CHEMISTRY
METALLURGY
RESEARCH
REPLACEMENT

CMRR Public Meeting, March 3, 2010

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TABLE OF CONTENTS

I. Agenda 3

II. Transcript 5

III. Presentation Slides – *CMRR Project* 56

IV. Presentation Slides – *Interested Parties* 80

V. Meeting Flip Chart Notes 100

VI. Statement from Sisters of Loretto 103

VII. Sign-In Sheet 105

I. Agenda

CMRR Public Meeting

Wednesday, March 3, 2010

Best Western "Hilltop House", Los Alamos, NM
6:30 – 8:30pm

6:30 – 6:40	Welcome	B. MacAllister
6:40 – 7:10	CMRR Project Presentation • Project Overview and Background • Project Update	R. Holmes
7:10 – 7:30	Questions	B. MacAllister
7:30 – 8:00	Settlement Parties Presentation	Settlement Parties
8:00 – 8:25	Questions	B. MacAllister
8:25 – 8:30	Closure & Adjourn	B. MacAllister

II. Transcript

TRANSCRIPT
of
Public Meeting

Chemistry and Metallurgy Research Replacement (CMRR) Project

March 3, 2010

[The meeting was called to order at 6:30 p.m. in the Hilltop House, Los Alamos, NM, by Meeting Facilitator Bruce MacCallister.]

[LANL Slide 1]
[LANL Slide 2]
[BRUCE MACALLISTER, FACILITATOR]
I think we might as well [get started]. Be sure, if you haven't already, to sign in our sign-in sheet. That helps us know how many people,—

[UNIDENTIFIED PERSON]
Mr. Jay—

[BRUCE MACALLISTER, FACILITATOR, CONTINUING]
—helps us plan for future space.

[UNIDENTIFIED PERSONS]
[Voices off microphone]

[BRUCE MACALLISTER, FACILITATOR]
So, as soon as you can get seated and signed in, we'll get going here.

[BRUCE MACALLISTER, FACILITATOR]
Well, since I have you quiet already, I'll introduce myself. My name's Bruce MacAllister. I'm not affiliated with the Laboratory. I am the senior manager of an organization called Business Excellence Solutions. We specialize in providing facilitation services, business planning services to high tech organizations, conflict resolution services, things like that.

[BRUCE MACALLISTER, FACILITATOR]
Um, we, uh, have our fairly standard agenda. I'll go ahead and review the agenda right now, and then I'd like to pass the microphone and have people introduce themselves, mostly so that the person taking notes will be able to keep track of who's speaking. I will be asking you to introduce yourself each time that you ask a question or wanna have a comment, just so that we can kinda keep an accurate record of the process. Okay?

[BRUCE MACALLISTER, FACILITATOR]

Um, if, we'll be going through a couple of ground rules in just a minute. Let me review the agenda with you. There's a lot of flexibility built into the agenda. We are providing the rough time frames for the major presentations, the settl-- the CMRR Project presentation, and the settlement parties presentation. Uhm, we've got a lot of flexibility around that with the questions and answers. Uh, the hard time frame to bear in mind is this 8:30 time frame. Because this is a rented space, we have to adjourn promptly at 8:30. So I will be driving the meeting to a close, give us about a five-minute landing approach, and then we'll be closing no later than 8:30. If we happen to end early because the questions and answers and presentations don't require that time, that's fine too.

[LANL Slide 3]
[BRUCE MACALLISTER, FACILITATOR]
Ahm, we've got two presenters tonight. I'll ask them at the time that they begin their presentations to introduce themselves. The settlement parties, I'll ask them to introduce themselves at the time of their presentation. So, ah, let me just review a couple of ground rules before we move on. Um, again, this meeting is structured in a response to a settlement agreement that was reached to avoid litigation. And we have agreed between the parties and Los Alamos National Laboratory to hold these meetings biannually, once in Spring, about this time of year, and once in Fall, typically in the September-October time frame. Ahm, the parties in the lawsuit are listed here. I won't— you all can read the names of the parties identified.

[LANL Slide 4]
[BRUCE MACALLISTER, FACILITATOR]
There's a couple of ground rules that are kinda outfalls from this that are important for us. It's really important for me as the facilitator, and it's really important for the note takers and for people recording the meetings that we speak sequentially. In other words, to the greatest extent possible, we try to avoid interruptions. I'll pass you the mike, I'll ask you to state your name, ask your question, raise your comment, whatever. But one person at a time, please. It's just very difficult otherwise.

[BRUCE MACALLISTER, FACILITATOR]
If you can, remember, everybody kinda do a cell phone check right now. Make sure that your phone is on "vibrate" or "off," for us please. If you need to converse with other participants, I'd invite you to use our capacious hallway out here for that. If you need the restrooms, they are down the hall to the left, at the end of the hallway.

[BRUCE MACALLISTER, FACILITATOR]
I will be having on as many flipcharts as necessary, "parking lots," for issues that we're either, we don't have immediate answers for you, or there are not the appropriate people in the room to answer the question, or they're topics that are relevant to the scope of this meeting, but we otherwise just don't have the information for you at this point. Or other agenda items for next meeting. So, I'll be keeping track of these, and remind me if you see me slipping up on something that you think is important to put up there. That's completely fair.

[BRUCE MACALLISTER, FACILITATOR]

Um, again, also remind me if I forget because I'm running around the room back and forth, to ask you to state your name each time I pass the mike to you. Okay? Also remember that, because we are on a fixed agenda, it's useful for us to keep our comments, ya'know, in the, in the flow of the basic conversation so that not, no individual dominates the microphone for too long, so that we can get through our agenda.

[BRUCE MACALLISTER, FACILITATOR]
Okay, any questions or comments so far? Any observations about the agenda, which I won't go back to the one there [on the slides], but I will be posting this on the wall [handling the agenda written on the top page of the flipchart]. And if not, I'll turn it over to the LANL officials to—

[UNIDENTIFIED PERSON]
Don't you want to go around the room?

[BRUCE MACALLISTER, FACILITATOR]
Oh yes. I do need to go around the room. So I'll start with you Steve.

[LANL Slide 5]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
I'm Steve Fong. I'm with the CMRR Project. I'm part of the federal team. I'll be presenting tonight.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Rick Holmes. I'm the Laboratory's project manager.

[TOM WHITACRE, PROJECT MANAGER, LASO, NNSA, DOE]
Tom Whitacre. I'm on the CMRR project as, from NNSA.

