

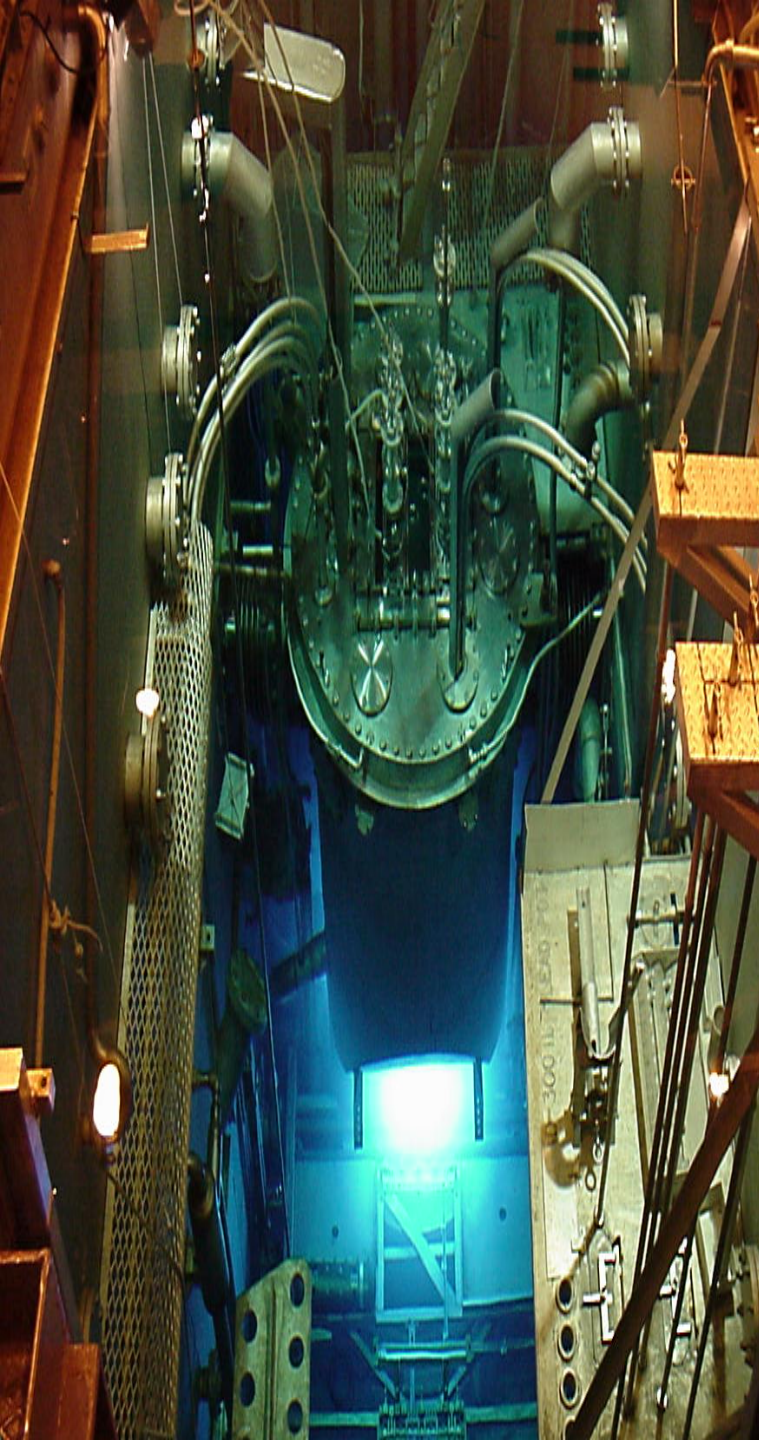


Actively enhancing life

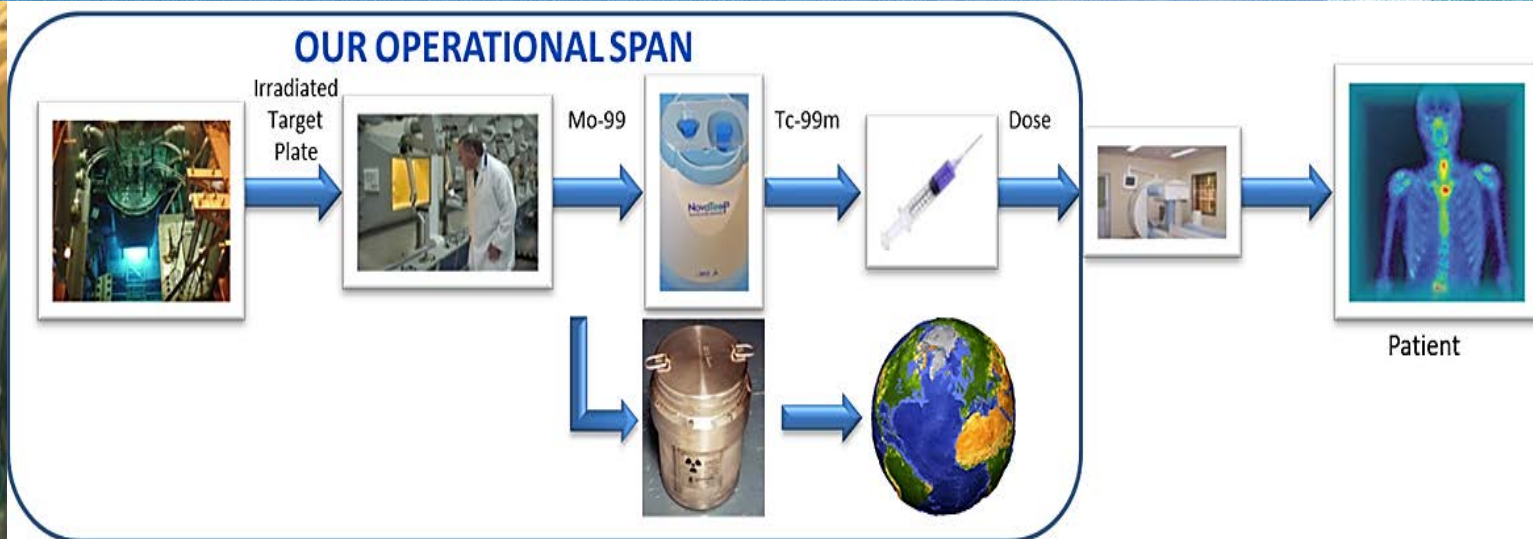


Actively enhancing life

REFLECTIONS ON 5 YEARS OF CONVERSION EXPERIENCE PIONEERS OF CHANGE



OUR FIELD OF PLAY



RADIOCHEMICALS & API'S

Mo-99; I-131; Lu-177n.c.a

RADIOACTIVE SOURCES (NDT)

