDs that may influence tagging evolutions.

VAR.1[] VAR.2 []
 MAINTENANCE SHEET []

SNT	Technical Object Description Location	Untag Cond	Tag Cond	Type	As Left	INIT
Status						
00020	S2460-2EX1AX16X 23 VACUUM PUMP 1208400002-SA 460/230V VITAL 125/250VDC BAT Related WCD : 000004037990	RI	DI	RBT	---	---
				ETG		
00030	S2230-2EY3AX5G4 23 VACUUM PUMP SEAL WATER CIRCULATO 1208400004-SA SPENT FUEL PIT HX. AREA Related WCD : 000004037990	X	O	RBT	---	---
				ETG		
00040	S2AR-23AR23 VAC PUMP SUCT FROM PRIME TK 1710000019-SA 23 & 24 VACUUM PUMPS AREA Location Detail : PRIOR TO OPERATION LUBE WITH ROCKWELL SEALANT 234 FOLIO 87- 2923	O	X	RBT	---	---
				ETG		

Location data or special instructions are listed for blocking points as applicable.

Individual WCDs

- ✓ **Allows Use of Worker Blocking Tags**
- ✓ **Allows Use of Standard Tag Types**
- ✓ **Worker and Supervisor Listed on WCD (Clearing Agents)**
- ✓ **Restricts Clearing Agent Assignments**

Individual WCDs

WCM: Assign Clearing Agent

Partners Goto System Help

New Entries Qualifications Group/Ind Verify Act./Deac.

Plant **NNUC** WCD **4029229** Service building AC unit inspections GRP ☐

<input type="checkbox"/> CLAgent	JOBSUP	JOB SUPERVISOR	Act <input checked="" type="checkbox"/> Ver <input checked="" type="checkbox"/> Mngr <input type="checkbox"/>
Partner	5146	ARMANDO F FERNANDEZ	CHBY NUAFF
<input type="checkbox"/> CLAgent	WORKER	WORKER	
Partner	12342	STEPHEN E NEFF	
<input checked="" type="checkbox"/> CLAgent	JOBSUP	JOB SUPERVISOR	
Partner	360	THOMAS M O GRADY	

Information

Only one manager and one worker allowed with WBT..

OK Help

Only one manager and one worker allowed with WBT..

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Attempting to activate a second Job Supervisor results in an error on Individual WCDs.

Group WCDs

- ✓ **Same Basic Function as Individual**
- ✓ **Identifies Multiple Supervisors**
- ✓ **Allows Title Clearing Agents**
- ✓ **Allows Worker Clearing Agents**
- ✓ **Tagging Rules Checks**

Group WCDs

WCM: Assign Clearing Agent

Partners Goto System Help

New Entries Qualifications Group/Ind Verify Act./Deac.

Plant: **NNUC** WCD: **4029286** 12 BORIC ACID EVAP CONC.PUMP GRP ☒

<input type="checkbox"/> CL.Agent Partner	TITLE 10	TAGGED FOR TITLE SHIFT SUPERVISOR	Act <input type="checkbox"/> Ver <input type="checkbox"/> Mngr <input checked="" type="checkbox"/>
<input type="checkbox"/> CL.Agent Partner	JOBSUP 360	JOB SUPERVISOR THOMAS M O GRADY	Act <input type="checkbox"/> Ver <input type="checkbox"/> Mngr <input checked="" type="checkbox"/>
<input type="checkbox"/> CL.Agent Partner	WORKER 9040	WORKER ASSIGNED - WBT BRIAN FALLA	Act <input type="checkbox"/> Ver <input type="checkbox"/> Mngr <input type="checkbox"/>

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TITLE and JOBSUP Clearing Agents are considered WCD Managers.

Conflict Analysis

- ✓ **Allows “What if” Scenarios**
- ✓ **Identifies Position Conflicts**
- ✓ **Identifies Tag Type Conflicts**
- ✓ **Differentiates Conflict Types**

Conflict Analysis

Simulation: Conflict (Tag)				
10 Technical object S1GS -1GS48 : M 0 RBT				
WC document	Counter	OpCond.	OT	System status
4028830	10	X	RBT	PTAG
20 Technical object S2MS -2MS900 : M X WBT				
WC document	Counter	OpCond.	OT	System status
4028830	20	X	RBT	PTAG
30 Technical object S2MS -2MS912 : M 0 VER				
WC document	Counter	OpCond.	OT	System status
4027867	140	0	VER	ETG
4028830	30	0	RBT	PTAG
40 Technical object S1GS -1GS49 : M 0 RBT				
WC document	Counter	OpCond.	OT	System status
4028830	40	0	RBT	PTAG

Red conflicts are considered safety significant.

