

PICKERING 'A'

UNIT 4 BOILER 6 HOT SOURCE

Scott Cameron
Pickering B RPM

The world is watching

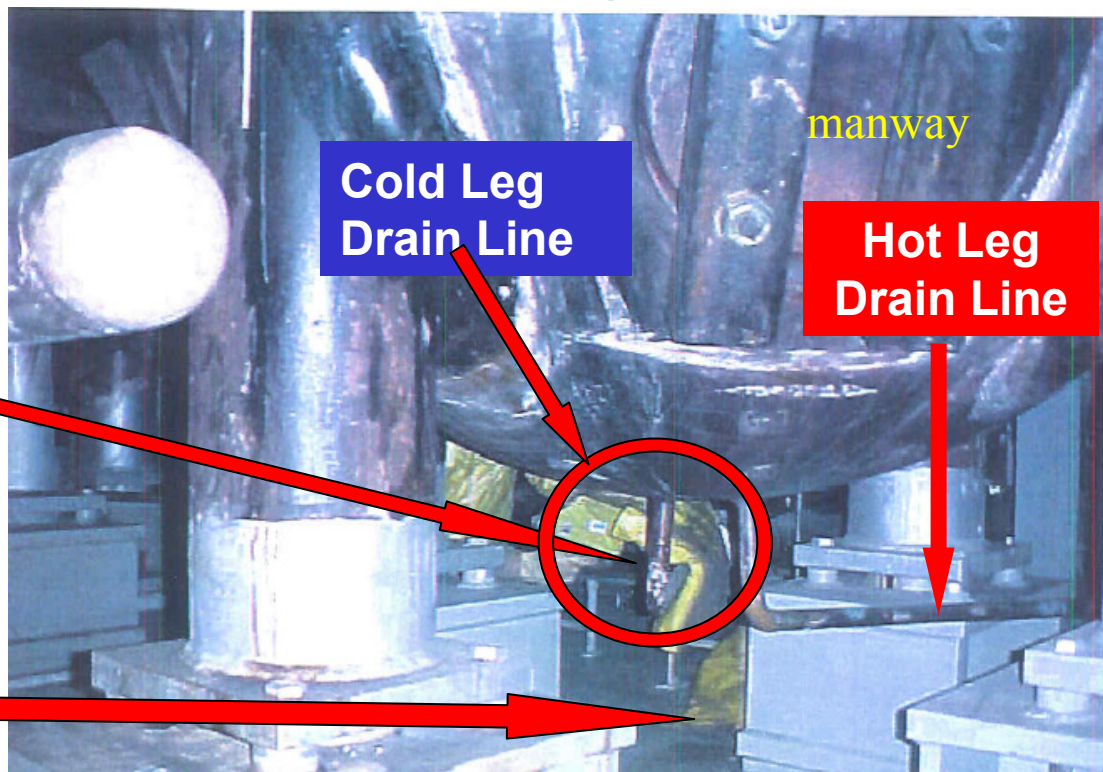


PROBLEM STATEMENT

High Energy Source Identified in the Cold Leg Drain Line of Unit 4,

>450,000 rem/h
ESTIMATED CONTACT
GAMMA DOSE RATE @ 1cm
18,000 rem/h @ 5cm
500 rem/h @ 30cm