Ir-192; Cs-137; Co-60

RADIOPHARMACEUTICALS

Novatec-P Tc-99m generator;
MIBG; I-131 capsules; FDG;
cold kits

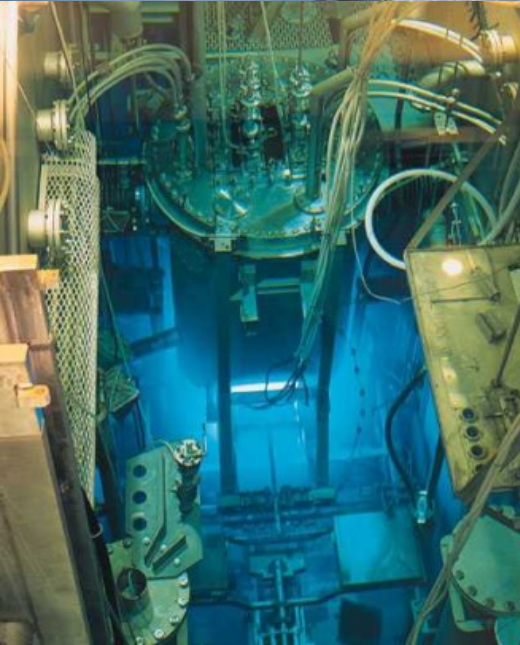
IRRADIATION SERVICES

NTD silicon; target irradiations

AND IT'S ALL ABOUT THE PATIENT



HEU TO LEU TIME LINE

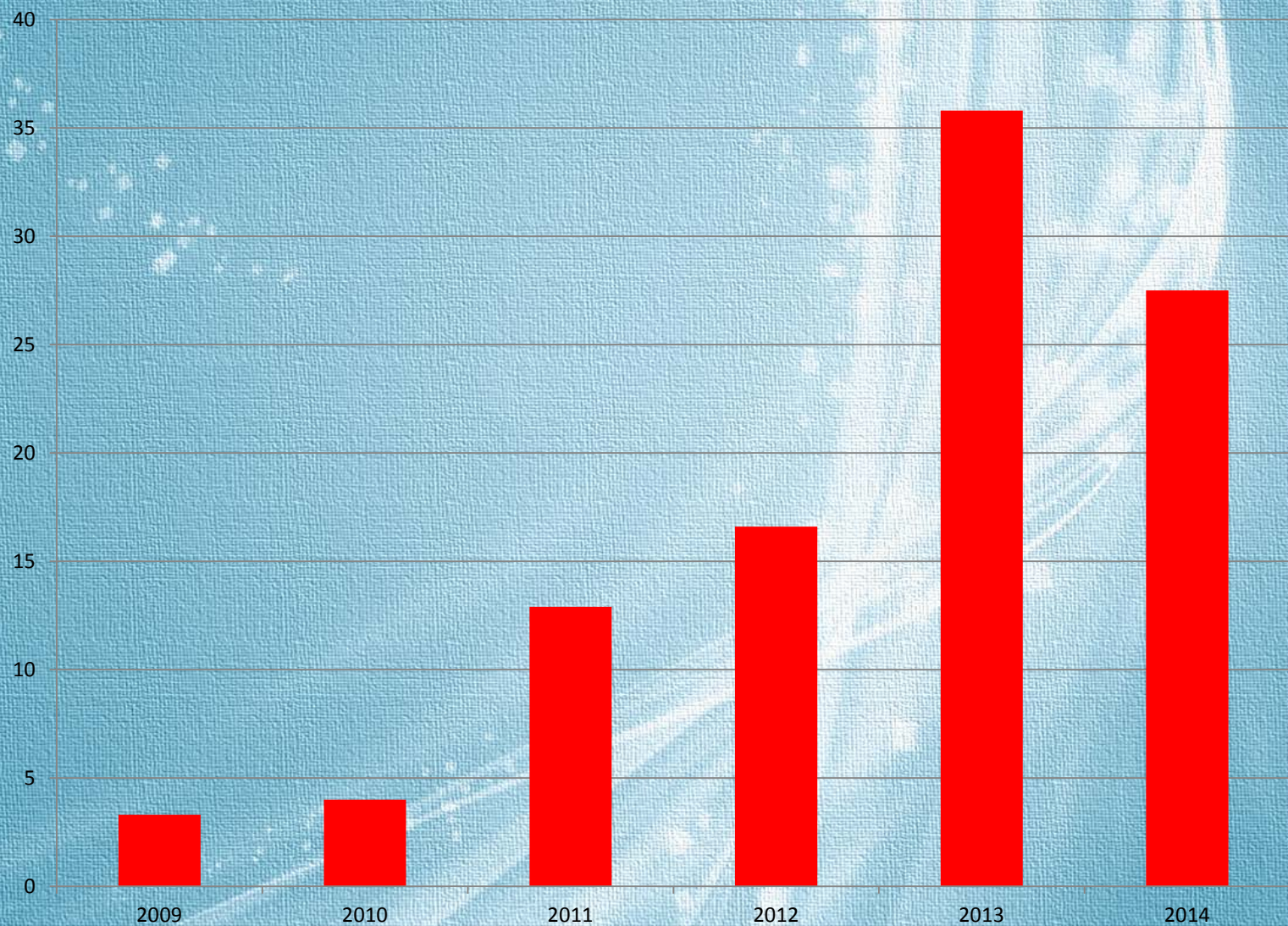


Year	Event
2007/8	Theoretical feasibility studies & cold experiments
2009	NNR approval received for test stage and first hot runs commence
2010	Hot runs, process validation, regulatory approval
Sep 2010	US FDA approves LEU ⁹⁹ Mo for a customer in the US
Dec 2010	First large scale commercial FDA approved batch of LEU ⁹⁹ Mo produced and shipped to US for patient use
Jun 2011	Routine commercial supply of LEU ⁹⁹ Mo commenced to some customers
Sep 2011	Commencement of investment in plant modifications (due to conversion)
Jan 2014	Hot commissioning of new LEU specific production line
Aug 2015	Cold Commissioning of new uranium residue facility