[ROBIN COLLIER, CULTURAL ENERGY]
Robin Collier, Cultural Energy.

[LORRIE BONDS LOPEZ, OUTREACH AND PUBLIC INVOLVEMENT, BUSINESS AND PROGRAM SERVICES, LANL]
Lorrie Bonds Lopez. I do outreach and public involvement for environmental programs at the Laboratory.

[MORRISON BENNETT, TRANSCRIBER]
Morrison Bennett. I'm your transcriber.

[ROGER SNODGRASS, LOS ALAMOS MONITOR]
Roger Snodgrass. Los Alamos Monitor.

[KIM GRANZOW, NEW MEXICO ENVIRONMENT DEPARTMENT]
Kim Granzow. New Mexico Environment Department.

[COURTNEY PERKINS, NEW MEXICO ENVIRONMENT DEPARTMENT]

Courtney Perkins. New Mexico Environment Department.

[MIKE WHEELER, LOS ALAMOS COUNTY COUNCILOR]
Mike Wheeler. Los Alamos County Councilor.

[ERICH KUERSCHNER, ECONOMISTS FOR PEACE AND SECURITY]
Erich Kuerschner. I live in Taos. I'm with Economists for Peace and Security.

[DANNY WILLIAMS, BRIDGE TO NOWHERE]
Dan Williams. I'm with the bridgetonowhere.org.

[BARBARA WILLIAMS, DARE TO DREAM NETWORK]
Barbara Williams. I'm the founder of the Dare to Dream Network.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Jay Coghlan, Nuke Watch New Mexico.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
Susan Gordon, Alliance for Nuclear Accountability.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Scott Kovac, Nuclear Watch New Mexico.

[CHARLES WILLIAM (BILL) BLANKENSHIP, CHEMICAL ENGINEER, ECOLOGY AND AIR QUALITY GROUP, ENVIRONMENTAL PROTECTION DIVISION, LANL]
Bill Blankenship. I'm in the Laboratory's Ecology and Air Quality Group.

[MYRON KOOP, CONSTRUCTION MANAGEMENT, DIVISION OFFICE, LANL]
Myron Koop. I'm on the CMRR Project.

[SUSAN TERP, RISK REDUCTION OFFICE, ENVIRONMENTAL PROECTION DIVISION, LANL]
Susan Terp. I'm with the Laboratory's Environmental Protection Division.

[CARL FROSTENSON, LABORATORY LEGAL COUNSEL, LANL]
Carl Frostenson. I'm with the Laboratory's Contract Assurance Office.

[TRISH WILLIAMS-MELLO, LOS ALAMOS STUDY GROUP]
Trish Williams-Mello with the Los Alamos Study Group.

[GREG MELLO, LOS ALAMOS STUDY GROUP]
Greg Mello, Los Alamos Study Group.

[NICOLE SEGUIN, CMRR PROJECT AND SECURITY AND ENVIRONMENTAL COMPLIANCE, LANL]
Nicole Seguin, CMRR Project.

[CYNTHIA BLACKWELL, LEGAL, ENVIRONMENTAL, SAFETY, AND HEALTH, LABORATORY LEGAL COUNSEL, LANL]
Cindy Blackwell. I'm with the Laboratory Legal Counsel.

[TIM NELSON, PROJECT DIRECTOR, INTEGRATED NUCLEAR PLANNING, LANL]
Tim Nelson. I'm with Integrated Nuclear Planning for the Laboratory.

[SELENA Z. SAUER, OPERATIONS SUPPORT, LABORATORY COUNSEL, LANL]
Selena Sauer, Laboratory Counsel.

[ADAM A. ORR, CMRR DIVISION OFFICE]
Adam Orr with the CMRR Project.

[JOSEPH H. HONEA, ENVIRONMENT, SAFETY, AND QUALITY, ASSOCIATE DIRECTORATE, LANL]
Joe Honea with the CMRR Project.

[DENNY HJERESEN, LEADER, ENVIRONMENTAL PROTECTION DIVISION, LANL]
I'm Denny Hjeresen. Environmental Protection Division Leader for LANL.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
Roger Snyder. I'm with the local NNSA office here.

[TONI CHIRI, OFFICE OF THE MANAGER, LOS ALAMOS SITE OFFICE, NNSA, DOE]
Toni Chiri, public affairs with the local NNSA office.

[THEODORE F. DESOUSA, COMMUNICATIONS OFFICE, COMMUNICATIONS AND GOVERNMENT AFFAIRS, LANL]
Fred Desousa from the Lab's communications office.

[KEVIN N. ROARK, COMMUNICATIONS OFFICE, COMMUNICATIONS AND GOVERNMENT AFFAIRS, LANL]
Kevin Roark, also from the Lab communication office.

[DENISE L. THRONAS, INTEGRATED NUCLEAR PLANNING, LANL]
Denise Thronas from Integrated Nuclear Planning at the Lab.

[BRUCE MACALLISTER, FACILITATOR]
Thank you. Did I miss anyone? Did anybody come in when we were passing the mike? Okay. Well then, without further ado, I'll turn it over to you Steve.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Okay, I think I'm now on this—

[BRUCE MACALLISTER, FACILITATOR]
You're on that mike, so you're good.

[Microphone feedback sounds]

[STEVE FONG]
We probably should stay away from each other.

[More back and forth about the mike sound interference]

[STEVE FONG]
And is this one gonna be okay? Right here?

[More back and forth about the mike sound interference]

[STEVE FONG]
Well I guess this is our ninth presentation, public presentation, and I was not present for the previous eighth [presentation], but I read the transcripts. Looks like you guys had a lively discussion and, uh, I notice there's about a hundred pages of the transcripts, and about every other page I was thrown under the bus by my own guys. But, uh, that's a, that was a lot, but, uh,— And I saw that you guys deviated all over the place, which— ya'know, I'm gonna try to keep it to the CMRR Project tonight. However, uh, however the conversation goes, we'll try to entertain the questions, try to answer 'em as best we can, and again, try to follow up where necessary. So.

[LANL Slide 6]
[STEVE FONG]
Again, my name's Steve Fong. I am on the CMRR Project for the federal team. Um, the CMRR Project, let's first go over that. That's uh, the Chemistry and Metallurgy Research Project, Replacement [Chemistry and Metallurgy Research Replacement Project]. We'll be using that acronym all tonight. As well as LANL for Los Alamos National Laboratory. Um, we're exactly that. We are a replacement project for an in-kind chemistry facility at the Laboratory located at TA-3 [Technical Area 3], which is sort of a downtown area of Los Alamos. It's our mission to replace the capabilities down the road nearby at TA-55. And that's down to the east. Uh, our project supports basically all special nuclear material capabilities at the Laboratory. We've been a project since about 2002. So, it's been some time. Lorrie, next.