350 rem/h JUST
BELOW HOT LEG
DRAIN LINE



Archived Photo Without Insulation
On This is Boiler 12 Not Boiler 6





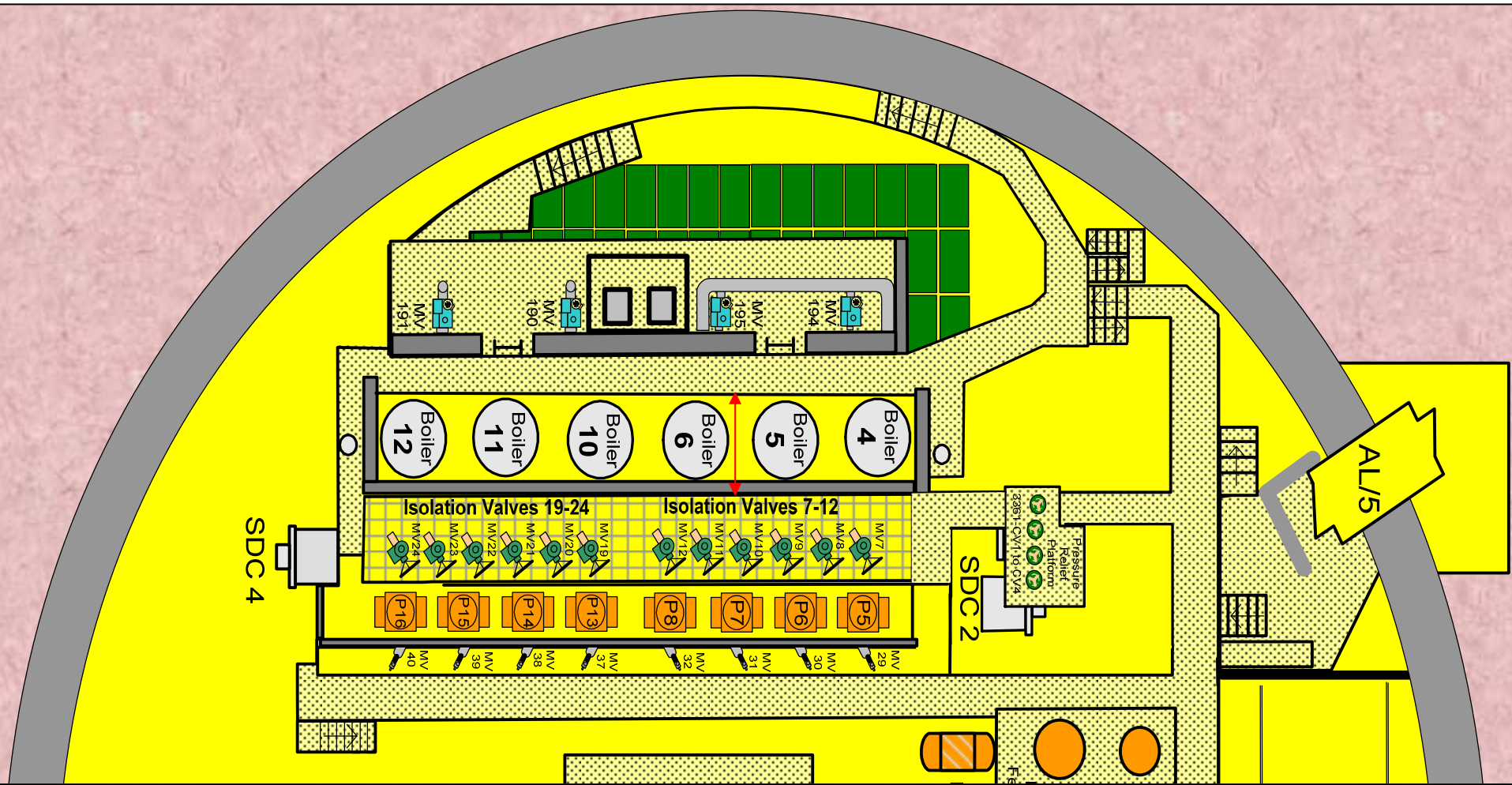
>450,000 rem/h @ 1cm On
Boiler Drain Line Elbow