PROGRESS WITH MO-99 CONVERSION



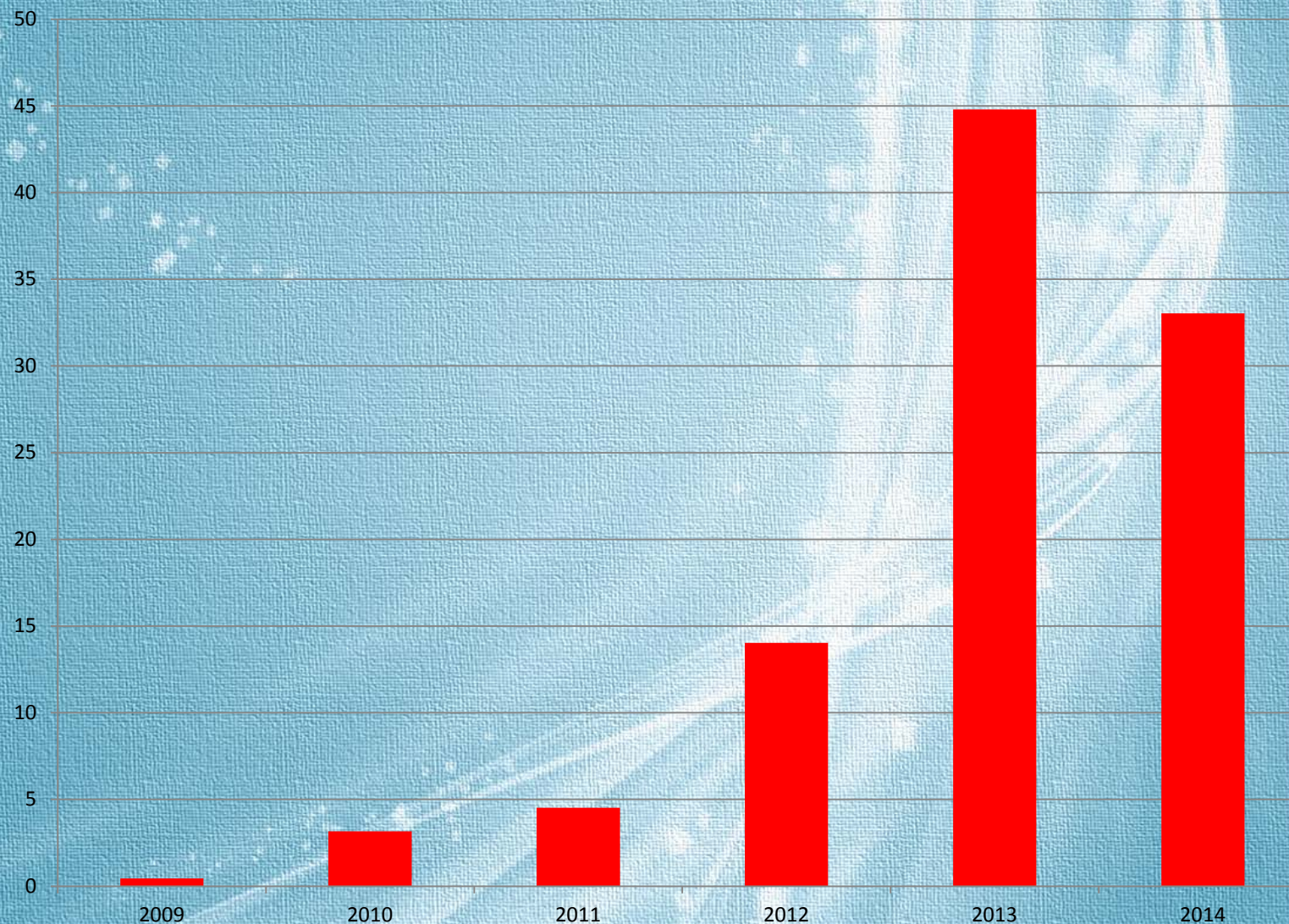
% LEU Distribution relative to all LEU runs



