

SWING HPSI PUMP P-018 ALIGNMENT

UNIT 2 (2 or 3)

DATE 7 Feb 85

TIME 0100

1.0 PREREQUISITES

INITIALS

1.1 Prior to use of an uncontrolled (pink) copy of this Station Document to perform work, verify that it is current by checking a controlled copy an any TCNs or by use of the method described in SO123-VI-1.0.

RCN

1.1.1 List all applicable TCNs or write N.A.

7-8

1.2 On-shift SRO-Operations Supervisor approval obtained.  
(SRO OPS SUPV Initials)

RL

1.3 If in Mode 4 (write N/A if not), at least one train of HPSI is operable and in service and will not be affected by the performance of this procedure.

N/A

1.4 HPSI P-018 shall be completely isolated from ESFAS Train prior to alignment to other ESFAS Train.

RL

2.0 PROCEDURE

INITIALS  
1ST / 2ND

NOTE: (1) Not applicable if performed in conjunction with Check-Off List 10.

2.1 Placing HPSI P-018 In Service on Train A

2.1.1 Turn DC Off and RACK OUT A0609

RCN RL

2.1.2 Lock Closed "B" Train mini-flow valve S2(3)1204MU104 to HPSI P-018

RCN RL

2.1.3 Lock Closed HPSI P-018 Train B discharge valve S2(3)1204MU014

RCN RL

2.1.4 Lock Closed HPSI P-018 Train B suction valve S2(3)1204MU011

RCN RL

2.1.5 Lock Closed CCW Train B to HPSI P-018 valve S2(3)1203MU259

RCN RL

2.1.6 Close CCW Train B from HPSI P-018 valve S2(3)1203MU231

RCN RL

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2-36531 2.1.7 Lock Open HPSI P-018 miniflow  
recirc. to Train A valve  
S2(3)1204MU036
- 2.1.8 Lock Closed P-018 miniflow  
orifice bypass valve S2(3)1204MU186
- 2.1.9 Lock Open HPSI P-018 discharge  
valve S2(3)1204MU016.
- 2.1.10 Lock Open HPSI P-018 discharge to  
Train A valve S2(3)1204MU013
- 2.1.11 Lock Open HPSI P-018 suction from  
Train A valve S2(3)1204MU010
- 2.1.12 Lock Open Train A CCW to P-018  
valve S2(3)1203MU258
- 2.1.13 Throttle Train A CCW from P-018 valve  
S2(3)1203MU232 to ~50 gpm as indicated  
by FE-6488

NOTE: Notify Health Physics before venting  
potentially radioactive water

- 2.1.13 Vent P-018 suction piping by uncapping  
and venting with P-018 suction vent  
valve S2(3)1204MR367 (passage between  
SEB Rms 005 and 015)
- 2.1.14 Close and cap P-018 suction vent  
valve S2(3)1204MR367

NOTE: Notify Health Physics before venting  
potentially radioactive water

- 2.1.15 Vent P-018 discharge piping by uncapping  
and venting with P-018 discharge vent  
valve S2(3)1204MR106
- 2.1.16 Close and cap P-018 discharge vent  
valve S2(3)1204MR106

NOTE: When P-018 is not aligned to  
either Train A or B, then both  
Train A and B Kirk Keys must be  
inserted in transfer switch D004

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.1.17 Remove Kirk Key from HPSI P-018  
P-018 Train B breaker A0609
- 2.1.18 Place Kirk Key in "Fed from A0609"  
position at disconnect switch D004
- 2.1.19 Position D004 to handle to the up  
position "Fed from A0409"
- 2.1.20 Remove Kirk Key from "Fed from A0409"  
position at disconnect switch D004
- 2.1.21 Place Kirk Key in breaker  
A0409
- 2.1.22 HPSI P-018 Train A breaker A0409:

RACKED IN  
DC ON  
CLOSING SPRINGS  
CHG MOTOR ENERGIZED.

TCN /

CAUTION Until P-018 is declared operable  
===== per step 2.3 23, Train A HPSI  
is not operable. With the  
plant in Modes 1-3, comply  
with the action requirements  
of Technical Specification 3.5.2.

- (1)2.1.23 With an operator present at P-018 to check  
for abnormal operation, start P-018 and  
verify P-018 operable as follows:

- .1 Verify P-018 starts and develops greater  
than 1400 psig discharge pressure as  
indicated on PI-0308 (CR-57)
- .2 Verify P-018 exhibits no unusual  
vibration or leakage while running

- 2.1.24 Stop P-018.

NOTE: P-018 and Train A HPSI are  
now operable

TCN /

NOTE: (1) Not applicable if performed in  
conjunction with Check-Off List 10.

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

2.3.10 Lock Closed CCW Train A to HPSI P-018  
valve S2(3)1203MU258

/

2.3.11 Close CCW Train A from HPSI  
P-018 valve S2(3)1203MU232

/

2.3.12 Lock Closed HPSI P-018 Train B  
miniflow valve S2(3)1204MU104

/

2.3.13 Lock Closed HPSI P-018 Train B  
discharge valve S2(3)1204MU014

/

2.3.14 Lock Closed HPSI P-018 Train B  
suction valve S2(3)1204MU011

/

2.3.15 Lock Closed CCW Train B to HPSI  
P-018 valve S2(3)1203MU259

/

2.3.16 Close CCW Train B from HPSI  
P-018 valve S2(3)1203MU231

/

PERFORMED BY:

[Signature] [Initial]  
Operator Initial

DATE/TIME

2-8-85 / 0100

PERFORMED BY:

[Signature] [Initial]  
Operator Initial

DATE/TIME

2-8-85 / 0100

VERIFIED BY:

MIKE BEDKH [Initial]  
Operator Initial

DATE/TIME

2-8-85 / 0300

VERIFIED BY:

/ /  
Operator Initial

DATE/TIME

NOTE:

SRO Ops. Supv. shall not sign "Reviewed By" until all comments  
in relation to this Check-Off List have been resolved i.e.:  
TCNs written and incorporated, caps and flanges installed, locks  
and chains in place, etc.

