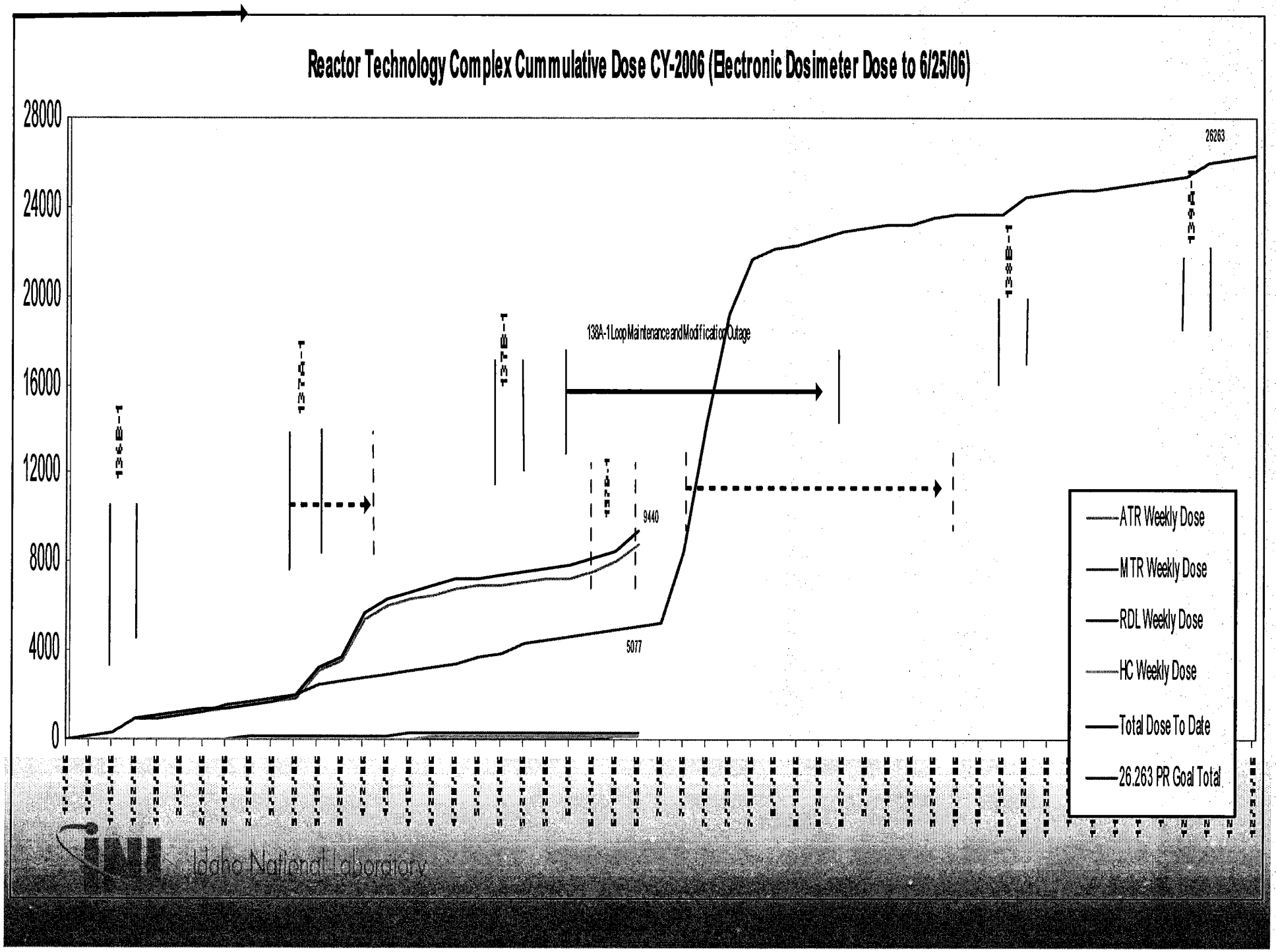
Idaho National Laboratory

RTC/STC

CY-2006 ALARA Summary

Brian Grant/ RTC ALARA Coordinator

June 27, 2006


Reactor Technology Complex Cummulative Dose CY-2006 (Electronic Dosimeter Dose to 6/25/06)
28000
24000
20000
16000
12000
8000
4000
0
136-B-1
137A-1
137B-1