[LANL Slide 7]
[STEVE FONG]
We're gonna replace CMR with one facility into two facilities. The first facility is the Radiological Laboratory/Utility Office Building, or what we'll call, sometimes you'll hear it RLUOB, or Rad Lab. And then there's the main facility, is the nuclear facility. We'll detail each one of these, Rick [Richard A. Holmes, Division Leader, CMRR Division Office, LANL] will, later on, specifically on the ins and outs of the facility, later in the presentation. But, um, the first facility, the Rad Lab, or RLUOB, is the first one out. We've just recently completed the shell of that facility, the building shell, and now we are in the mission phase to equip that facility. It provides us immediate capabilities, in about 2013, to start replacing some of the missions that are assigned and carried on at the CMR facility. We'll move everybody in in about 2011, and then in

about 2012 or 2013 we're gonna start up operations. That's when we should ah, ah, be ready to go. It's radiological operations. We have a radiological lab, 19,500 square feet of radiological lab space. Uh, it's office space for 350 people. We are consolidating training space that we currently have. We have leased space in the town, which our trainers are, uh, are providing the classroom experience. But we are moving that to the fourth floor. And we'll talk a little about that later. As I said, that facility is essentially complete. We've requested the administrator of NNSA for what we call a project close-out, and try to close off that phase. And we have, since July, been starting up in the execution space for the equipment installation phase. And Rick [Holmes] will detail off what that might mean.

[STEVE FONG]
The nuclear facility is our Haz Cat 2 [Hazard Category 2], Security Cat I is what we label a nuclear facility. That's where most of the chemistry operations will, uh, occur. It houses a storage facility for six metric tons, 22,500 square feet of lab space, and all of the equipment that's associated with it. "Why two facilities?" is probably a good question. Um, again, uh, the radiological space you would say is an order of magnitude less in terms of cost. So we try to pull out all of the efficiencies and, as we could, so that we can contain costs and also provides us, again, the assurance that we can bring in some chemistry capabilities early in the process. The CMR Project, the CMR facility is at its end of its life, so we are trying to make sure that we have continuity of operations and capabilities.

[LANL Slide 8]
[STEVE FONG]
This is the area at TA-55, slightly looking to the east, kind of, kinda to the north. Uh, we have the existing facility, uh, the plutonium facility that's in existence. The facility that's to the far right, is our RLUOB facility, or our Rad Lab facility, which the shell is constructed. And right now, the CMR facility, nuclear facility, is simply in paper, in design. So that's in design space. There's nothing there at this time. It is essentially a lay-down area that's been graded away to assist our construction for the radiological space.

[LANL Slide 9]
[STEVE FONG]
Uh, our programmatic requirements for this facility over the years [have] been under review and has been under study for many years. But essentially it's, it's the same mission that we've been assigned, uh, from year to year to year. We've had many independent external reviews. However, if you look backwards in times, the amount of square footage, the programmatic space, the capabilities we are providing, are all the same.

[STEVE FONG]
This year we received $97 million. Next year the [U.S.] Administration's request is at $22.5. That president's request will then go to Congress, is at Congress, and we are gonna be going through a large budge cycle and try to figure out what exactly is the figure for '11. But, uh, basically, that is enough for us to continue on with our design and start getting ready for the execution of the core nuclear facility.

[STEVE FONG]

Our direction is essentially the same. They want us to complete the Rad Lab, which we have, in terms of the building shell and now we are moving into the equipment phase. And we're, we're slightly ahead of schedule, and Rick [Holmes] was gonna probably, probably touch into a little bit more details of where we are actually at along the way in REI. The "REI" is another acronym. It's the "RLUOB equipment installation" phase.

[STEVE FONG]
Uh, we have, we are studying a, uh, whether or not to see, if we can bring in the entire project in by 2020. Construction complete and operations by 2022. That's not been set. That's understand, under study. But's that's kinda the gauge in which we're, uh, vectoring in for towards the end.

[STEVE FONG]
Again, the nuclear facility is in final design. We've completed preliminary design. And we are about to embark on final design. We have the request in to begin it's, to go into, uh, final design here this fiscal year. Our technical certainty in terms of making sure that we have the right requirements has been [in]ternally reviewed in-house and it's been externally reviewed at great lengths with the Defense Nuclear Facility Safety Board (DNFSB). And I think, ya'know, we are basically aligned in terms of those requirements. We don't see those requirements changing in terms of our safety set in which we need to incorporate to design. So we are pretty confident that we are ready to go to embark on, um, into final design.

[STEVE FONG]
Um, again, uh the budget, ah, in terms of what we need to get going in '11 and the out years, uh, are out in the public. It's, it's now to Congress for them to decide. The Nuclear Posture Review— I hear it's sometime this month. And I'm not sure if anybody else has heard anything else-wise, but it's been slipping over this past year, but I hear that this is the month that it's gonna be released. And that should set the stage nationally also about whether or not, and how CMRR plays in sort of the larger programmatic mission for the [Nuclear Weapons] Complex.

Lorrie? Oh there you go, there's—

[LANL Slide 10]
[STEVE FONG]
Um, again, this is a little bit of a broken record. But I wanted to put this up to basically say the requirements: that has not changed. Year after year, our key mission is to provide that analytical chemistry and materials characterization support. We do have our storage facility, six metric tons. That has not gone up or gone down, it's been staying the same. It's, it's the same. Provide the capability for large vessel handling. We have that space identified, but we are not equipping it. We're providing a, a square footage space in our nuclear facility for that. And, of, basically of, support of the capabilities that the current CMR provides.

[LANL Slide 11]
[STEVE FONG]
Um, one of the unique things about CMRR is we have the opportunity to do this right. We have built in a lot of flexibility into our laboratory space. So, as, as our needs change, we can realign

our, our nuclear laboratory with some ease, as opposed to some of the old, older facilities, which it's rather difficult to do.

[STEVE FONG]
Um, we have a design life, in which, the service life we are designing to for the next 50 years. And there are there's a lot of specialty equipment that goes into both, not only the radiological facility, but the nuclear facility itself. There's a lot going on there.