REVIEWED BY:

(SRO Ops. Supv.)

DATE/TIME

SAN ONOFRE NUCLEAR GENERATING STATION  
UNITS 2 AND 3

OPERATING INSTRUCTION S023-3-2.7  
REVISION 7 PAGE 1 OF 8  
ATTACHMENT 8.9  
CHECK-OFF LIST 9  
TCN 7-8

SWING HPSI PUMP P-018 ALIGNMENT

UNIT 2 (2 or 3)

DATE 7 Feb 85

TIME 0100

1.0 PREREQUISITES

INITIALS

1.1 Prior to use of an uncontrolled (pink) copy of this Station Document to perform work, verify that it is current by checking a controlled copy on any TCNs or by use of the method described in S0123-VI-1.0.

REN

1.1.1 List all applicable TCNs or write N.A.

7-8

1.2 On-shift SRO-Operations Supervisor approval obtained.  
(SRO OPS SUPV Initials)

RR

1.3 If in Mode 4 (write N/A if not), at least one train of HPSI is operable and in service and will not be affected by the performance of this procedure.

N/A

1.4 HPSI P-018 shall be completely isolated from ESFAS Train prior to alignment to other ESFAS Train.

REN

2.0 PROCEDURE

INITIALS  
1ST / 2ND

NOTE: (1) Not applicable if performed in conjunction with Check-Off List 10.

2.1 Placing HPSI P-018 In Service on Train A

2.1.1 Turn DC Off and RACK OUT A0609

10:11 AM

2.1.2 Lock Closed "B" Train mini-flow valve S2(3)1204MU104 to HPSI P-018

10:11 AM

2.1.3 Lock Closed HPSI P-018 Train B discharge valve S2(3)1204MU014

10:11 AM

2.1.4 Lock Closed HPSI P-018 Train B suction valve S2(3)1204MU011

10:11 AM

2.1.5 Lock Closed CCW Train B to HPSI P-018 valve S2(3)1203MU259

10:11 AM

2.1.6 Close CCW Train B from HPSI P-018 valve S2(3)1203MU231

10:11 AM

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

2.1.7 Lock Open HPSI P-018 miniflow  
recirc. to Train A valve  
S2(3)1204MU036

1st 2nd MA

2.1.8 Lock Closed P-018 miniflow  
orifice bypass valve S2(3)1204MU186

1st 2nd MA

2-36531 2.1.8 Lock Open HPSI P-018 discharge  
valve S2(3)1204MU016.

1st 2nd MA

2.1.9 Lock Open HPSI P-018 discharge to  
Train A valve S2(3)1204MU013

1st 2nd MA

2.1.10 Lock Open HPSI P-018 suction from  
Train A valve S2(3)1204MU010

1st 2nd MA

2.1.11 Lock Open Train A CCW to P-018  
valve S2(3)1203MU258

1st 2nd MA

2.1.12 Throttle Train A CCW from P-018 valve  
S2(3)1203MU232 to ~50 gpm as indicated  
by FE-6488

1st 2nd MA

NOTE: Notify Health Physics before venting  
potentially radioactive water

2.1.13 Vent P-018 suction piping by uncapping  
and venting with P-018 suction vent  
valve S2(3)1204MR367 (passage between  
SEB Rms 005 and 015)

1st 2nd MA

2.1.14 Close and cap P-018 suction vent  
valve S2(3)1204MR367

1st 2nd MA

NOTE: Notify Health Physics before venting  
potentially radioactive water

2.1.15 Vent P-018 discharge piping by uncapping  
and venting with P-018 discharge vent  
valve S2(3)1204MR106

1st 2nd MA

2.1.16 Close and cap P-018 discharge vent  
valve S2(3)1204MR106

1st 2nd MA

NOTE: When P-018 is not aligned to  
either Train A or B, then both  
Train A and B Kirk Keys must be  
inserted in transfer switch D004

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.1.17 Remove Kirk Key from HPSI P-018  
P-018 Train B breaker A0609
- 2.1.18 Place Kirk Key in "Fed from A0609"  
position at disconnect switch D004
- 2.1.19 Position D004 to handle to the up  
position "Fed from A0409"
- 2.1.20 Remove Kirk Key from "Fed from A0409"  
position at disconnect switch D004
- 2.1.21 Place Kirk Key in breaker  
A0409
- 2.1.22 HPSI P-018 Train A breaker A0409:

RACKED IN  
DC ON  
CLOSING SPRINGS  
CHG MOTOR ENERGIZED.

TCN |

CAUTION Until P-018 is declared operable  
===== per step 2.3 23, Train A HPSI  
is not operable. With the  
plant in Modes 1-3, comply  
with the action requirements  
of Technical Specification 3.5.2.