138A-1 Loop Maintenance and Modification Outage
137A-1
9440
5077
138B-1
139A-1
26263
ATR Weekly Dose
MTR Weekly Dose
RDL Weekly Dose
HC Weekly Dose
Total Dose To Date
26.263 PR Goal Total
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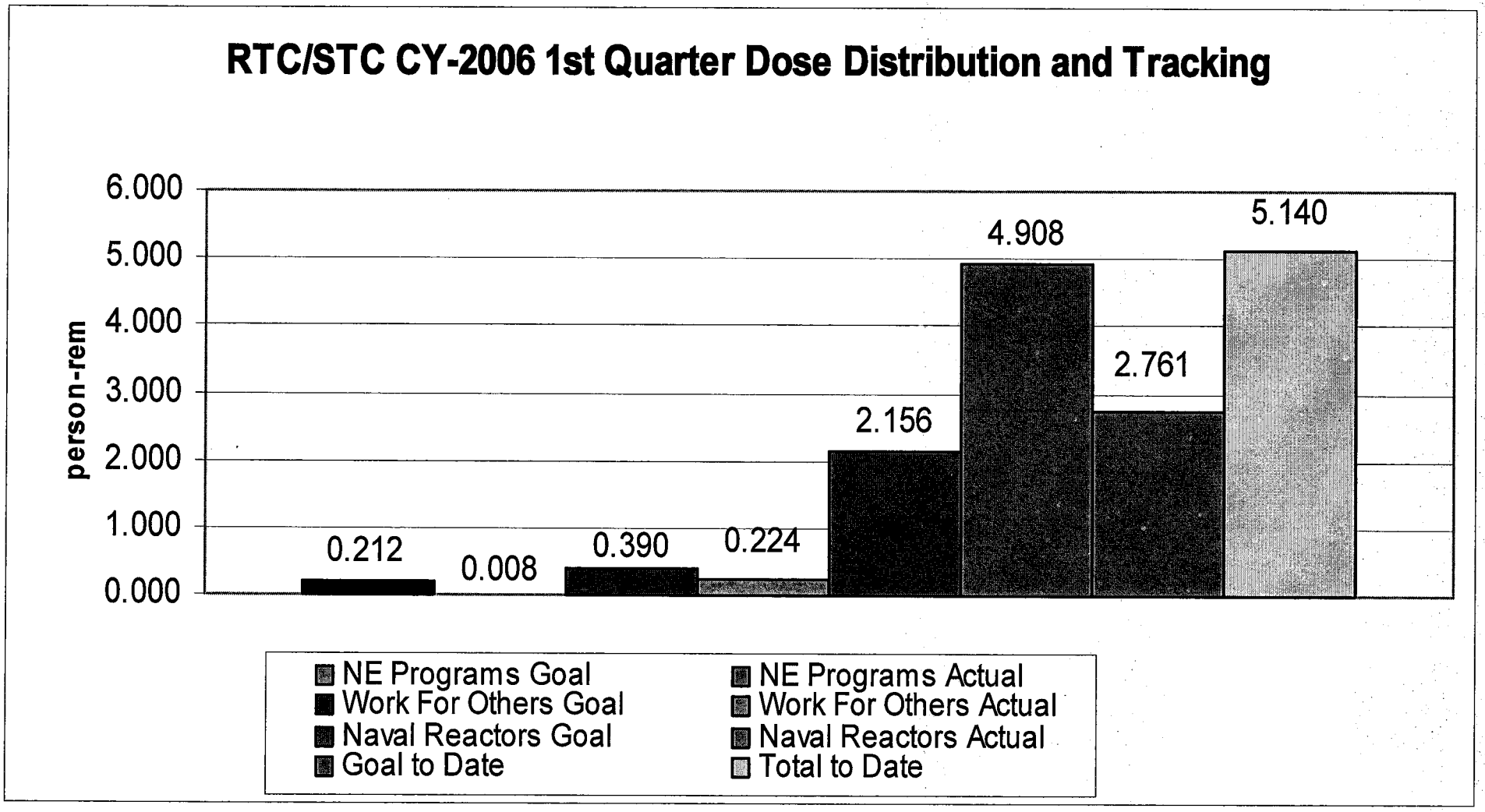
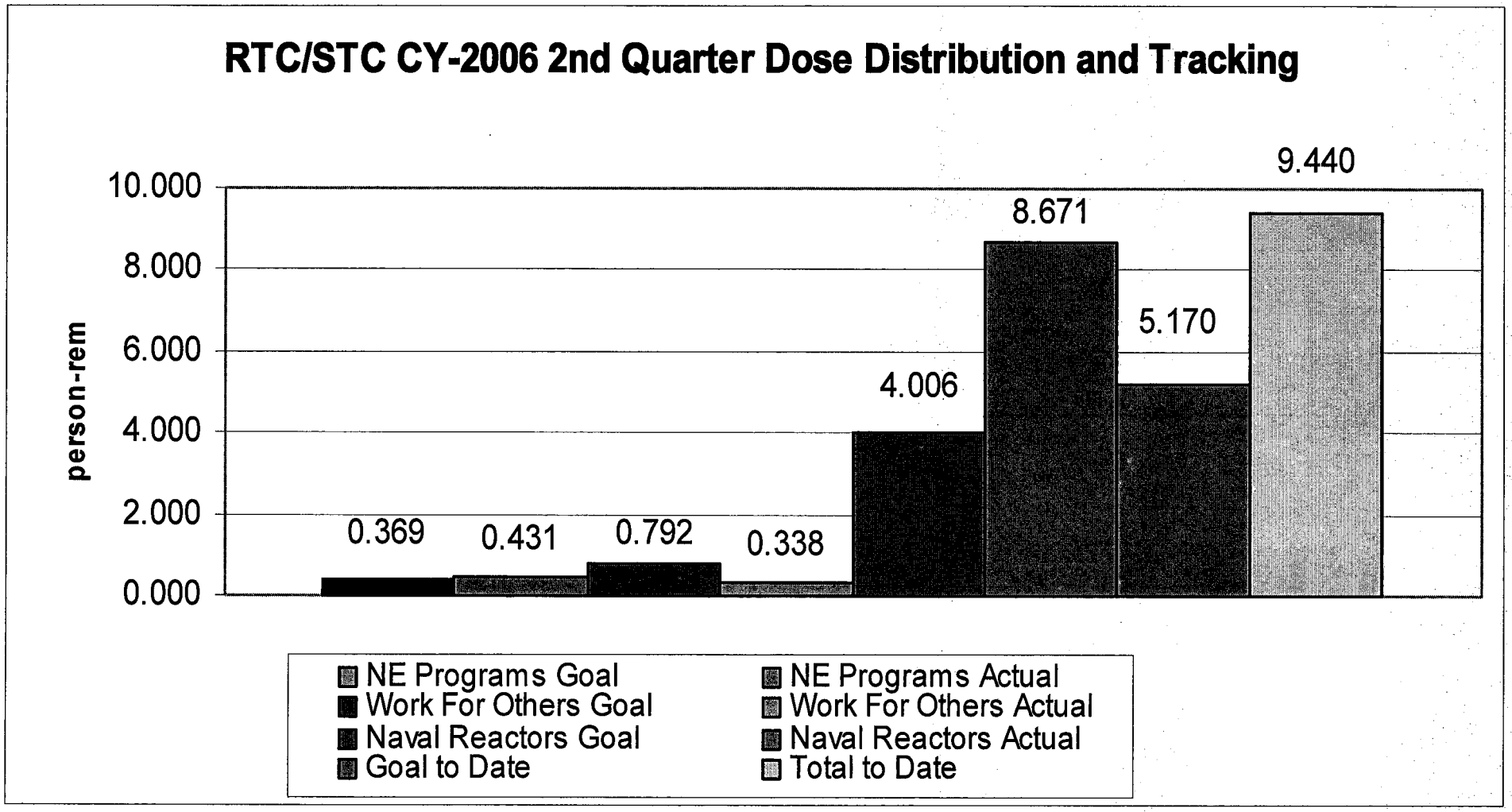