[LANL Slide 12]
[STEVE FONG]
Um, again, in the, just an overall timeline. In 2000 we embarked at CD-0 [Critical Decision 0] that basically said "Go ahead and get into conceptual design, develop the concepts." In 2005 our mission said, in terms of alternatives, we're selected, and said— That decision basically said, "Go begin preliminary design, figure out what your performance requirements are for this facility." We started in 2005 because we knew what we wanted in terms of the non-nuclear space, the radiological space. We embarked on the radiological facility, at which [time] we just completed its shell. And you can see right here in 2009, um, in July, we started the equipment phase.

[STEVE FONG]
Oop. Um, we've been through a number of [U.S. Government] administrations on this since 2002. And again, the the thought was, "Where do we stand with the nuclear facility?" And the preliminary design did take some time. We had to make sure that everything was aligned in terms of our mission requirements, programmatic requirements, make sure that we are bringing the right capabilities and which fits the overall NNSA strategy.

[STEVE FONG]
This year, ah, the Nuclear Posture Review, and the final design authorization: those are our big events for this year. Future years, uh, we will finish the radiological— begin the staff move-in for our rad lab occupants, start moving people out from CMR to the radiological facility. We have a number of other baseline packages which we'll detail on another slide, so I'm gonna defer back to that. But again, the thought is, at least at this point, try a full plan of construction complete in 2020, and turn over operations in 2022.

[STEVE FONG]
Now we are gonna get into the details. I'm gonna ask Rick [Holmes] to come up and then we'll, after Rick's done, then we'll get into answering questions and answers to questions.

[LANL Slide 13]
[LANL Slide 14]
[RICHARD A. HOLMES, DIVISION LEADER, CMRR DIVISION OFFICE, LANL]
Am I on? My name is Rick Holmes. For those of you that don't remember, I'm the Laboratory's project manager for the entire CMRR Project. I've been here for more than three years now. My team is responsible for delivery of both buildings and the equipment that goes inside of both buildings. Ah, the first part— and this may be the last time we talk just about the Rad Lab itself

without talking specifically about the equipment installation, because the building is done. The building has, in the basement is the utility infrastructure for the laboratory modules itself, the electrical switch gear, filter units, things such as that. The laboratory level is on the first floor of the building, which is built in, on the one end, into the wall adjacent to, near TA-55. [Pointing to slide] And then as you go along, this is Parajito Road out here, and the intersection of Parajito and Pecos, where the building is located. Because of the elevation and the topography, it sticks out above grade at the southern end of the building.

[RICHARD A. HOLMES]
The second and third levels of the building are office space, and on the fourth floor is training. The building is oriented to have uncleared space and cleared worker space inside at both on the laboratory floor and in the office spaces. Ah, built with over two million man hours without a loss-time accident. Ahm, it'll be LEED certified. That's Leadership and Energy in Environmental Design. At the silver level. And we will submit the documentation to achieve that rating as we finish the equipment installation phase inside the building. The project has won a number of environmental awards from the NNSA department: most recently a Best in Class for recycling of materials that we've done through the construction phase. So we are trying to do it right. It is built under the NQA-1 [nuclear quality assurance] level of quality. And, in my opinion, it wasn't really necessary for this building, but I think it was very, very useful. In (a) insuring the building was built properly, but also, then, increases the maturity of the processes and procedures so that when we move forward into the harder portion of the nuclear facility then those procedures are better and have been used and have had a chance to be broken and modified as you go through them. Next chart.

[LANL Slide 15]
[RICHARD A. HOLMES]
So, a couple of charts with some pictures in them. The atrium, which also by use of natural light is one of the LEED elements, and this is looking from the outside glass that you saw in the last picture down. This is also the break point for where you have uncleared space and then cleared space. Um, it has a control room inside for monitoring the utilities inside the building, boilers that are in the central utility building that will provide hot water for not only work inside the Rad Lab, but also hot water service for that which is necessary in a, in a nuclear facility. Um, again, office space. And in the equipment installation phase we will put in place the cubicles and the office furniture inside and, it's got a little dark as it got blown up in here, but I think it's better in the pictures that you've got. Um, some of the fire water pump infrastructure in the building. Next chart.

[LANL Slide 16]
[RICHARD A. HOLMES]
Again, a couple more pictures of the, a picture of the vestibule. The security portal that's in place to divide between the cleared and uncleared, which is just like everywhere else where you have to go through that similar thing in laboratory [spaces]. Electrical switch gear, and then the, again, the outer portion of the building itself. So that's the Rad Lab. Done. Complete.

[LANL Slide 17]
[LANL Slide 18]

[RICHARD A. HOLMES]
Moving on to the next part of the project. That's the equipment installation phase. We've used this chart before. It includes a number of elements inside of that work. Most notably is design and fabrication of the gloveboxes and the specialty equipment that goes inside of those gloveboxes. Um, that, those gloveboxes are in fabrication now. A contract was awarded to the vendor. They've met all the right quality requirements and documentation requirements, so they've been released to fabricate. We're talking on an order of magnitude of twenty-five or thirty individual gloveboxes that'll go inside the Rad Lab.

[RICHARD A. HOLMES]
Also important is the laboratory build-out. The laboratories comprised in both the Rad Lab and nuclear facility are comprised of modules. A module is 12-1/2 feet wide, 60 feet long. And every module has the same utility services as every other one. And multiple modules, one, two, three, can be up to four, combine to make laboratories. So when you hear us talk about modules, and you see that number inside of documentation, those kind of things, you are talking about the building block of individual laboratories. Those building blocks are combined in order to make up laboratories. So the laboratory build-out phase is to put in the walls necessary to take and divide up the modules into the right number of laboratories for the initial build for the Rad Lab. Now, the design that Steve [Fong] talked about in terms of being flexible. It's straightforward for the fifty year life, it's not quite that simple. Those walls are fire-rated walls, so we are talking dry walls, ya'know, studs and dry wall, double layers on each side with utility services that penetrate them. But there are no loads that are carried from those walls down, so that you could take them apart. And if you had a two-module laboratory and you now needed a four, you could then take out the interior wall and combine them together, put in the right equipment and move forward to continue similar operations. Again, it's still gonna be laboratory operations. Still bounded by the 8.4 grams of plutonium that Steve [Fong] talked about inside.