PROGRESS WITH I-131 CONVERSION



% LEU Distribution relative to all LEU runs



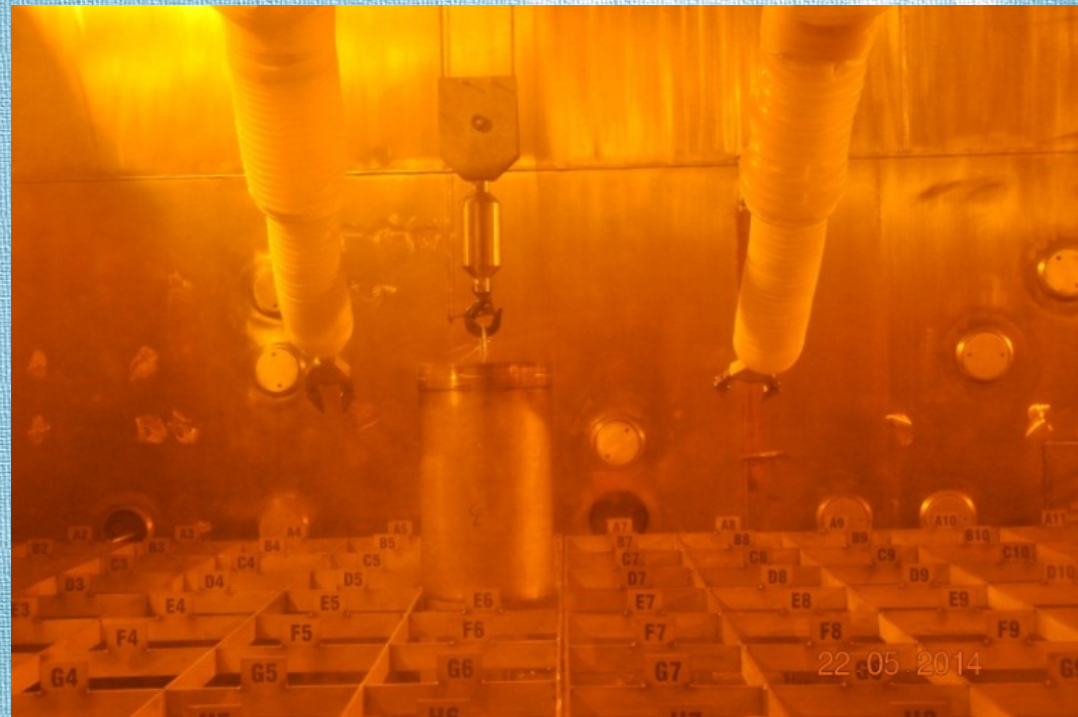
NEW DISSOLVER CELL PRODUCTION LINE

COMMISSIONED AND OPERATING WELL



NEW URANIUM RESIDUE FACILITY

COLD COMMISSIONED
HOT COMMISSIONING SCHEDULED FOR END 2015



COMPLIANCE LESSONS FROM THE FRONT LINE

- HEU TO LEU -

IT' ALL ABOUT CONSEQUENCES:

THE GOOD, THE BAD & THE UGLY



**PIONEERS IN CONVERSION
TECHNOLOGY**

A WORLD FIRST

EXCEED FULL COMPLIANCE



**MASSIVE CAPITAL
INVESTMENT**

**HIGHER REACTOR
OPERATIONAL COSTS AND
LOWER FLUXES**

**LOWER MO-99
PRODUCTION CAPACITY**

HIGHER WASTE



**NO NOTICEABLE
THERAPEUTIC BENEFITS TO
PATIENT**

THE PATIENT PAYS MORE

INTO THE FUTURE

LET'S LEARN

FROM THE LESSONS OF THE PAST

Technology
and scale-
up
challenges
are to be
expected

Developing
non-HEU
production
methods
takes
longer
than
expected.

It costs
more than
initially
budgeted

It is more a
'technology
push' than
a 'market
pull'
situation



IT'S TIME FOR WISE ACTION
- no *reactions* required -

THANK YOU