- (1)2.1.23 With an operator present at P-018 to check  
for abnormal operation, start P-018 and  
verify P-018 operable as follows:
- .1 Verify P-018 starts and develops greater  
than 1400 psig discharge pressure as  
indicated on PI-0308 (CR-57)
- .2 Verify P-018 exhibits no unusual  
vibration or leakage while running
- 2.1.24 Stop P-018.

TCN |

NOTE: P-018 and Train A HPSI are  
now operable

NOTE: (1) Not applicable if performed in  
conjunction with Check-Off List 10.

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

2.3.10 Lock Closed CCW Train A to HPSI P-018  
valve S2(3)1203MU258

/

2.3.11 Close CCW Train A from HPSI  
P-018 valve S2(3)1203MU232

/

2.3.12 Lock Closed HPSI P-018 Train B  
miniflow valve S2(3)1204MU104

/

2.3.13 Lock Closed HPSI P-018 Train B  
discharge valve S2(3)1204MU014

/

2.3.14 Lock Closed HPSI P-018 Train B  
suction valve S2(3)1204MU011

/

2.3.15 Lock Closed CCW Train B to HPSI  
P-018 valve S2(3)1203MU259

/

2.3.16 Close CCW Train B from HPSI  
P-018 valve S2(3)1203MU231

/

PERFORMED BY:

[Signature]  
Operator Initial

DATE/TIME

2-8-85 / 0100

PERFORMED BY:

[Signature]  
Operator Initial

DATE/TIME

2-8-85 / 0600

VERIFIED BY:

MIKE BEDICH / MB  
Operator Initial

DATE/TIME

2-8-85 / 0300

VERIFIED BY:

/  
Operator Initial

DATE/TIME

NOTE:

SRO Ops. Supv. shall not sign "Reviewed By" until all comments  
in relation to this Check-Off List have been resolved i.e.:  
TCNs written and incorporated, caps and flanges installed, locks  
and chains in place, etc.

REVIEWED BY:

(SRO Ops. Supv.)

DATE/TIME

SWING HPSI PUMP P-018 ALIGNMENT

UNIT 2 (2 or 3)

DATE 2-12-85

TIME 1130

1.0 PREREQUISITES

INITIALS

- 1.1 Prior to use of an uncontrolled (pink) copy of this Station Document to perform work, verify that it is current by checking a controlled copy an any TCNs or by use of the method described in SO123-VI-1.0.

- 1.1.1 List all applicable TCNs or write N.A.

7-3 7-8

- 1.2 On-shift SRO-Operations Supervisor approval obtained.  
(SRO OPS SUPV Initials)

- 1.3 If in Mode 4 (write N/A if not), at least one train of HPSI is operable and in service and will not be affected by the performance of this procedure.

- 1.4 HPSI P-018 shall be completely isolated from ESFAS Train prior to alignment to other ESFAS Train.

2.0 PROCEDURE

NOTE: (1) Not applicable if performed in conjunction with Check-Off List 10.

2.1 Placing HPSI P-018 In Service on Train A

- |       |  |              |      |
|-------|--|--------------|------|
| 2.1.1 | Turn DC Off and RACK OUT A0609                                     | <u>N/A /</u> | PHPI |
| 2.1.2 | Lock Closed "B" Train mini-flow valve S2(3)1204MU104 to HPSI P-018 | <u>N/A /</u> | PHPI |
| 2.1.3 | Lock Closed HPSI P-018 Train B discharge valve S2(3)1204MU014      | <u>N/A /</u> | PHPI |
| 2.1.4 | Lock Closed HPSI P-018 Train B suction valve S2(3)1204MU011        | <u>N/A /</u> | PHPI |
| 2.1.5 | Lock Closed CCW Train B to HPSI P-018 valve S2(3)1203MU259         | <u>N/A /</u> | PHPI |
| 2.1.6 | Close CCW Train B from HPSI P-018 valve S2(3)1203MU231             | <u>N/A /</u> | PHPI |

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.1.7 Lock Open HPSI P-018 miniflow  
recirc. to Train A valve  
S2(3)1204MU036
- 2.1.8 Lock Closed P-018 miniflow  
orifice bypass valve S2(3)1204MU186
- 2.1.8 Lock Open HPSI P-018 discharge  
valve S2(3)1204MU016.
- 2.1.9 Lock Open HPSI P-018 discharge to  
Train A valve S2(3)1204MU013
- 2.1.10 Lock Open HPSI P-018 suction from  
Train A valve S2(3)1204MU010
- 2.1.11 Lock Open Train A CCW to P-018  
valve S2(3)1203MU258
- 2.1.12 Throttle Train A CCW from P-018 valve  
S2(3)1203MU232 to ~50 gpm as indicated  
by FE-6488

RLS/IK OK

RLS/IK OK

RLS/IK OK

RLS/IK OK

RLS/IK OK

RLS/IK OK

RLS/IK OK

NOTE: Notify Health Physics before venting  
potentially radioactive water

- 2.1.13 Vent P-018 suction piping by uncapping  
and venting with P-018 suction vent  
valve S2(3)1204MR367 (passage between  
SEB Rms 005 and 015)
- 2.1.14 Close and cap P-018 suction vent  
valve S2(3)1204MR367

N/A PHPI

N/A PHPI

NOTE: Notify Health Physics before venting  
potentially radioactive water

- 2.1.15 Vent P-018 discharge piping by uncapping  
and venting with P-018 discharge vent  
valve S2(3)1204MR106
- 2.1.16 Close and cap P-018 discharge vent  
valve S2(3)1204MR106

