Radiation Protection at DOE: Politics and Science A Historical Perspective

C. Rick Jones

Health Physics Society Annual Meeting June 28, 2011

Link to Abstract Link to Menu

I am going to share with you two stories about politics and science in DOE. But First I have

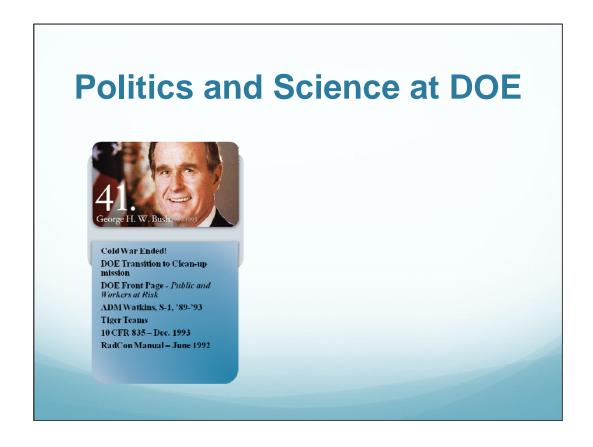
4 Things to share with you -

First - This Presentation is based upon my Personal Experience having been in the room when discussions were held and decisions made. This is not second hand information.

2nd - DOE is self-regulated for worker safety and health. Meaning OSHA and NRC rules and inspections don't apply!

3rd – The Award Fee process – DOE pays all the bills, then annual, PRIVATE performance review is conducted between DOE and Contractor management for a CASH bonus – this is pure profit to contractor

Lastly, this presentation will focus only on Radiation Protection programs, but a great deal of other activities were also going on in DOE.



FIRST STORY – How did DOE get a Radiological Control (or RadCon) Manual?

President Bush elected 1988, term in Jan 1989 to Jan 1993

Cold War Ended and veil of Secrecy being lifted on DOE

DOE Transitioning from weapons to Clean-up mission

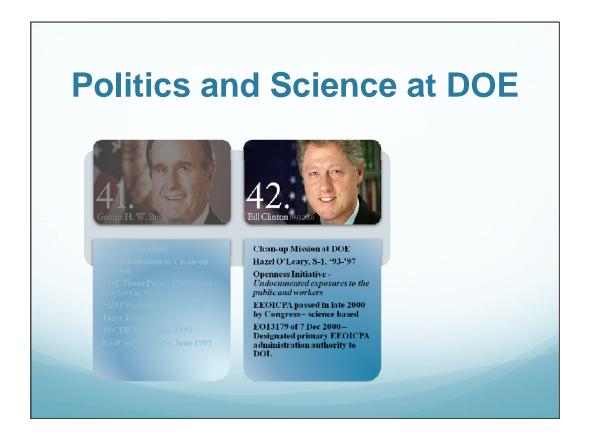
DOE Front Page in Local newspapers (Hanford, Rocky Flats) - Picked up by National news. The claim was that DOE Is and has been spewing radioactive material into the environment and workplace! – The President was under EXTREME pressure to get control of the situation!

Admiral Watkins is appointed as Secretary of Energy in 1989 – You want control, bring in the Military! Adm Watkins initiates a number of actions:

- 1. Launch the Tiger Teams to baseline and document the status of RP programs
- 2. NEEDED new Tools to encourage Contractor performance -- Initiated rulemaking to codify DOE Order 5480.11 and implement industry standards like NRC 10 CFR Part 20 Provides DOE with Price-Anderson Enforcement against Contractors that would be more public and was felt to be an embarrassment to contractors which would encourage compliance.
- 3. 1990/1991 Tiger Team reports start flowing in documenting RP programs vary across the DOE, lack rigor and poor conduct of Ops, when compared to Navy Nuclear Program personally that made sense to me as each site developed independently, in secret, and with different missions but that was not acceptable to the administration.
- 4.By late 1991 Secretary's office directed us to write a DOE RadCon Manual, like the Navy Nuc Propulsion program, within 6 months. We did not agree, as the culture in DOE was VERY different, but we did not prevail. After 6 months of 12 hour days, 6 days a week the DOE RadCon Manual was produced. In June 1992, I briefed Admiral Watkins on the DOE RadCon Manual, he turned to his Navy friends in the room and asked them if he should sign it. They said yes so it was approved and he signed the first DOE Rad Con Manual (Show Manual). The Admiral then turned to GC and directed them to modify all DOE contracts as soon as possible to make compliance with the RadCon Manual mandatory. After all DOE pays the bills for DOE contractors and although the DOE contractors did not like it, implementing the DOE RadCon Manual was paid for by DOE.
 - 5. We continued working on the DOE Rulemaking and produced 10 CFR 835 in December 1993.