500 rem/h @ 30cm

1" to 3" of insulation to get to
drain line

**Boiler Base
Pedestals
BOILER - 6**

AREA THAT SOURCE AFFECTS





**Drain Line Valve
Under PHT Pumps
Along HT Catwalk,
Flanged Off.**





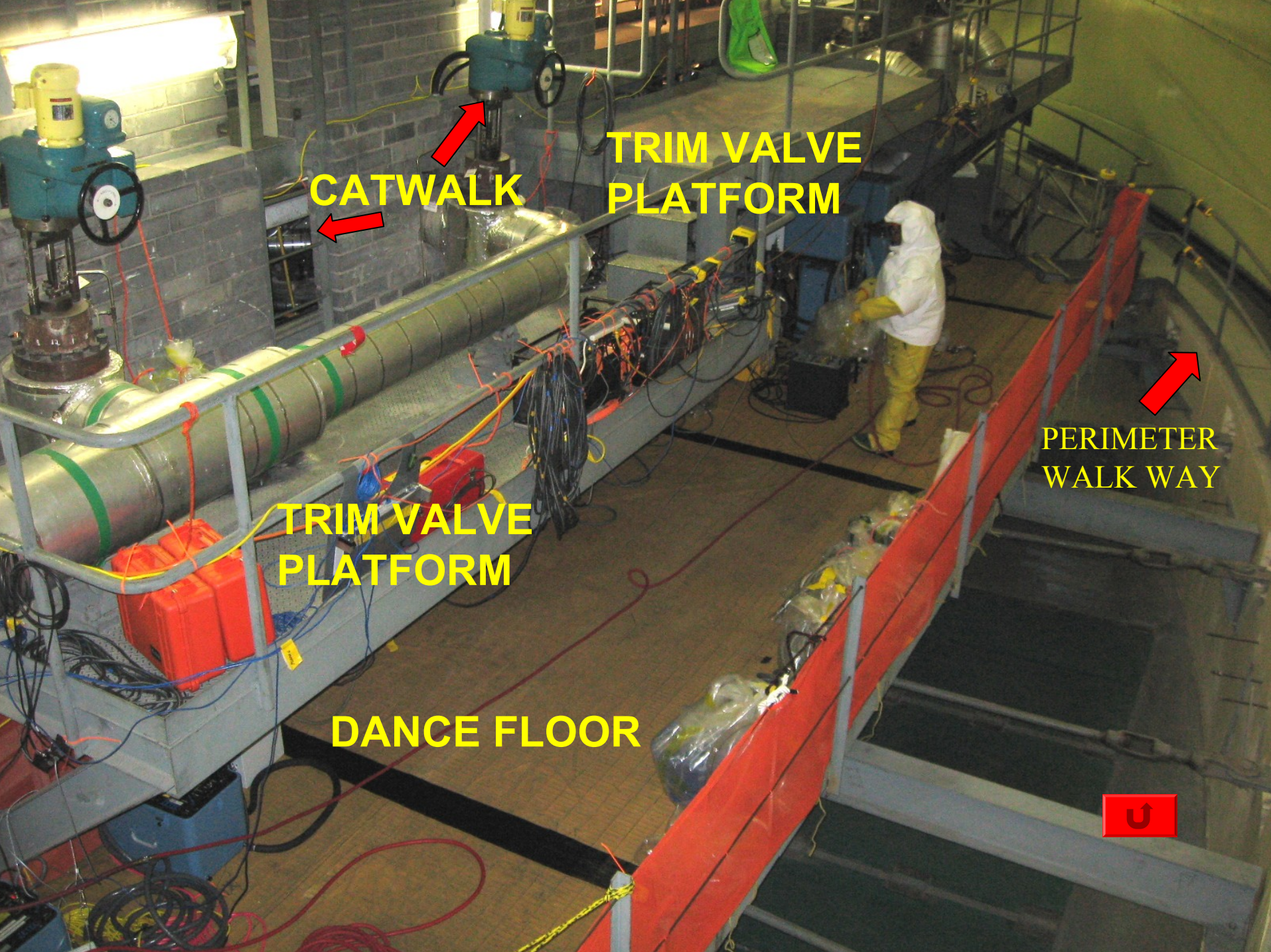
200
mrem/h

Perimeter
Walk Way



← 2.5 rem/h at
Surveyor
Position

Dance Floor



CATWALK

TRIM VALVE
PLATFORM

TRIM VALVE
PLATFORM

DANCE FLOOR

PERIMETER
WALK WAY



Path Forward

- 1. FLUSH AND CAPTURE**
- 2. IF FLUSH AND CAPTURE FAILS: 1) SHIELD BOILER 6 (USING LONG HANDLED TOOLS, ROPES) 2) RUN PARALLEL PLAN TO DO WORK ON EAST SIDE, PLAN FOR CUT OUT DURING P1041 OUTAGE**
- 3. PLAN DEVELOPED FOR CUT OUT DURING THIS OUTAGE IF TIME PERMITS.**



1. FLUSH AND CAPTURE

OPERATIONAL METHOD:

Forced drain to a shielded catch container (particle will progress in drain line/drain hose to two IX Columns in parallel.