N/A PHPI

N/A PHPI

NOTE: When P-018 is not aligned to  
either Train A or B, then both  
Train A and B Kirk Keys must be  
inserted in transfer switch D004

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- |        |  |            |            |
|--------|--|------------|------------|
| 2.1.17 | Remove Kirk Key from HPSI P-018<br>P-018 Train B breaker A0609   | <u>N/A</u> | <u>PHD</u> |
| 2.1.18 | Place Kirk Key in "Fed from A0609"<br>position at disconnect switch D004                               | <u>N/A</u> | <u>PHD</u> |
| 2.1.19 | Position D004 to handle to the up<br>position "Fed from A0409"   | <u>N/A</u> | <u>PHD</u> |
| 2.1.20 | Remove Kirk Key from "Fed from A0409"<br>position at disconnect switch D004                            | <u>N/A</u> | <u>PHD</u> |
| 2.1.21 | Place Kirk Key in breaker<br>A0409   | <u>N/A</u> | <u>PHD</u> |
| 2.1.22 | HPSI P-018 Train A breaker A0409:<br><br>RACKED IN<br>DC ON<br>CLOSING SPRINGS<br>CHG MOTOR ENERGIZED. | <u>N/A</u> | <u>PHD</u> |

TCN |  
CAUTION Until P-018 is declared operable  
===== per step 2.3.22, Train A HPSI  
is not operable. With the  
plant in Modes 1-3, comply  
with the action requirements  
of Technical Specification 3.5.2.

- (1)2.1.23 With an operator present at P-018 to check  
for abnormal operation, start P-018 and  
verify P-018 operable as follows:
- .1 Verify P-018 starts and develops greater  
than 1400 psig discharge pressure as  
indicated on PI-0308 (CR-57)
  - .2 Verify P-018 exhibits no unusual  
vibration or leakage while running
- 2.1.24 Stop P-018.

N/A PHD  
N/A PHD  
N/A PHD

TCN |  
NOTE: P-018 and Train A HPSI are  
now operable

NOTE: (1) Not applicable if performed in  
conjunction with Check-Off List 10.

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

2.2 Placing HPSI P-018 In Service on Train B

- |        |   |      |     |
|--------|---|------|-----|
| 2.2.1  | Turn DC Off and Rack Out<br>HPSI P-018 breaker A0409  | N/A/ | PHI |
| 2.2.2  | Lock Closed HPSI P-018<br>Train A Miniflow valve<br>S2(3)1204MU036                            | N/A/ | PHI |
| 2.2.3  | Lock Closed HPSI P-018<br>Train A discharge valve<br>S2(3)1204MU013                           | N/A/ | PHI |
| 2.2.4  | Lock Closed HPSI P-018<br>Train A suction valve S2(3)1204MU010                                | N/A/ | PHI |
| 2.2.5  | Lock Closed CCW Train A<br>to HPSI P-018 valve S2(3)1203MU258                                 | N/A/ | PHI |
| 2.2.6  | Close CCW Train A from HPSI<br>P-018 valve S2(3)1203MU232                                     | N/A/ | PHI |
| 2.2.7  | Lock Open HPSI P-018 miniflow recirc.<br>to Train B valve S2(3)1204MU104                      | N/A/ | PHI |
| 2.2.8  | Lock Closed P-018 miniflow<br>orifice bypass valve S2(3)1204MU186                             | N/A/ | PHI |
| 2.2.9  | Lock Open HPSI P-018 discharge to<br>Train B valve S2(3)1204MU014                             | N/A/ | PHI |
| 2.2.10 | Lock Open HPSI P-018 discharge<br>valve S2(3)1204MU016  | N/A/ | PHI |
| 2.2.11 | Lock Open HPSI P-018 suction from<br>Train B valve S2(3)1204MU011                             | N/A/ | PHI |
| 2.2.12 | Lock Open Train B CCW to P-018<br>valve S2(3)1203MU259  | N/A/ | PHI |
| 2.2.13 | Throttle Train B CCW from P-018 valve<br>S2(3)1203MU231 to ~50 gpm as indicated<br>by FE-6340 | N/A/ | PHI |

NOTE: Notify Health Physics before venting  
potentially radioactive water

- 2.2.13 Vent P-018 suction by uncapping and  
venting with P-018 suction vent valve  
S2(3)1204MR367 (passage between SEB  
Rms 005 and 015)

N/A/ PHI

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.2.14 Close and cap P-018 suction vent  
valve S2(3)1204MR367

N/A PHD

NOTE: Notify Health Physics before venting  
potentially radioactive water.

- 2.2.15 Vent P-018 discharge by uncapping and  
venting with P-018 discharge vent  
valve S2(3)1204MR032

N/A PHD

- 2.2.16 Close and cap P-018 discharge vent  
valve S2(3)1204MR032

N/A PHD

- 2.2.17 Remove Kirk Key from HPSI P-018  
Train A breaker A0409

N/A PHD

- 2.2.18 Place Kirk Key in "Fed from A0409"  
position at disconnect switch D004

N/A PHD

- 2.2.19 Position D004 handle to the down  
position, "Fed from A0609"

N/A PHD

- 2.2.20 Remove Kirk Key from "Fed from A0609"  
position at disconnect switch D004

N/A PHD

- 2.2.21 Place Kirk Key in breaker A0609

N/A PHD

- 2.2.22 HPSI P-018 Train B breaker A0609

RACKED IN  
DC ON  
CLOSING SPRINGS  
CHG MOTOR ENERGIZED.