[RICHARD A. HOLMES]
We've started building those walls inside the building already, which is about a year ahead of plan. We are also in the contracting phase for the ventilation portion of that build-out. The piping portion and electrical portion, again, ahead of schedule. And what we did was, we, we, instead of issuing one contract for all of the construction and then having to wait for money to show up, we looked at it and said, "What if we broke it up into parts? We can then attract better bidders to come and do the pieces parts, 'cause you can get a ventilation person to come and do ventilation; you can get a piping person to come and do piping; and you can get an electrical person to come and do electrical; and, and get started earlier and make better use and efficient use of the current funding rather than wait for next year's funding to show up. Because of that $225 million dollars, a pretty large chunk has to be applied against the Rad Lab work as well. So money that comes into the project has to be apportioned or used for the various phases of work to keep work moving forward. So we are now, this year, this summer, in the big evaluate and award process for those contracts, um, and we've been getting good interest in terms of people coming to, be interested in coming to do that work.

[RICHARD A. HOLMES]
Also includes the security systems, the telecommunications and the furniture which is working forward through the process and, and eventually addition of a parking lot across the street that

will provide additional parking spaces for the people who will work in the Rad Lab and all those, in all those office spaces.

[RICHARD A. HOLMES]
Again, as Steve [Fong] said, beneficial occupancy, which means we will turn over the office spaces and the utility systems, will be by, no later than October of ’11, and then complete finish of the facility ready and operational is committed to be done in the first half of Fiscal Year ’13. And so, that proc— that will work forward through the paces. Not a large activity in terms of pace, but underway.

[LANL Slide 19]
[LANL Slide 20]
[RICHARD A. HOLMES]
On to where we are in the nuclear facility: one element you’ll see is how do you work within the Department’s [Department of Energy’s] rules to insure that you can articulate what the cost and schedule baseline should be for a building of this particular type as well as allowing for adequate time or sufficient time to further the design for each of those particular packages. And so what we will do inside of the Department’s decision process is break that into probably four or five individual packages, the first of which is infrastructure. And infrastructure includes, and I have a schematic that shows where this would be in the corridor, but mobilization of a concrete batch plant to provide for the capacity that the building will ultimately need. Ahm, temporary utilities, um, preparation of the site laydown spaces that’ll be necessary ‘cause there’s not a whole large amount of flat land up here in Los Alamos. Site excavation, stabilization of the soil underneath the building, ah, a[n] additional warehouse and a substation for the, uh, for storing material, the warehouse for storing material while it’s pending installation in the building. And the substation is to provide additional power capacity, given the requirements necessary for the Rad Lab and the nuke facility.

[RICHARD A. HOLMES]
The project scope also includes relocation of Parajito Road. This is about 1200 to 1500 feet right alongside where the building goes. Essentially, picture the road moving right next to itself. So where the right shoulder is now, that becomes the left shoulder. Also relocation of the utilities would occur that run along, right along the site right now. Then the basemat package, the structure. And then the balance of the project construction. The reason to do it this way is so that for each of these packages, design is complete for that package, as we commit to the cost and schedule baseline and start getting contractors up here to go do work.

[RICHARD A. HOLMES]
It also matches the construction flow necessary to do the work. So if we gave to construction today all the design for the structure, let’s assume that was done, because of the work that has to be done before that, they wouldn’t do anything with it for a while. So this allows for good understanding of the design while you move through the package, but also an efficient execution of construction and is actually very much low-risk because before you release each one of these packages, you know everything you need to know about that particular package in terms of execution pace.

[LANL Slide 21]
[RICHARD A. HOLMES]
This picture, which eventually we could blow up, is the Parajito Corridor. The nuke facility will be off to the left side of the screen. [Points to slide] And this is Parajito Road as it moves down towards White Rock. If you've been up there before. The plan is, rather than issue a contract, until the contractor, figure out where you're gonna put everything, is that the project will put in place and establish the infrastructure necessary, laydown space, a trailer, office space, places for shops to be located, again extra space for where a batch plant would be to provide for the capacity for the concrete necessary to construct the building. And this would be the earliest part, the non-nuclear part of construction, that if funding is available, we would start sometime in Fiscal Year '11, next fiscal year. It also includes the location of where the warehouse would be. And then any changes like a turning lane, etcetera, to get in and out of these areas safely necessary to sustain construction. So, we've thought about how to go execute this work. It's not like you get a bunch of money, and then you go off and get started with it, is there is a plan in place. We go through the decision process to get the non-nuclear portion released first, which then enables the rest of the construction as we move down the road.

[LANL Slide 22]
[RICHARD A. HOLMES]
Lastly, to keep you up to date, and I think these dates have shifted a little bit, given the sequence of construction and where we are for permitting as to when we will have documents in the review process, again, for the, the operating permit modification, for the, for the Rad Lab, we're, later this year would have that done and go into the approval process. The new source review for the nuclear facility would be in, sometime in '11 in to NMED [New Mexico Environment Department]. Ahm, an NSR [new source review] permit, air permit for the batch plant operation, again, so we can mobilize the batch plant, it's not ultra sophisticated. It looks very much like every other batch plant that you'd need around the country, but you'd need to make sure that you've got it done right and get it in place right. And then the pre-construction approval for the nuclear facility, again, tied to when the nuclear facility construction or the basemat specifically for the nuclear facility would start. So again, just to keep you in the loop on when things get to NMED so you can participate in that review process, and I think these dates are a little different than what we had before. And I think, given what we know today, ya'know, again always pending Congressional modification of budgets, etcetera, or other decisions, then these dates, I think, are gonna stay pretty firm for now.

[LANL Slide 23]
[RICHARD A. HOLMES]
So that ends Steve's [Fong] and my formal or informal portion of the presentation. Who wants to throw out the first pitch?

[BRUCE MACALLISTER, FACILITATOR]
Thank you. And for the benefit of people who came in late, just a little reminder. When I pass you the mike, please be sure to give your name before you ask your question, and that way we will be able to keep everything kinda straight in our note taking. Questions?

[BRUCE MACALLISTER, FACILITATOR]

Sir?

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Uh, thank you. I'm Jay Coghlan with Nuke Watch New Mexico. A question for you Steve, and, uh, one thing that I find the presentation somewhat deficient in, is, um, describing the mission needs for the nuclear facility in particular. But the specific question that I'm interested in, in the last couple of weeks Mr. Winchell [Donald L., Jr.], manager of Los Alamos NNSA, among other things was saying in the press that the nuclear facility would be necessary for LANL's nonproliferation programs. And I'm never heard a description of the nonproliferation programs that would occur there. And specifically I'm interested in segregating out so-called nonproliferation programs for mixed oxide fuel fabrication, which is controversial, and it's kinda snide on my part, but actually I regard that as a proliferation program rather than a nonproliferation program. But this has to do with the amount of quantities of special nuclear materials that would be involved. And why can't LANL's nonproliferation programs take place within the lab, Rad Lab, that does have that administrative limit of 8.4 grams of plutonium 239 equivalent. So I'm looking for justification of the public statement made by the LASO [Los Alamos Site Office, NNSA] manager that the nuclear facility was necessary for LANL's nonproliferation programs.

