

UPF UPDATE

JULY 2013

NO END IN SIGHT!

When will the UPF be finished? The answer to that question matters a lot, because it effects the cost of the National Nuclear Security Administration's flagship bomb plant and it raises a second question: will there be anything for the bomb plant to do if it is ever finished?

NEW GOAL: 2035...

The latest schedule from the NNSA, supported by a July report from the Government Accountability Office, projects the UPF will not be finished until 2035 or later, a mere twenty years extension its original scheduled date.

When the UPF was first proposed, in 2005, the scheduled completion date was 2016, a not unreasonable projection for a major construction project.

But the Uranium Processing Facility is not just any major construction project—it's a project being managed by the NNSA and funded by the seemingly bottomless barrel of pork from Washington, DC.

Companies undertaking major construction projects usually answer to shareholders or lending institutions. But B&W Y12 answers to no one, apparently, as Congress keeps handing out money—taxpayer dollars—without asking questions. The only apparent incentive B&W has is to keep the money coming, and NNSA seems only too happy to oblige.

SCHEDULE SLIPPAGE

In 2009, the General Manager of B&W Y12, the company that runs the Y12 plant and is charged with building the UPF, said the project was on track to be 90% designed by the end of 2010, a milestone that would trigger a final cost estimate and permission to start

construction.

It didn't happen. Since the NNSA took over nuclear weapons operations for the Department of Energy in 2001, it never has happened. "It" being major construction projects meeting budget and schedule projections.

For the UPF, it is really not happening. In March 2010 officials said the project was in "final design stages."

NNSA spokesman Steven Wyatt backtracked on that claim in August, 2010 saying the design was 45% complete. Fourteen months later, Y12 spokesman David Keim pegged design work at 62% complete.

OOPS!

By June 2012, Project Manager John Eschenberg said the design was 75% complete and would hit the 90% milestone by fall.

Then, on October 2, 2012, instead of announcing achievement of the 90% milestone, NNSA announced it had achieved the "space/fit" issue. There was not enough space in the building as designed to fit all the required equipment.

The setback, which NNSA later said cost half a billion dollars, was put down to management failure—four separate design teams that weren't talking to each other. By May 2013, NNSA said the

THE UPF

The UPF was proposed in 2005 as a replacement for aging production facilities, Building 9212, at Y12 in Oak Ridge.

The original plan for the UPF included modernized dismantlement operations; that mission was dropped in October 2012 when designers realized the facility was too small to hold all the equipment planned for it.

The FY2014 budget tries to give the UPF a name change—the Uranium Capabilities Replacement Project—obfuscating the fact that the UPF is the flagship of the next generation of nuclear weapons production facilities in the US.

LIFE EXTENSION PROGRAM

The NNSA's Life Extension Program seeks to refurbish and replace aging parts of weapons in the US nuclear stockpile to extend their useful life for 60-80 years.

In some cases, life extension modifications significantly change the military capabilities of the warhead being "LEPped," effectively creating a new nuclear weapon.

In 2013, the US is performing LEPs on the W-76 Trident warhead; plans to perform LEPs on the B61 bomb are undergoing scrutiny; initial studies on LEPs for the W78/88 warhead are also beginning.

.....
contact: Ralph Hutchison
Oak Ridge Environmental Peace Alliance
www.orepa.org • orep@earthlink.net

project had recovered to 70% design completion.

IT MATTERS

This matters for several reasons. The UPF can't be built until the design is completed. And the longer it takes, the more it costs.

It also matters because the UPF has specific work to do—extend the lives of US nuclear warheads and bombs. If the UPF is not completed until 2035 or later, it quite likely will be obsolete, a massive production facility with little if anything to do.

TIME IS MONEY

The GAO report indicates a direct connection between time and money, citing a 2011 review of the UPF by the Army Corps of Engineers. The Corps found if the UPF could be built by 2023, it could be built for around \$7.5 billion. But that would require funding at a rate of \$900 million a year for four straight years, and the Corps didn't think Congress would do that. Neither did NNSA, which prepared a guidance document saying budget assumptions should fall in the range of \$200-\$500 million annually.

At that rate, said the Army Corps, the UPF won't be finished until 2035, and it will cost somewhere in the range of \$10.3 - \$11.6 billion.

WHY DO WE NEED IT?

The purported purpose of the UPF is performing Life Extension Upgrades on the warheads and bombs in the US nuclear stockpile. The UPF would build replacement thermonuclear cores for each warhead and bomb in the US arsenal.

This work could not be done in existing facilities, according to Y12 officials in 2009, because Building 9212 was deteriorating and would be untenable after 2018. Now, without explanation, Building 9212 suddenly will last another decade or two!

If this seems like the folks in Oak Ridge are having their cake and eating it, too, you win the Perception Prize for this week!

There is another piece to the "Why" question as well, and that's the mission piece.

Y12 is currently doing life extension upgrades on the W76 warheads—2,000 warheads in all, even though the total number of warheads of all kinds in the active US stockpile is 1,575 under the START Treaty.

Plans for future Life Extension work, the B61 and the W78/88 hybrid, are beginning to be weighed down by new estimates of their cost.

And the question of whether new

weapons cores need to be produced as part of Life Extension is one that has yet to be answered; OREPA and oth-

ers have called for a study to determine whether replacement cores are even necessary; some documents indicate the same result can be obtained with massive savings through "limited life component replacement," which means switching out only those parts that are affected by aging—a hip replacement rather than a full-on replacement of all joints and organs in the body.

If those projects fail to proceed, the need for the UPF scales down dramatically—maybe even disappears. At the very least, it can be severely down-sized.

Whether we need the B61 and W78/88 LEPs and what they will cost is the subject of another UPF Update—so stay tuned!

WHAT TO DO?

Accountability seems like a good place to start. The \$500 million space/fit fiasco? No outside investigation, no Congressional hearings, no reassigned managers—nothing. NNSA did its own internal investigation and found seven root causes. Every one of them was a management failure.

Congress should demand answers and hold individual managers accountable for the waste of half a billion tax dollars.

But the problem runs deeper—it's a cultural problem in the NNSA. The UPF is not the first project that gulps money and doesn't get finished. Congress should require systemic changes before handing NNSA another dime, and if NNSA can't figure out how to change its culture, it should be dismissed and management of the nuclear stockpile should return to the Department of Energy.

In...	They said it would be finished by:
2005	estimated: 2016
2009	estimated: 2018
2010	estimated: 2022-2024
2012	begin occupancy: 2019 full operations: 2023
2013	Phase I complete: 2025 Phase II & III: 2038