Risk-particle doesn't move

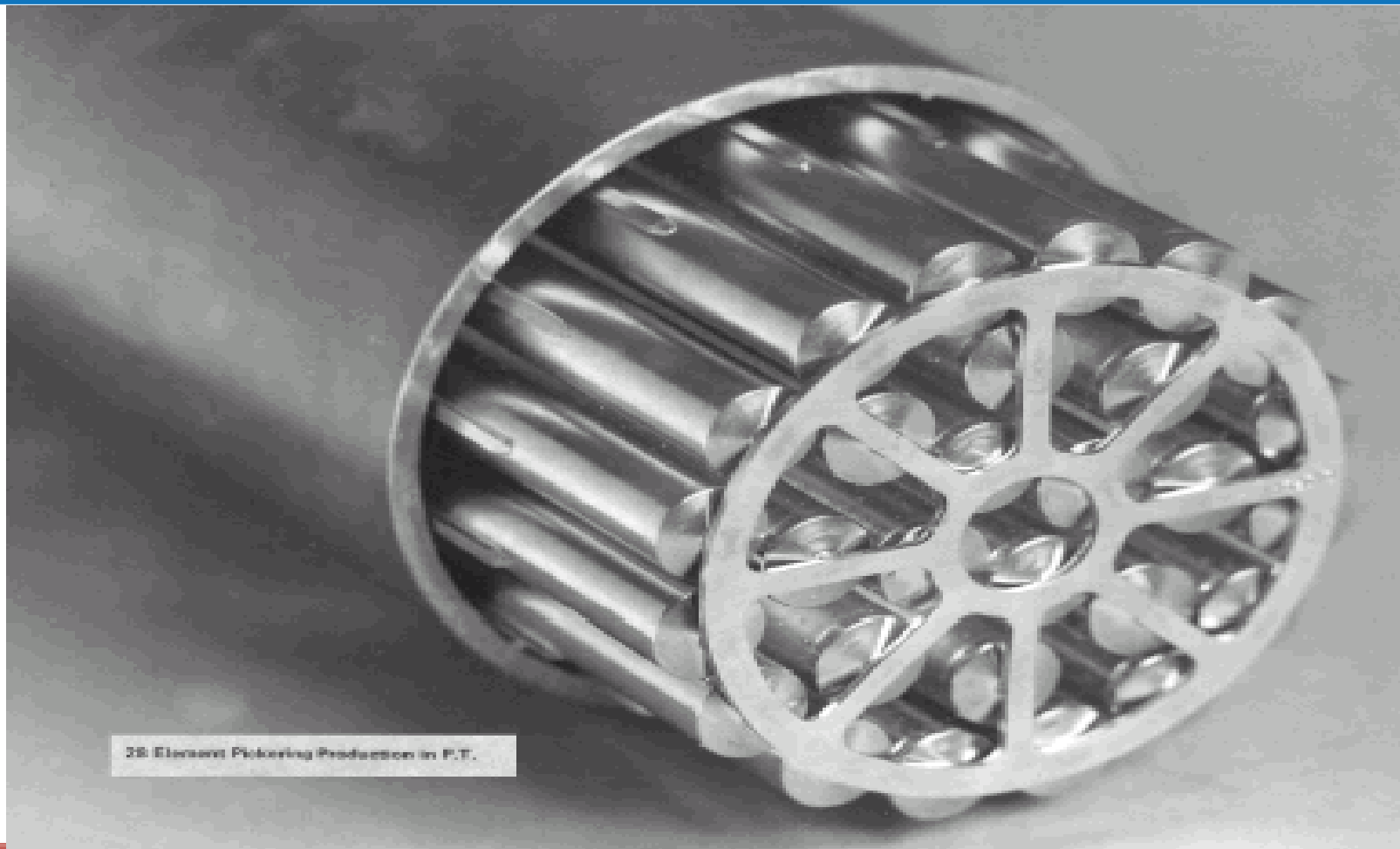
Contingency- See Option 2 Above

Risk- Particle becomes lodged on route in steel line drain line before reaching tygon hose.

Contingency- Shield (depending on location). Continue with boiler campaign on west side, develop plan for next outage to cut out.