[STEVE FONG]
Jay—

[UNIDENTIFIED PERSONS]
[Inaudible off-microphone words.]

[STEVE FONG]
I think a lot of information you probably—

[Microphone feedback sound.]

[UNIDENTIFIED PERSON]
It's not me. [Referring to microphone feedback sound.]

[Laughter]

[STEVE FONG]
You've probably read through the [Nuclear Weapons] Complex Transformation EIS [Environmental Impact Statement]. Did you find that to be useful or not for any of this discussion? There is some discussion about programs contained within the CMR facility. We can try to, in the next meeting, talk about more of what the suite of capabilities are. We have a standard slide or two that basically outlines the—

[STEVE FONG]
[continues with microphone readjusted] —that outlines our capabilities that we are providing. But other than that, I'm a project guy, so I really don't get into the programmatic end. I could try to launch it over to Dr. Tim Nelson [Project Leader, Integrated Nuclear Planning, LANL] for

more information about this topic. But again, Rick [Holmes] and I are project guys. We, we are building, building shells, gloveboxes, providing equipment, but we don't really get into the nuts and bolts of what the equipment for, who gets to use it, what's the relationship between the nuke facility at PF-4 in terms of, of uh, operations and capabilities. Again, this, this, formatted this briefing for project-specific type of information.

[BRUCE MACALLISTER, FACILITATOR]
Follow up?

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Ya'know, quickly Steve, I've read the Complex Transformation Programmatic Environmental Statement a couple of times. And it doesn't really address nonproliferation programs. And, um, in an attempt to press my point, if the federal manager of the NNSA Los Alamos Site is making public statements that the nuclear facility is necessary for nonproliferation programs, that needs to be backed up and justified. And I'm not aware of any justification to date for that, in neither the Complex Transformation documents nor in the recently released federal budget. But, in any event, next meeting, it'd be nice to have somebody here from both NNSA and the Lab from nonproliferation programs to make sure that this is not the latest popular rationale for building this $4.5 billion dollar facility.

[RICHARD A. HOLMES]
Sort of a list of capabilities for providing a nonproliferation program, Jay [Coghlan], there is capability within the current CMR. There is a current program that goes on, so again, we are providing the laboratory space. What goes on in that space will change year-to-year, depending on NNSA missions, what is happening in the world politics, etcetera, etcetera. So. But I hear, I heard your comment. You would understand the list up. Okay.

[BRUCE MACALLISTER]
And I've noted it on our parking lot.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Thank you. Scott Kovac, Nuclear Watch New Mexico. Um, I was wondering, I don't see on slide 12 the NF [nuclear facility] baseline performance baseline. When do you expect, or do you have an idea when you might,—

[STEVE FONG]
Can we jump to the timeline in the nuclear facility, probably slide 20— There it is. Here it is.

[LANL Slide 20]
[STEVE FONG]
Each one of these is a chunk to the baseline. The infrastructure package is done. We'll be, uh, every baseline package we put together a fixed mission scope. We'll go through the external reviews before we release that on to the street and get bids, but we will at that point set up and establish what the scope is, what the cost and schedule will be. The, the road movement is part of that, is part, is ancillary to the nuclear facility, but is needed for us to construct the basemat. The foundation coming up is the next set of, of work. But again, that's mostly concrete. But the rest

of the structure and then the rest of the, of project, will be out in the 2014 time frame. At that point we will have established everything in terms of the entire project to go.

[SCOTT KOVAK]
So the, so the actual cost—

[BRUCE MACALLISTER, FACILITATOR]
Hold on. Let me get the mike to you.

[SCOTT KOVAK]
So the actual final cost estimate for the NF [nuclear facility] on this chart is, is at, is it the pink, is it somewhere—

[STEVE FONG]
Right.

[SCOTT KOVAK CONTINUES]
— in ’13 or so?

[STEVE FONG]
14.

[MORRISON BENNETT, TRANSCRIBER]
Your name?

[SCOTT KOVAK]
Scott Kovac with Nuclear Watch.

[STEVE FONG]
We will have that in about that time frame for the final cost. At that point, we will know everything. Yes?

[BRUCE MACALLISTER, FACILITATOR]
Next question? I saw a hand over here.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Thank you. Joni Arends, Concerned Citizens for Nuclear Safety. So when you were talking about, um, the nonproliferation, what percentage of the facility is going to be used for nonproliferation programs?

[RICHARD A. HOLMES]
Uh, I don’t have those figures.

[JONI ARENDS]
Does Dr. Tim Nelson know?

[UNIDENTIFIED PERSON]
He might.

[TIM NELSON, PROJECT DIRECTOR, INTEGRATED NUCLEAR PLANNING, LANL]
So,— My name is Tim Nelson. Um, a little bit of what we are talking about is when you have analytical chemistry and materials characterization. I'm gonna give you an example and then we'll extrapolate it to nonproliferation. But you'll have a capability, and I'm gonna pick on an ICP mass spec [inductively coupled plasma mass spectrometer]. An analytical chemistry instrument. It looks for very small quantities of what most people would consider to be impurities of something you don't want. Could be iron, um, or other metals. And when you use that piece of equipment, you use it for lots of different programs. So when Don [Donald L. Winchell, Jr., Manager, Los Alamos Site Office, NNSA, DOE] was talking about nonproliferation, um, I'm gonna use that ICP mass spec to support nonproliferation. I also use it to support weapons programs. I also use it to support lots of other programs, including environmental programs. So that's a little bit different than in the context of, um, I have a nonproliferation program that very specifically has this space and is operating in this space, and I can break it out. Um, so I don't know if that answers your question.