Green conflicts should be reviewed for possible problems.

Standard Tag Out Library

- ✓ **Special Instructions Text**
- ✓ **Used to Create New Tag Outs**
- ✓ **Provides Repeatability**
- ✓ **Allows “What if” Scenarios**

Blocking Points

- ✓ Functional locations
- ✓ Equipments
- ✓ Temporary Blocking Points (No Master Data)

Linking to Orders and/or Operations

- ✓ **Identifies Work Being Covered**
- ✓ **Aides in Boundary Determination**
- ✓ **Provides Link From Order Back to WCD**
- ✓ **Lists Clearance Numbers**

Linking to Orders and/or Operations

Change Preventive Maintenance, Nuclear 30039061: Central Header

Order Edit Goto Extras Environment System Help

WC application

Order: NUPM 30039061 3Y/PM/2ARE5/23 AR VAC PM

Sys.status: REL CSER PRC SETC

HeaderData | Operations | Components | Costs | Partner | Objects | Ad

Orders are linked using WC Applications.

Operations are linked using op level permitting.

Assign Permit

Permit Edit Goto System Help

3Y/PM/2ARE5/23 AR VAC FMP/CLN REPCK CPLG

Sch. Start: 01/14/2002 Outage Req. 054 Main Work Cntr M-PMR

Fun. Loc. S2AR -2ARE5 23 AIR REMOV VACUUM PUMP

Equipment 10263257

Assembly

Location 17100019 Room No. Operations 4

Act.	Subop	Description	Lt	Conf	Pmt	Ind	StTextKy	EarSchDte	Work	Nunr	Work ctr	System status
0005		EVALUATE FOR PERMITS.					NPERMIT	01/14/2002	0	0	M-PMR	CRTD REL
0005	0010	EVALUATE FOR SAFETY TAG...					NTAGYES	01/14/2002	0	0	M-PMR	CRTD REL
0020		PERFORM COUPLING LUBE I...					NLUBE	01/14/2002	8	2	M-PMR	CRTD REL
0030		PLACE IN SERVICE AND VERI...					NRTOP	01/14/2002	2	1	M-PMR	CRTD REL

Permits

No. 1 of 1

Type: NTAGYES SAFETY TAGGING

Permit #: 4027867

NUM 1: 0

NUM 2: 0

NUM 3: 0.000

DATE: DATE

DATE: DATE

Comment:

Restorations

- ✓ **Identifies Restoration Position**
- ✓ **Provides Text for Field Operator**
- ✓ **Tracks Last Verified Date / Time**

Restorations

SNU	Technical Object Description Location	Tag Cond	Untag Cond	Type	As Left	INIT
00000	S1SPI-CW-0002 SEE TAGGING / UNTAGGING LONG TEXT	NA	NA	N/T	---	---
00005	S1FW-1FW179 FW TO HW ISOL VALVE 0410000055-SA CIRC WATER INTAKE. Related WCD : 000004027693	X	O	RBT	---	---

Field instructions can be added to shop papers for both tagging and untagging evolutions.

UNTAGGING WORK LIST

Plant Nuclear Business Unit
Document No 4027702
Header Description Circ Water Boiler outage (1Y inspection)
Group
Tagged For Assigned to ESO #:

Printed By NUB0F
Date 10/28/2001
Time 12:53:36
Page 3 of 3

VAR.1[] VAR.2 []
MAINTENANCE SHEET []

SNU	Technical Object Description Location	Tag Cond	Untag Cond	Type	As Left	INIT
		Status				

UnTagging Long Text

Release Instructions:

___ Use STAR principle when releasing tags.

___ Ensure All personel involved with filling and venting system have been briefed IAW Chemical Plan associated with CW Boiler.