Had to make it past this

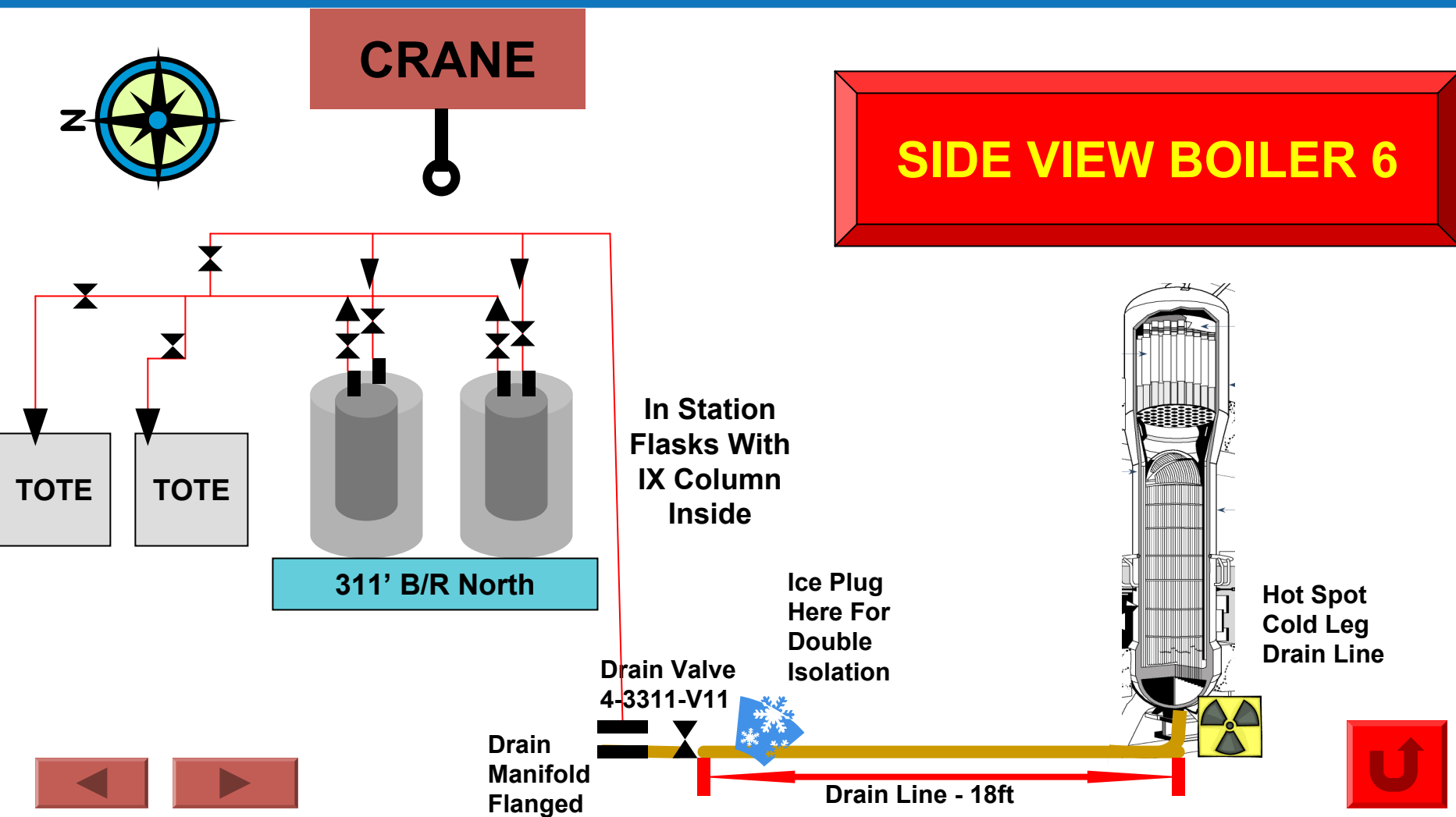


28 Element Pickering Production in P.T.

Figure 2.6: 28 Element Pickering Fuel Bundle in Pressure Tube



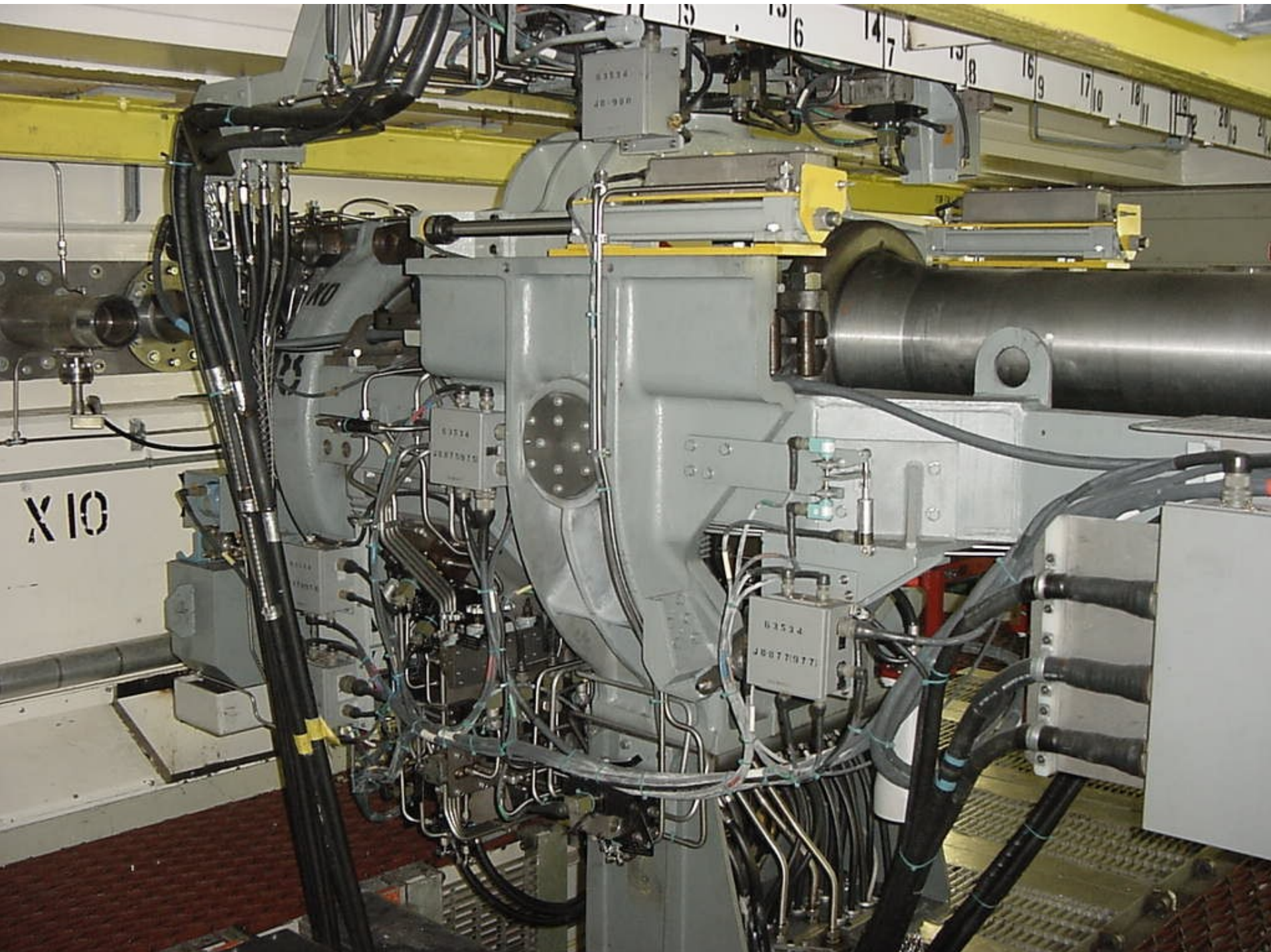
DRAWING OF FLUSH AND CAPTURE OPTION 2



PREREQUISITE ACTIVITIES

1. Draft Work Plan (complete)
2. Address assessing requirements (complete)
3. Develop and procure tooling (complete)
4. Set up mock up (IP unit 3)
5. Acquire resources (complete base staff)
6. Training (ready)
7. Transfer of Particle Issues (IP)
8. Target Dates (Feb 19&20)
9. Approval of Back-Up Schedule and Implementation