[TIM NELSON]
I know if you looked at the nonproliferation programs that you refer to in the context of MOX [mixed oxide], for the most part right now, what we are doing at LANL is what we call the ARIES [advanced recovery and integrated extraction system] prototype. And we are disassembling weapons and producing oxide that's to be shipped to Savannah River. That's feed for the MOX fuel fab facility, but our part is actually take the weapon apart and put the weapon material in an oxide form in a container that can be stored. Now that material needs to be analyzed. And it's analyzed through the capabilities that are provided by the existing CMR building, what would be the CMR nuclear facility as well as the Radiological Laboratory. When you talk about quantities of material, when we split the Rad Lab and the nuclear facility into two separate buildings, those processes, those analytical chemistry processes, were split according to how much material they needed to do a sample, to run the sample. So, the types of processes, analytical chemistry processes in the Rad Lab is much smaller quantities than the analytical chemistry processes that are in the nuclear facility, which is much larger sample sizes. I think I hit most of the question.

[BRUCE MACALLISTER, FACILITATOR]
Follow up question?

[JONI ARENDS]
So now we're back in the dual use arguments that went on the mid-nineties, it seems to me, because you're not necessarily making that distinction between the weapons program and the nonproliferation work. So,—

[TIM NELSON]
Yeah, I can't— This is Tim Nelson. I can't— I don't know what the arguments were in the nineties, but I can tell you what we are doing now.

[JONI ARENDS]
Okay.

[TIM NELSON]
It's multiple use. So it's actually, essentially every program, which is what Steve [Fong] said in his opening remarks relative to mission need. Every nuclear program at the Laboratory uses these capabilities.

[JONI ARENDS]
Okay. So then I have a question or two for Steve [Fong]. With regard to the map—

[STEVE FONG]
The map? Uh, which map?

[Few words missed as audio tape is being turned over.]

[JONI ARENDS]
Okay. So. Can you point out where MDA-C [Material Disposal Area C] is?

[STEVE FONG]
MDA-C is, may be about, about this area. [Points to an area off to the left of the slide.]

[JONI ARENDS]
Okay.

[STEVE FONG]
Maybe farther.
[RICK HOLMES]
Just east of Pecos, Parajito Road— This is Rick. It's just east of the Parajito Road/Pecos intersection.

[STEVE FONG]
East—

[RICK HOLMES]
So it's off to the left of the picture. And we are not gonna use it.

[STEVE FONG]
... 55

[RICK HOLMES]
And we are not gonna use it.

[JONI ARENDS]
Okay. So. Where is this? Where is the entrance to Area G then? Where is the entrance to TA-54?

[STEVE FONG]
You might— Let's go to the third or fourth slide of my presentation. I think that might be the aerial view. The one after this. Yeah.

[LANL Slide 8]
[STEVE FONG]
I'm not sure. Yeah you can.

[RICK HOLMES]
It's not on that.

[STEVE FONG]
Well, it curves. [Points to the lower central portion of the slide.] This little curve right here is actually, I believe, the intersection that's shown just to the, to the east.

[RICK HOLMES]
Yeah.

[STEVE FONG]
So. Yeah. We're located down in this area here, and it's cut off. So.

[JONI ARENDS]
Okay.

[STEVE FONG]
But the TAs are in there, 60-something, and 60— Is it 63?

[RICK HOLMES]
63, 46.

[STEVE FONG]
46.

[JONI ARENDS]
So are we down, are we down where Beverly Ramsey used to have her office and Stewart—

[STEVE FONG]
I see some people nodding their heads. I don't know where Bev—

[ANOTHER UNIDENTIFIED VOICE OFF MIKE]
Between there and the current [TA] 55.

[BRUCE MACALLISTER]
[Soto voce, handing microphone to Denny Hjeresen, okay, you wanna say that again?]

[STEVE FONG]

And MDA-C—

[DENNY HJERESEN]
Denny Hjeresen. Los Alamos.

[BRUCE MACALLISTER]
Joni?

[STEVE FONG]
—is right up in there, this area here.

[JONI ARENDS]
So. Are you disturbing new land. Do you have to have an EA [environmental assessment] or some kind of—

[UNIDENTIFIED PERSON]
Analysis.

[JONI ARENDS continuing]
—analysis because it seems you're breaking up new land?

[STEVE FONG]
We have those.

[UNIDENTIFIED PERSON]
Joni?

[JONI ARENDS]
You already do?

[STEVE FONG]
Yes.

[JONI ARENDS]
And were they released for public comment, or?

[STEVE FONG]
No, I don't believe they were. Nicole [Seguin] They were supplemental analysis that I don't think floated to that level.

[JONI ARENDS]
Because categorical—

[STEVE FONG]
Joni, I do believe that—

[JONI ARENDS]
—exclusions or what?

[STEVE FONG]
I'm not sure what the actual determinations were.

[Other soto voce voices off microphone.]
[Inaudible words]
Determinations . . .
These were disturbed areas—

[DENNY HJERESEN]
Disturbed areas, yes.

[UNIDENTIFIED PERSON]
[Inaudible words off microphone.]

[BRUCE MACALLISTER, FACILITATOR]
You wanna say—

[STEVE FONG]
In terms of the analysis and level, I can get back to you in terms of what level of, of NEPA [National Environmental Policy Act] determination. In terms of the use, most of this area has been pre-, pre-, uh, been disturbed and used before and has grown back, and it looks like it hadn't ever been used, it's full of piñons right now and junipers.

[UNIDENTIFIED PERSON]
Yeah.

[BRUCE MACALLISTER, FACILITATOR]
Okay, other questions? I saw a hand over here. Sir?

[DANNY WILLIAMS, BRIDGE TO NOWHERE]
Yeah, uh, Dan Williams, with the Bridge to Nowhere. Um, I've just got a couple of really stupid questions here. Over the last seven years, what has caused the estimate to go from the $600 million to four hun—, or, $4.5 billion dollars? Did somebody get a raise? And why do we need a facility to make so many triggers? Don't we have enough of 'em?

[STEVE FONG]
First question. Uhm, let's go to the, this is kinda handy. Let's go to the slide that shows the, the dates. That's about one or two more, right next, there you go.

[LANL Slide 12]
[STEVE FONG]
When the first initial budgets out was at CD-0 at which we started establishing, well, what is the range? And basically all we have is paper and a concept. And that, the process in which we

develop projects, we are forced to give a number, and try to start, start ball-parking, is it? How big is it? And that's without any definition. That's at the pre-conceptual stage. And we had to go through conceptual design. We're now at preliminary design. As we go forward and baseline these, these projects, we do establish firm fixed price, a firm price baseline in which, a cost and schedule base, that we provide to [the U.S.] Congress and we say, "We now have enough information, we have enough design fidelity to go forward and commit to a level performance in which we'll bring in the projects." That happens in our Critical Decisions 2-3. For instance, the Rad Lab/Utility Office Building: when we had enough information for that facility in 2005, we established a baseline, and we have thus, since, as of this last month, have brought in that facility for that baseline. The same thing happens for the, the equipment phase. When we have enough design information in which we are ready to commit to a, a performance baseline, is what we call it, it's at that time we will determine what that cost and schedule will be for performance.