___ S1SPI-CW-02: Fill and Vent CW boiler and affected HW piping IAW section 5.4 of SC.OP-SO.CW-0002.

___ S1SPI-CW-01: Place CW boiler in service IAW section 5.1 of SC.OP-SO.CW-0002.

Reviewed By _____
Date _____

Restorations

WCM: Display Current Positions

Current Position Goto System Help

Plant **NNUC** CompArea **S1** Mode **01**

TechObject **F S1230-1CWY2CW4D7** CIRC WATER INTAKE SPACE HEATER

NormalPos **X** VALVES CLOSED, BKRS CLOSED/ON

CurrentPos **X** VALVES CLOSED, BKRS CLOSED/ON

User Info

Comments Set by 000004027702 at EUG

Changed on **10/28/2001** Changed by **NUB0F**

Technical Object Status

WCD	System Status	User Status

Current position screen lists comments related to the last position change. If the exact time of the change is needed, this data is retained in the change log.

User: NUB0F		Change Document (Current Position)				Date: 10/28/2001	
Plant: NNUC		Technical Object: S1230-1CWY2CW4D7				Time: 14:03:57	
Date	Time	User	Action	Record	Field	Old Value	New Value
10/28/2001	13:33:43	NUB0F	Update	NNUC F S1230-1CWY2CW4D7	ACTPROC	0	X

Lineups

- ✓ **Provides Grouping**
- ✓ **Identifies Off-Normal Components**
- ✓ **Shows Conflicts with WCDs**
- ✓ **Identifies Restoration Position**
- ✓ **Provides Text for Field Operator**
- ✓ **Tracks Last Verified Date/Time**

Lineups

Change Lineup Transaction: Detail Screen Transaction No. 0000001166

Transaction Edit Goto System Help

Select all tech obj Mark all

Lineup txn no	1166	Date created	10/03/2001
Lineup Id	18 RHR LOOP B	Planning plant	NNUC
Lineup System Id	RHR EQUIPMENT ALIGNMENT	Plant sect/Comp area	HC
Lineup Type	EQUIP EQUIPM...	Cond.op.syst/Mode	01
Lineup Category	N NORMA...	Lineup Verif. Level	2
Lineup txn desc	TRISBC001B RF10 'B' RHR	Current verif Level	1
Lineup Status	New		

Transaction items

SlNo	Item	St	Object	Exp posn	Curr Posn	
1	10	F	H1BC -52-222113	X	X	000
MOV BC-HUF075 RHR S... Set by 4026342 while untagg...						
2	20	F	H1BC -52-222092	X	X	000
MOV BC-HUF048B RHR ... Set by 4011007 while untagg...						
3	30	F	H1BC -52-222091	X	X	000
MOV BC-HUF047B RHR ... Set by 4020714 while untagg...						
4	40	F	H1BC -52-222083	IP	IP	000
RHR TORUS SPRAY 1BC... Set by 4011007 while untagg...						
5	50	F	H1BC -52-222063	IP	IP	000
RHR TEST RETURN 1BC... Set by 4011007 while untagg...						
6	60	F	H1BC -52-222061	IP	IP	000
RHR CNTNMNT SPRAY 0... Set by 4011007 while untagg...						
7	70	F	H1BC -52-222013	X	X	000
MOV BC-HUF003B RHR ... Set by 4020714 while untagg...						

Confirm Entry 1 of 215

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Lineups can be used to verify positions of components prior to putting a system back in service.

Plant Component Configuration

- ✓ **Mode Dependent Normal Positioning**
- ✓ **Current Position Information**
- ✓ **Mode Dependent Off Normal Reporting**
- ✓ **Mode Dependent Tagged Off Normal Reporting**

Mode Dependent Normal Positioning

[illegible]

Current Mode	
Plant	NNUC
CompArea	S1
Mode	01

User Info	
Name	MODE 1
Changed on	10/16/2001
Last chang	NUWBR

Plant mode and mode dependent normal position is maintained in SAP.

Current Position Information

The screenshot shows a software window titled "WCM: Display Current Positions". It contains several sections for displaying technical data:

- Current Position:** Includes fields for Plant (NNUC), CompArea (S1), Mode (01), TechObject (F STAR -12AR8), NormalPos (0), and CurrentPos (X).
- User Info:** Includes a Comments field (Set by 000004033964 at ETG) and a Changed on field (09/29/2001).
- Technical Object Status:** A table with columns for WCD, System Status, and User Status.

WCD	System Status	User Status
000000120153	PREP PROC ETG	

At the bottom right, there is a status bar with the text: P00 (2) (100) | sappa01 | INS | 10:05

Current position and tagging information is displayed.

User can navigate to WCD(s) from this screen.