N/A PHD

CAUTION  
=====

Until P-018 is declared operable  
per step 2.2.23, Train B HPSI is  
not operable. With the plant in  
Modes 1-3, comply with the action  
requirements of Technical  
Specification 3.5.2.

- (1)2.2.23 With an operator present at P-018 to check  
for abnormal operation, start P-018 and  
verify P-018 operable as follows:

NOTE: (1) Not applicable if performed in  
conjunction with Check-Off List 10.

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.2.23.1 Verify P-018 starts and develops greater than 1400 psig discharge pressure as indicated on PI-0309 (CR-57)
- (1)2.2.23.2 Verify P-018 exhibits no unusual vibration or leakage while running.
- (1)2.2.24 Stop P-018

N/A PMP1

N/A PMP1

N/A PMP1

NOTE: P-018 and Train B HPSI are now operable

2.3 Removing P-018 From Service

NOTE: When P-018 is not aligned to either Train A or B, then both Train A and B Kirk Keys must be inserted in transfer switch D004

- 2.3.1 Turn DC Off and Rack Out HPSI P-018 Train A breaker A0409
- 2.3.2 Remove Kirk Key from HPSI P-018 Train A breaker A0409
- 2.3.3 Place Kirk Key in "A0609 TO LOAD" position at disconnect switch D004
- 2.3.4 Turn DC Off and Rack Out HPSI P-018 breaker A0609
- 2.3.5 Remove Kirk Key from HPSI P-018 Train B breaker A0609
- 2.3.6 Place Kirk Key in "A0409 TO LOAD" position at disconnect switch D004
- 2.3.7 Lock Closed HPSI P-018 Train A Mini-flow valve S2(3)1204MU036
- 2.3.8 Lock Closed HPSI P-018 Train A discharge valve S2(3)1204MU013
- 2.3.9 Lock Closed HPSI P-018 Train A suction valve S2(3)1204MU010

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

NOTE: (1) Not applicable if performed in conjunction with Check-Off List 10.

INITIALS  
1ST / 2ND

2.0 PROCEDURE (Continued)

- |        |   |     |      |
|--------|---|-----|------|
| 2.3.10 | Lock Closed CCW Train A to HPSI P-018 valve S2(3)1203MU258    | N/A | dupl |
| 2.3.11 | Close CCW Train A from HPSI P-018 valve S2(3)1203MU232        | N/A | dupl |
| 2.3.12 | Lock Closed HPSI P-018 Train B miniflow valve S2(3)1204MU104  | N/A | dupl |
| 2.3.13 | Lock Closed HPSI P-018 Train B discharge valve S2(3)1204MU014 | N/A | dupl |
| 2.3.14 | Lock Closed HPSI P-018 Train B suction valve S2(3)1204MU011   | N/A | dupl |
| 2.3.15 | Lock Closed CCW Train B to HPSI P-018 valve S2(3)1203MU259    | N/A | dupl |
| 2.3.16 | Close CCW Train B from HPSI P-018 valve S2(3)1203MU231        | N/A | dupl |

PERFORMED BY: [Signature] DATE/TIME 2/12/85  
Operator Initial

PERFORMED BY: [Signature] DATE/TIME \_\_\_\_\_  
Operator Initial

VERIFIED BY: [Signature] DATE/TIME 2/12/85  
Operator Initial

VERIFIED BY: [Signature] DATE/TIME 2/12/85 14:40  
Operator Initial

NOTE: SRO Ops. Supv. shall not sign "Reviewed By" until all comments in relation to this Check-Off List have been resolved i.e.: TCNs written and incorporated, caps and flanges installed, locks and chains in place, etc.

REVIEWED BY: [Signature] DATE/TIME 2/12/85 / 1500  
(SRO Ops. Supv.)

SWING HPSI PUMP P-018 ALIGNMENT

UNIT 2 (2 or 3)

DATE 2-12-85

TIME 1130

1.0 PREREQUISITES

INITIALS

- 1.1 Prior to use of an uncontrolled (pink) copy of this Station Document to perform work, verify that it is current by checking a controlled copy on any TCNs or by use of the method described in SO123-VI-1.0.

1.1.1 List all applicable TCNs or write N.A.

7-3 7-8

- 1.2 On-shift SRO-Operations Supervisor approval obtained.  
(SRO OPS SUPV Initials)

- 1.3 If in Mode 4 (write N/A if not), at least one train of HPSI is operable and in service and will not be affected by the performance of this procedure.

- 1.4 HPSI P-018 shall be completely isolated from ESFAS Train prior to alignment to other ESFAS Train.

2.0 PROCEDURE

NOTE: (1) Not applicable if performed in conjunction with Check-Off List 10.