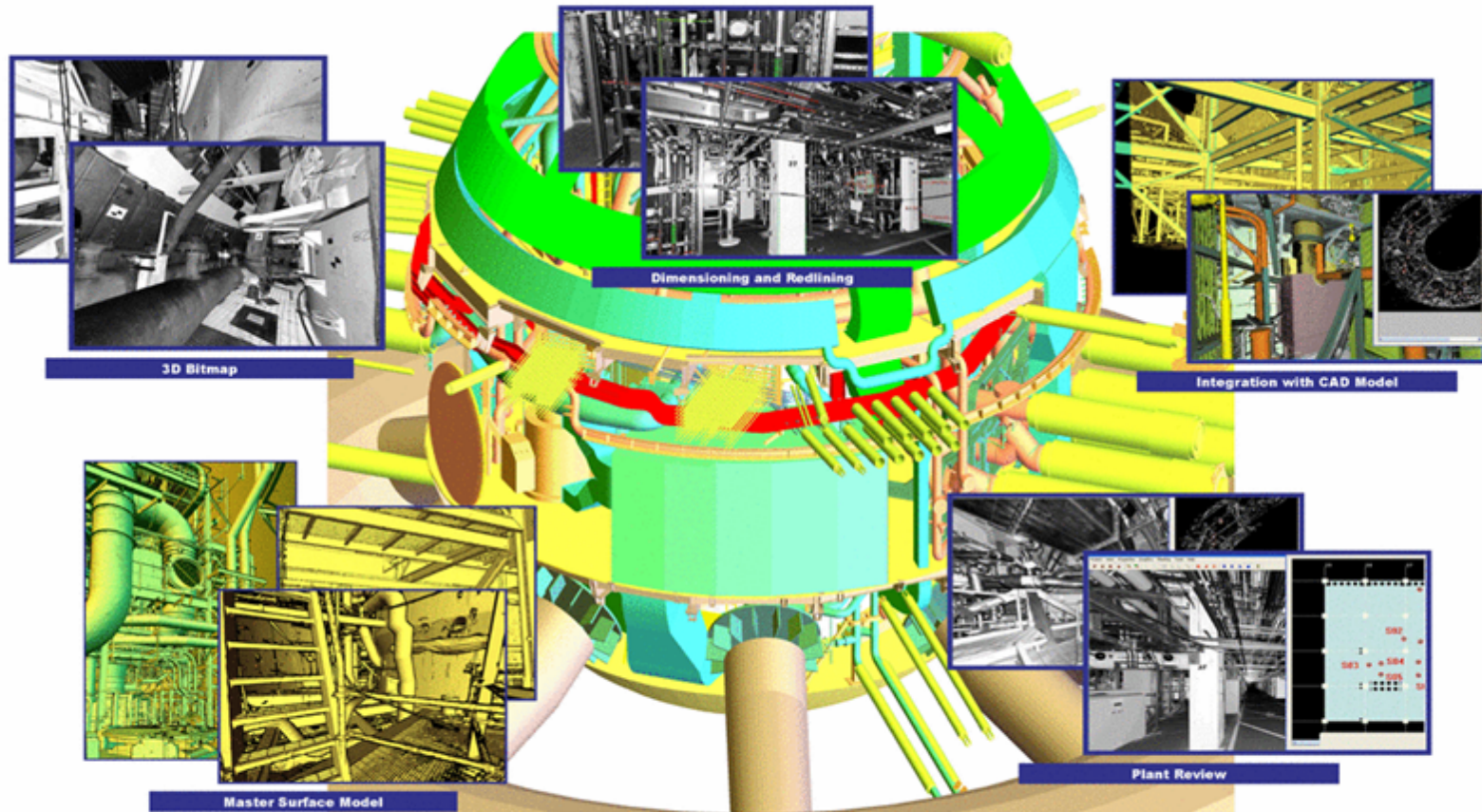
To be continued.....

Oct 2009 Vienna



Laser Scan Space Manager

PanoMap



CSA

Construction Systems Associates, Inc.
www.csaatl.com

CSA

Dose Reduction Tool