Mode Dependent Off Normal Reporting

User: NUBOF Off Normal Report Date: 11/03/2001
Plant: MNUC Mode 01 Time: 10:21:44

Technical Object	Description	Current	Normal	Location	Loc. Description	Status	ChangeDate	Remark
S1115-1FLFH11A19	FUEL TRANSFER CONT PNL (see text)	0	X	0610000001	SA SKIMMER PAD & CONTROL PANEL.	OffNormal	04/11/2001	Set by 4026869 while tagging
S1125-1AX1AX2X#	11CFCU LO SPD BKR CTL PWR	0	BD	0108400002	SA 460/230V VITAL, 125/250VDC BAT	OffNormal	11/03/2001	ADMIN TO INOP CFCU
S1125-1AX1AX3X#	11CFCU HI SPD BKR CTL PWR	0	BD	0108400002	SA 460/230V VITAL, 125/250VDC BAT	OffNormal	11/03/2001	ADMIN TO INOP CFCU
S1125-1AX1AX4X#	11CFCU HI SPD BKR CTL PWR	0	BD	0108400002	SA 460/230V VITAL, 125/250VDC BAT	OffNormal	11/03/2001	ADMIN TO INOP CFCU
S1125-1CX1AX6X#	15CFCU LO SPD BKR CTL PWR	0	BD	0108400002	SA 460/230V VITAL, 125/250VDC BAT	OffNormal	11/03/2001	ADMIN TO INOP CFCU
S1125-1CX1AX7X#	15CFCU HI SPD BKR CTL PWR	0	BD	0108400002	SA 460/230V VITAL, 125/250VDC BAT	OffNormal	11/03/2001	ADMIN TO INOP CFCU
S1125-1CX1AX8X#	15CFCU HI SPD BKR CTL PWR	0	BD	0108400002	SA 460/230V VITAL, 125/250VDC BAT	OffNormal	11/03/2001	ADMIN TO INOP CFCU
S1230-1CWY2CW4A	CW SPACE HTG BLR CIRC PMP	0	X	0410000055	SA CIRC WATER INTAKE.	OffNormal	06/24/2001	Set by 4027702 while tagging
S1230-1CWY2CW4D5-3	13 UNIT HEATER FAN MTR STARTER	0	X	0410000055	SA CIRC WATER INTAKE.	OffNormal	06/27/2001	Set by 4027693 while tagging
S1230-1CWY2CW4D7	CIRC WATER INTAKE SPACE HEATER	0	X	0410000055	SA CIRC WATER INTAKE.	OffNormal	06/24/2001	Set by 4027702 while tagging
S1230-1FY1SP1	11 SPACE HEATER	0	X	0310000001	SA MS PENET AREA	OffNormal	10/14/2001	BROKEN - 20079983
S1460-1EX1CB2H	1 RX CAN CNTR PNL 439-1	0	X	0510000009	SA 11 IODINE REMOVAL FAN UNIT.	OffNormal	04/11/2001	Set by 4026869 while tagging
S1460-1GX1FH1K	1 FUEL TRANSFER PANEL	0	X	0610000001	SA SKIMMER PAD & CONTROL PANEL.	OffNormal	04/11/2001	Set by 4026869 while tagging
S1460-1HX1CP4E	SAMPLE CHILLER	0	X	0410000042	SA NO 1 COND POLISHING HOUSE	OffNormal	08/31/2001	20057819
S1460-1HX1TB25X	SRV BDG 460 PWR PNL SBPPL140T AIR CHIL	DI	X	0712000003	SA SECONDARY CHEM LAB	OffNormal	06/06/2001	Set by 4029229 while tagging
S1CA -1CA363	SUP TO PNL 244	X	0	0507800004	SA CORRIDOR SEAL TABLE/SUMP DOOR	OffNormal	10/26/2001	CLOSED FOR 20064420.
S1CH -1CH959	SUPPLY TO PL-2010	X	0	0712000001	SA AMMONIA STORAGE AREA.	OffNormal	08/31/2001	20070678 VLV STEM BROKEN
S1CW -1SC22	1SC13 PRESS TAP	X	0	0410000055	SA CIRC WATER INTAKE.	OffNormal	09/25/2001	ISOLATE LEAK ; 20078097
S1DF -1DF120	#3 & 4 SW HOT AIR FURNACE DF ISOL VAL	X	0	0410000049	SA SERVICE WATER BLDG.	OffNormal	10/24/2001	Set by 000004027609 at ETC
S1DF -1DF122	HTR CIRC WATER INTAKE INLET VALVE	X	0	0410000055	SA CIRC WATER INTAKE.	OffNormal	06/24/2001	Set by 4027702 while tagging