2.1 Placing HPSI P-018 In Service on Train A

- 2.1.1 Turn DC Off and RACK OUT A0609  
2.1.2 Lock Closed "B" Train mini-flow valve S2(3)1204MU104 to HPSI P-018  
2.1.3 Lock Closed HPSI P-018 Train B discharge valve S2(3)1204MU014  
2.1.4 Lock Closed HPSI P-018 Train B suction valve S2(3)1204MU011  
2.1.5 Lock Closed CCW Train B to HPSI P-018 valve S2(3)1203MU259  
2.1.6 Close CCW Train B from HPSI P-018 valve S2(3)1203MU231

N/A / PMP

N/A / PMP

N/A / PMP

N/A / PMP

N/A / PMP

N/A / PMP

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

2.1.7 Lock Open HPSI P-018 miniflow  
recirc. to Train A valve  
S2(3)1204MU036

RLS/IK OK

2.1 Lock Closed P-018 miniflow  
orifice bypass valve S2(3)1204MU186

RLS/IK OK

2.1.8 Lock Open HPSI P-018 discharge  
valve S2(3)1204MU016.

RLS/IK OK

2.1.9 Lock Open HPSI P-018 discharge to  
Train A valve S2(3)1204MU013

RLS/IK OK

2.1.10 Lock Open HPSI P-018 suction from  
Train A valve S2(3)1204MU010

RLS/IK OK

2.1.11 Lock Open Train A CCW to P-018  
valve S2(3)1203MU258

RLS/IK OK

2.1.12 Throttle Train A CCW from P-018 valve  
S2(3)1203MU232 to ~50 gpm as indicated  
by FE-6488

RLS/IK OK

NOTE: Notify Health Physics before venting  
potentially radioactive water

2.1.13 Vent P-018 suction piping by uncapping  
and venting with P-018 suction vent  
valve S2(3)1204MR367 (passage between  
SEB Rms 005 and 015)

N/A PMP

2.1.14 Close and cap P-018 suction vent  
valve S2(3)1204MR367

N/A PMP

NOTE: Notify Health Physics before venting  
potentially radioactive water

2.1.15 Vent P-018 discharge piping by uncapping  
and venting with P-018 discharge vent  
valve S2(3)1204MR106

N/A PMP

2.1.16 Close and cap P-018 discharge vent  
valve S2(3)1204MR106

N/A PMP

NOTE: When P-018 is not aligned to  
either Train A or B, then both  
Train A and B Kirk Keys must be  
inserted in transfer switch D004

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.1.17 Remove Kirk Key from HPSI P-018  
P-018 Train B breaker A0609
- 2.1.18 Place Kirk Key in "Fed from A0609"  
position at disconnect switch D004
- 2.1.19 Position D004 to handle to the up  
position "Fed from A0409"
- 2.1.20 Remove Kirk Key from "Fed from A0409"  
position at disconnect switch D004
- 2.1.21 Place Kirk Key in breaker  
A0409
- 2.1.22 HPSI P-018 Train A breaker A0409:

N/A / PMP

N/A / PMP

N/A / PMP

N/A / PMP

N/A / PMP

RACKED IN  
DC ON  
CLOSING SPRINGS  
CHG MOTOR ENERGIZED.

N/A / PMP

TCN |  
CAUTION Until P-018 is declared operable  
===== per step 2.3 22, Train A HPSI  
is not operable. With the  
plant in Modes 1-3, comply  
with the action requirements  
of Technical Specification 3.5.2.

- (1)2.1.23 With an operator present at P-018 to check  
for abnormal operation, start P-018 and  
verify P-018 operable as follows:

- .1 Verify P-018 starts and develops greater  
than 1400 psig discharge pressure as  
indicated on PI-0308 (CR-57)
- .2 Verify P-018 exhibits no unusual  
vibration or leakage while running

N/A / PMP

N/A / PMP

- 2.1.24 Stop P-018.

N/A / PMP

TCN |  
NOTE: P-018 and Train A HPSI are  
now operable

NOTE: (1) Not applicable if performed in  
conjunction with Check-Off List 10.

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

2.2 Placing HPSI P-018 In Service on Train B

- |        |   |      |     |
|--------|---|------|-----|
| 2.2.1  | Turn DC Off and Rack Out<br>HPSI P-018 breaker A0409  | N/A/ | PHI |
| 2.2.2  | Lock Closed HPSI P-018<br>Train A Miniflow valve<br>S2(3)1204MU036                            | N/A/ | PHI |
| 2.2.3  | Lock Closed HPSI P-018<br>Train A discharge valve<br>S2(3)1204MU013                           | N/A/ | PHI |
| 2.2.4  | Lock Closed HPSI P-018<br>Train A suction valve S2(3)1204MU010                                | N/A/ | PHI |
| 2.2.5  | Lock Closed CCW Train A<br>to HPSI P-018 valve S2(3)1203MU258                                 | N/A/ | PHI |
| 2.2.6  | Close CCW Train A from HPSI<br>P-018 valve S2(3)1203MU232                                     | N/A/ | PHI |
| 2.2.7  | Lock Open HPSI P-018 miniflow recirc.<br>to Train B valve S2(3)1204MU104                      | N/A/ | PHI |
| 2.1    | Lock Closed P-018 miniflow<br>orifice bypass valve S2(3)1204MU186                             | N/A/ | PHI |
| 2.2.8  | Lock Open HPSI P-018 discharge to<br>Train B valve S2(3)1204MU014                             | N/A/ | PHI |
| 2.2.9  | Lock Open HPSI P-018 discharge<br>valve S2(3)1204MUG16  | N/A/ | PHI |
| 2.2.10 | Lock Open HPSI P-018 suction from<br>Train B valve S2(3)1204MU011                             | N/A/ | PHI |
| 2.2.11 | Lock Open Train B CCW to P-018<br>valve S2(3)1203MU259  | N/A/ | PHI |
| 2.2.12 | Throttle Train B CCW from P-018 valve<br>S2(3)1203MU231 to ~50 gpm as indicated<br>by FE-6340 | N/A/ | PHI |

NOTE: Notify Health Physics before venting  
potentially radioactive water

- 2.2.13 Vent P-018 suction by uncapping and  
venting with P-018 suction vent valve  
S2(3)1204MR367 (passage between SEB  
Rms 005 and 015)

N/A/ PHI

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.2.14 Close and cap P-018 suction vent  
valve S2(3)1204MR367

N/A PH/1

NOTE: Notify Health Physics before venting  
potentially radioactive water.