RTC/STC CY-2006 1st Quarter Dose Distribution and Tracking
person-rem
6.000
5.000
4.000
3.000
2.000
1.000
0.000
0.212
0.008
0.390
0.224
2.156
4.908
2.761
5.140
NE Programs Goal
Work For Others Goal
Naval Reactors Goal
Goal to Date
NE Programs Actual
Work For Others Actual
Naval Reactors Actual
Total to Date



Through 6-25-06

2006 First and Second Quarter Performance

137A-1 Outage

- *Extended approximately 31 days beyond original planned duration*
- *Leaking experiment capsule resulted in primary coolant activities approximately 20-times normal*
  - *Increased chemistry sampling to determine effectiveness of circulation and purification-77 mrem*
  - *Increased RCT surveillance to characterize work areas and track dose reduction measure effectiveness-610 mrem*
  - *Increased radiation levels in exclusion areas affected planned work scope (some areas 5-10 times higher than normal)*
  - *Very high contamination levels when opening systems for maintenance*
  - *Special test handling and leak testing required*

2006 First and Second Quarter Performance

137A-1 Outage

- *Work brought forward to support high power PALM run required draining of the primary coolant system*
  - *Emergency Firewater Injection System Check Valves-323 mrem*
  - *Emergency Coolant Pump Suction Check Valve-795 mrem*
- *Emergent work at onset of the outage*
  - *Pressurizing Pump Repairs-160 mrem*
    - *Decontamination of the Bypass Demin. Corridor-50 mrem*
  - *Test and repair heat exchanger sump level switches-161 mrem*
  - *Install spool piece to bypass N-16 system filters-45 mrem*
  - *Clean N-16 chambers-11 mrem*

2006 First and Second Quarter Performance

Zero skin contamination events (reportable or not)

One non-reportable clothing contamination

One non-reportable hot particle event

Two spills due to malfunctioning equipment

Highest exposed individuals

- *300 mrem (CWI Insulator supporting ATR)*
- *256 mrem (BEA RCT supporting ATR)*
- *81 mrem neutron (PINS Project)*

Upcoming Work

138A-1 Outage at ATR

- *83-91 day outage mainly for experiment loop maintenance/modifications and M-3 Heat Exchanger inspections/tube plugging*
  - *Shielding plan is being developed for each loop cubicle during valve and pump maintenance*
  - *Chemical decontamination of the three experiment loops with the highest radiation levels and the canal recycle heat exchanger*
  - *Use of containment tents at cubicle entrances*
  - *Area decontamination planned while radiation levels are at pre-operational levels (post system decon)*