So by 1993 the DOE had the more public Price-Anderson enforcement of 10 CFR 835 and compliance with the DOE RadCon Manual that was enforced by contract to adversely impact Award Fee. These actions were political to get control of the situation.

OH the science! In the RadCon Manual we were the first Federal organization to implement provisions of the recently published ICRP 60 by establishing a 2 rem/year Administrative Control level for workers.



SECOND STORY – How did DOE end up with a worker compensation program? After 1992 Election President Clinton takes office Jan 1993.

Hazel O'Leary is appointed Secretary of Energy

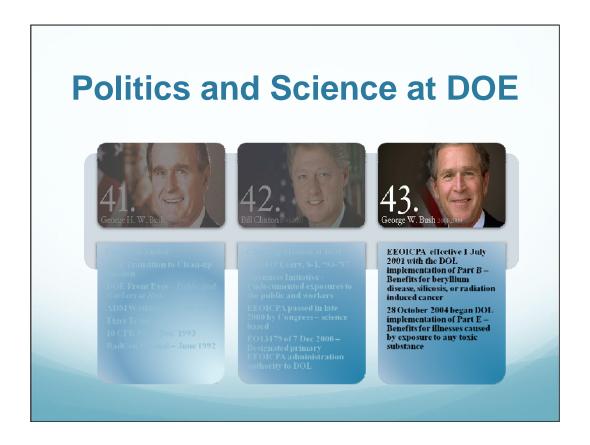
She launches her Openness Initiatives – declassifies thousands of pages of previously classified documents and establishes a toll-free hotline for anyone to call in and tell us how DOE has harmed them.

So between Tiger Teams documenting all the problems in RP programs across DOE, the review of previously classified documents by interested parties and personal testimonials on how DOE has harmed them. The case has been made that there a LOT of undocumented radiation exposures to the public and workers from DOE operations.

What to do? What to do??

No secret that Democratic Party gets significant funding from Organized Labor Unions. The Unions and Administration wanted to establish a Worker Compensation Program for workers harmed by DOE. To do that the Unions and the Administration needed Congressional legislation to establish and fund such a program. Congress was supportive but dictated they needed a science based program – they could not just give money away! Many of us were apposed to the program as there was no way to determine detrimental health impacts unique to radiation and dose records were very much in question. We and the Assistant Secretary for Environment, Safety and Health could not find or create a defensible science based compensation program. Proponents of a scientific approach termed "More likely than not" to create the basis for compensating workers with illnesses prevailed and in 1998 a new Assistant Secretary was appointed to work with Congress and put a worker compensation program in place prior to the departure of President Clinton in January 2001. Thus the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) was approved and signed by President Clinton in late 2000.

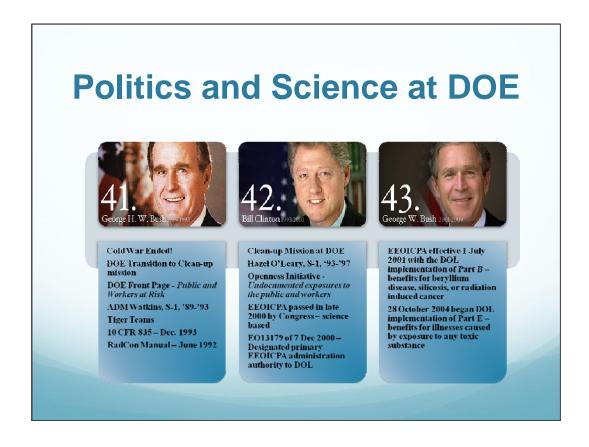
Executive Order 0113179 was signed by President Clinton on 7 December 2000 to move EEOICPA from DOE to DOL, which was a more Union friendly organization.



President Bush takes office January 2001.

As directed by the legislation signed by President Clinton, EEOICPA becomes effective 1 July 2001 with the DOL implementation of Part B for among other disease and illnesses, radiation induced cancer. On 28 October 2004 DOL began implementation of Part E.

I retired in September 2004 so I have no knowledge of the program past that date.



So that is just 2 stories from my 16 years at DOE spanning four administrations and three Presidents.

Summary

- Washington is about politics and money!
- Politicians find the science to support their agenda
- A single Administrator is more political (e.g., DOE vs. NRC but changing!)
- Science would benefit from enhanced ethics
- Putting the range of scientific results in perspective would aid understanding
- Listing assumptions and their impact on scientific results would also benefit understanding

The scientific process needs to be more transparent!