- 2.2.15 Vent P-018 discharge by uncapping and  
venting with P-018 discharge vent  
valve S2(3)1204MR032

N/A PH/1

- 2.2.16 Close and cap P-018 discharge vent  
valve S2(3)1204MR032

N/A PH/1

- 2.2.17 Remove Kirk Key from HPSI P-018  
Train A breaker A0409

N/A PH/1

- 2.2.18 Place Kirk Key in "Fed from A0409"  
position at disconnect switch D004

N/A PH/1

- 2.2.19 Position D004 handle to the down  
position, "Fed from A0609"

N/A PH/1

- 2.2.20 Remove Kirk Key from "Fed from A0609"  
position at disconnect switch D004

N/A PH/1

- 2.2.21 Place Kirk Key in breaker A0609

N/A PH/1

- 2.2.22 HPSI P-018 Train B breaker A0609

RACKED IN  
DC ON  
CLOSING SPRINGS  
CHG MOTOR ENERGIZED.

N/A PH/1

CAUTION  
=====

Until P-018 is declared operable  
per step 2.2.23, Train B HPSI is  
not operable. With the plant in  
Modes 1-3, comply with the action  
requirements of Technical  
Specification 3.5.2.

- (1)2.2.23 With an operator present at P-018 to check  
for abnormal operation, start P-018 and  
verify P-018 operable as follows:

NOTE: (1) Not applicable if performed in  
conjunction with Check-Off List 10.

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.2.23.1 Verify P-018 starts and develops greater than 1400 psig discharge pressure as indicated on PI-0309 (CR-57)
- (1)2.2.23.2 Verify P-018 exhibits no unusual vibration or leakage while running.
- (1)2.2.24 Stop P-018

N/A PMP1

N/A PMP1

N/A PMP1

NOTE: P-018 and Train B HPSI are now operable

2.3 Removing P-018 From Service

NOTE: When P-018 is not aligned to either Train A or B, then both Train A and B Kirk Keys must be inserted in transfer switch D004

- 2.3.1 Turn DC Off and Rack Out HPSI P-018 Train A breaker A0409
- 2.3.2 Remove Kirk Key from HPSI P-018 Train A breaker A0409
- 2.3.3 Place Kirk Key in "A0609 TO LOAD" position at disconnect switch D004
- 2.3.4 Turn DC Off and Rack Out HPSI P-018 breaker A0609
- 2.3.5 Remove Kirk Key from HPSI P-018 Train B breaker A0609
- 2.3.6 Place Kirk Key in "A0409 TO LOAD" position at disconnect switch D004
- 2.3.7 Lock Closed HPSI P-018 Train A Mini-flow valve S2(3)1204MU036
- 2.3.8 Lock Closed HPSI P-018 Train A discharge valve S2(3)1204MU013
- 2.3.9 Lock Closed HPSI P-018 Train A suction valve S2(3)1204MU010

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

NOTE: (1) Not applicable if performed in conjunction with Check-Off List 10.

2.0 PROCEDURE (Continued)

INITIALS  
1ST / 2ND

- 2.3.10 Lock Closed CCW Train A to HPSI P-018  
valve S2(3)1203MU258
- 2.3.11 Close CCW Train A from HPSI  
P-018 valve S2(3)1203MU232
- 2.3.12 Lock Closed HPSI P-018 Train B  
miniflow valve S2(3)1204MU104
- 2.3.13 Lock Closed HPSI P-018 Train B  
discharge valve S2(3)1204MU014
- 2.3.14 Lock Closed HPSI P-018 Train B  
suction valve S2(3)1204MU011
- 2.3.15 Lock Closed CCW Train B to HPSI  
P-018 valve S2(3)1203MU259
- 2.3.16 Close CCW Train B from HPSI  
P-018 valve S2(3)1203MU231

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

N/A PMP1

PERFORMED BY: Antony Lopez Initial ALS

DATE/TIME 2/12/85

PERFORMED BY: \_\_\_\_\_ Operator Initial \_\_\_\_\_

DATE/TIME \_\_\_\_\_

VERIFIED BY: Chuck Initial CH

DATE/TIME 2/12/85

VERIFIED BY: Chuck Initial CH

DATE/TIME 2/12/85 14:40

NOTE:

SRO Ops. Supv. shall not sign "Reviewed By" until all comments  
in relation to this Check-Off List have been resolved i.e.:  
TCNs written and incorporated, caps and flanges installed, locks  
and chains in place, etc.

REVIEWED BY: John Bennett (SRO Ops. Supv.)

DATE/TIME 2/12/85 1500

6.0 PROCEDURE (continued)

INITIALS

SAN ONOFRE NUCLEAR GENERATING STATION  
UNITS 2 & 3

OPERATOR SURVEILLANCE TEST 5023-3-3.16.2  
REVISION 1 PAGE 4

7.0 ACCEPTANCE CRITERIA (Cont'd)

INITIALS

- 7.1.1 Levels in the S/Gs were increased with each  
Auxiliary Feedwater Pump.