Mode Dependent Tagged Off Normal Reporting

User: NUBOF Off Normal Report Date: 11/03/2001
Plant: MNUC Mode 01 Time: 10:20:13

Technical Object	Description	Current	Normal	Location	Loc. Description	Status	ChangeDate	Remark
S1CVC-12WR73	CONC PMP FLUSH CONN	X	X	0108400023	SA SEAL WTR INJ FILTERS VA RM	Tagged	03/23/2001	Set by 4026125 while tagging
S1CVC-13CVPP-BZL	13 CHARGING PUMP BEZEL	NA	NE	0112200002	SA NO 1 CONTROL RM	Tagged	00/00/0000	Set by 114782 while tagging
S1CVC-1BR135	FEED INLET DRN	0	X	0110000008	SA BORIC ACID EVAPORATOR ROOM	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR144	EVAP STM COIL VENT V	0	X	0111300001	SA SAMPLE ROOM	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR172	UNIT 1-UNIT 2 BA FD XCONN	X	X	0110000008	SA BORIC ACID EVAPORATOR ROOM	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR43	IX FILTER OUTLET VALVE	X	IP	0110000014	SA ION EXCHANGER RM/DH ALLEY.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR44	IX FILTER BYP VALVE	X	X	0110000014	SA ION EXCHANGER RM/DH ALLEY.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR56	EVAP FD RECIRC	X	IP	0110000014	SA ION EXCHANGER RM/DH ALLEY.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR59	BA EVAP TO WA EVAP	X	X	0110000010	SA 1 CONCENTRATES FILTER ROOM.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR61	CONC FILT INLET VALVE	X	IP	0110000010	SA 1 CONCENTRATES FILTER ROOM.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR66	CONC FILT BYP VALVE	X	X	0110000010	SA 1 CONCENTRATES FILTER ROOM.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1BR68	CONC HOLD TK INLET V	X	0	0108400023	SA SEAL WTR INJ FILTERS VA RM	Tagged	03/23/2001	Set by 4026125 while tagging
S1CVC-1BR76	CONC HOLD TK RECIRC V	X	IP	0108400023	SA SEAL WTR INJ FILTERS VA RM	Tagged	03/23/2001	Set by 4026125 while tagging
S1CVC-1BR79	12 CVCS HUT INLET BYPASS VALVE	LX	LX	0106400025	SA GS FD PMP RM	Tagged	08/01/2001	.
S1CVC-1CV57	13 CHG PUMP SUCT VALVE	X	LO	0108400037	SA 13 CHARGING PUMP ROOM	Tagged	00/00/0000	Set by 114782 while tagging
S1CVC-1CV64	13 CHG PUMP DISCH VALVE	X	IP	0108400034	SA CHARGING PUMP VALVE ALLEY	Tagged	00/00/0000	Set by 114782 while tagging
S1CVC-1WR115	PW BA EVAP VALVE	X	X	0110000028	SA EVAPORATOR'S CONTROL PANEL RM.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1WR130	BA EVAP DIST CLR OUTLET DRN	0	X	0110000013	SA WASTE EVAPORATOR ROOM	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CVC-1WR2	BA EVAP CLR OUTLET STOP VALVE	X	IP	0110000014	SA ION EXCHANGER RM/DH ALLEY.	Tagged	10/21/2001	Set by 000004030560 at ETC
S1CW -13BCWPP-BZL	13B CIRC WATER PUMP BEZEL	NE	NE	0112200002	SA NO 1 CONTROL RM	Tagged	00/00/0000	Set by 4011869 while untagging
S1CW -13CW126	13B CNDSR OUTLET MOV	X	IP	0710000043	SA 13 COND. COOLING OUTLET AREA.	Tagged	11/03/2001	Set by 000004043810 at ETC

Involvement at Your site

- ✓ Represented Employees Involvement**
- ✓ Safety Tagging SME's**
- ✓ Corporate Safety Committee**
- ✓ IS Department**

SAP-CENTRIC EAM 2010

Inspiring Individuals – Empowering Enterprises



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