Yes/No  
Circle One

RIC

- 2 If no circled, refer to Reference 2.1, 3.7.1.2  
and list actions taken in comments section.

COMMENTS:

PURPOSE OF TEST: Periodic Surveillance \_\_\_\_\_ T.S. Action \_\_\_\_\_  
Other (explain): 113 Startup

TEST COMPLETED BY: John A. Lannon  
ALSO SEE SUPPLEMENT Operator

DATE/TIME 12-1-84 1020G

TEST REVIEWED BY:

EO Day  
SRO Ops. Supv.

DATE/TIME 12/1/84 0300

8.0 RECORDS

- 8.1 File completed procedure in the Surveillance Compliance File.  
8.2 Make appropriate log entry that the surveillance test was completed.  
8.3 Periodically transmit completed records to CDM in accordance with  
applicable station administrative procedures.

9.0 ATTACHMENTS

- 9.1 Not applicable.

H. E. Morgan

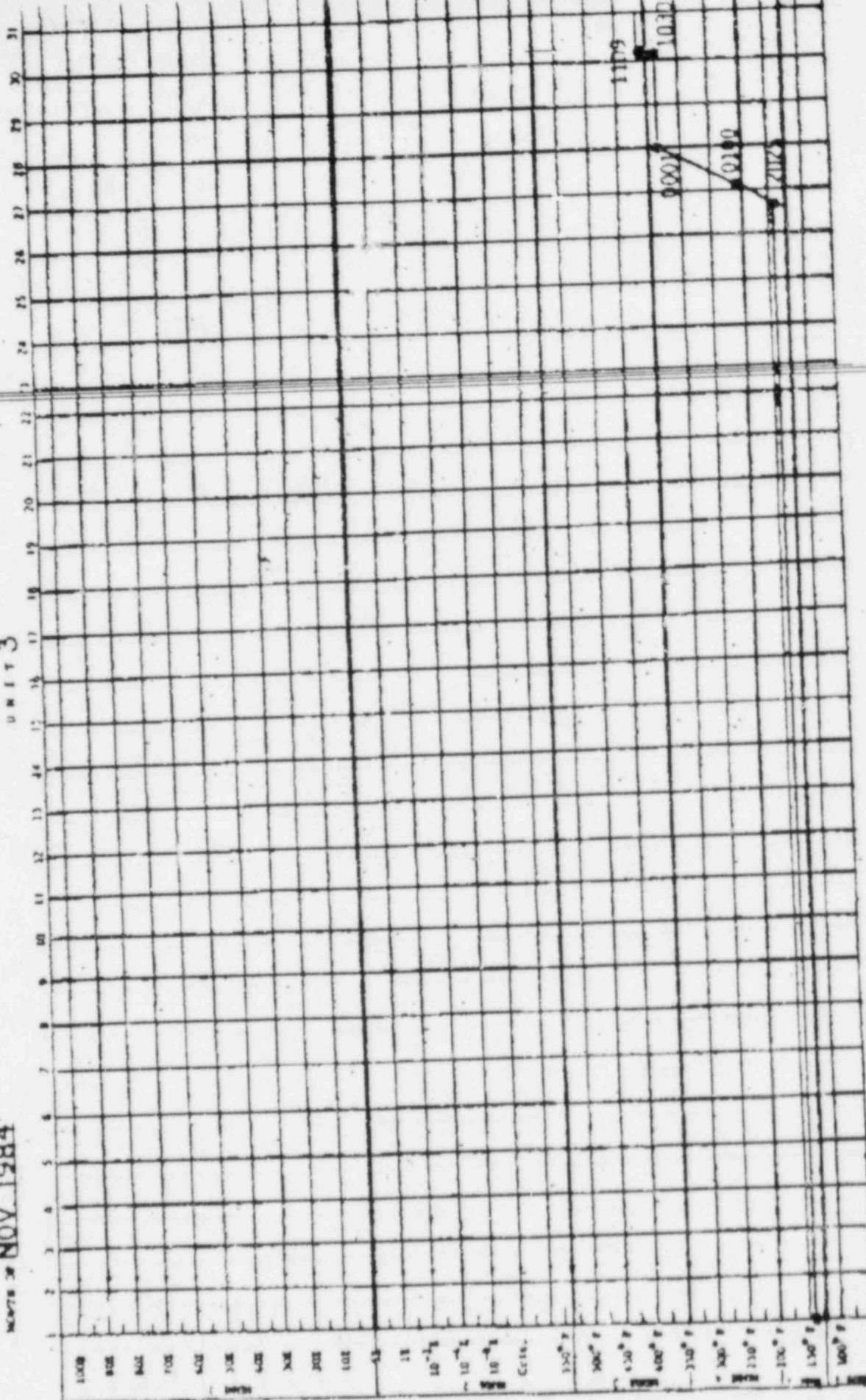
H. E. MORGAN  
STATION OPERATIONS MANAGER

OPERATIONS UNIT 3  
MONTHLY ON-SITE SAFETY REVIEW  
COMMITTEE REPORT - NOVEMBER 1984

OPERATING SUMMARY

NOV 1984

UNIT 3



MONTH OF DEC 1934

OPERATING SUMMARY

UNIT 3