[STEVE FONG]
Uh, you have to have enough information to make these decisions. Right now, in the, for the nuclear facility, we don't have that fidelity yet. We are on our way. We think we've, we've marched through a number of technical issues to make sure that we have the right safety set that goes into that facility. So we are getting close. There's a lot of interaction with a lot of external groups. Not only do we provide the government's estimate, but that government estimate has to be externally, externally and independently estimated and reviewed to the decision maker. And the decision maker for this project is up at the deputy secretary level [of the DOE]. So he wants to make sure that not only that we bring in the amount of information, but that he has external reviewers that look at this information and say, "Yeah, it's gonna cost this much," or "No, I think these guys need to go, go at it some more and actually develop more information." And I understand the risks and confidence that are associated with that performance baseline. So, uh, early on, yeah, we didn't have enough information. Now, I can say, "Yeah, we['ve] got volumes." We have, things that are, are getting large in terms of the amount of fidelity that goes into specific individual systems or components.

[UNIDENTIFIED PERSON]
[Inaudible words off microphone.]

[BRUCE MACALLISTER, FACILITATOR]
Hold on. Just—

[BRUCE MACALLISTER, FACILITATOR]
So, the question is: is that estimate going to go up?

[DANNY WILLIAMS, BRIDGE TO NOWHERE]
I mean, are we saying, "This is it, it's not going any higher?" or are we saying, "Hey, this is still open to go higher?"

[RICK HOLMES]
It depends on the, many factors. I mean, not only you have the price of fuel, you see it go up and down every day. The price of concrete. What's happening in the world market for concrete. There are a lot of factors that go along with it. So, I hope not, but it is our duty to factor in and

try to put out the best planning information possible. But it's time where we get to this Critical Decisions 2-3 where we have to package— that's at that time and moment we will use the best factors we have out there, and then lay it on out. That's the best we can do.

[BRUCE MACALLISTER, FACILITATOR]
Other questions?

[GREG MELLO]
Steve, —

[BRUCE MACALLISTER, FACILITATOR]
Introduce yourself.

[GREG MELLO]
Oh sorry. Greg Mello. Do you, when you make these, um, cost estimates, um, are, what are the assumptions that you are using about concrete and steel and construction costs? Are they— sort of assuming they are flat from here on out? Or you build it a certain percent, since it's volatile, you can't really tell, but, what are your assumptions in short?

[BRUCE MACALLISTER, FACILITATOR]
Sure. Well, Rick?

[RICHARD A. HOLMES]
This is Rick. Because my team is responsible for trying to put something together. So you start with what you know today. Try to estimate what escalation factors are going to be for prices of commodities for years in the future, and I don't know— Commodity prices are gonna go up. I don't know when.

[GREG MELLO]
What do you use?

[RICHARD A. HOLMES]
So, today we have used, DOE has published escalation factors. And, I think, because they are somebody's best estimate to begin with, that's what we start with when we give that information to DOE. And they have actually published those. I think they are in, I think they are avail— I don't think they are secret or anything. Ahm, and right now they currently go to 2018. And so one assumption you have to make is, because they are flat in rate, they are about 2.1 or 2.4 percent, out in those years, and you, the assumption you have to make is that they stay at the same rate as they are going forward. So, when we give an estimate to DOE, we use their escalation rate.

[RICHARD A. HOLMES]
So you don't assume everything's gonna stay the same. You don't assume they are gonna go down, they are gonna go up. Because if a building of this size, in terms of quantities we are talking about, and for example, we are talking about, about a hundred and thirty thousand cubic yards of concrete in a building. Um, and Portland cement, which is a key component of concrete,

can often wind up going places around the world where the world market will tend to drive availability of some of those materials as you go forward. And that's a variable that you cannot plan for. So part of that chart that I showed you, that talked about baselining the last portion of the job, which is gonna have the biggest dollar values in it because it's the balance of the facility. In 2014, is intended to provide the Department [of Energy], and then ultimately the Department's commitment to Congress with certainty that, yes, we know enough at that point, it's a short enough duration that we can then not have to assume what escalation gonna be, we can go buy it right away, put it in the warehouse, put it in the laydown space, and manage, and manage in that particular way.

[RICHARD A. HOLMES]
Probably a longer answer than you wanted.

[BRUCE MACALLISTER, FACILITATOR]
Okay. Follow up?

[GREG MELLO]
Yeah. Uh, do you have a published lifecycle cost for the facility, as per your [word missing] order.

[RICHARD A. HOLMES]
There was a lifecycle cost— So the answer is, "Yes, it is being updated." There was one that was done back in the early days of the project as part of the DOE decision process. That number gets updated. My team is now trying to prepare for, an NNSA review of the costs of at least our current plan, so they can figure out what they need to program in budget space, 'cause you have to be ahead of commitments in budget space to give it a Congressional cycle. For example, DOE's input into the budget process for Fiscal Year '12 has to be done in July. So, it's a— We are doing some of that work now for programming space. And that lifecycle cost would be updated as part of that, as part of that exercise.

[STEVE FONG]
I think the last one, Jay, er Greg, was, uh, 2005.

[BRUCE MACALLISTER, FACILITATOR]
Okay.

[DANNY WILLIAMS, BRIDGE TO NOWHERE]
Dan Williams with Bridge to Nowhere again. My second part of that question was, uh, basically, ya'know, the world is trying to reduce nuclear. Ahm, we really don't need it. And even the president is on that wave length. Why is it that we're moving forward with making more of these triggers? I mean, what do we need 'em for?

[STEVE FONG]
Well. That's a big question. There's a lot of thoughts to all that. And, uh, first of all, the, the budget request for FY '11 and the planning numbers that go forward from '11 to now, I think, '15 or '16 are the administration's requirements. That is part of the president's request for this. I

think, about the late February timeframe, I think there's an interesting article that [Vice President] Joe Biden wrote. It talked, to try to put this thing all in perspective. And that information is, we can share that. Um, but I won't even venture into the politics of what we need and where this all stands in terms of mission importance and why do we need weapons. That's not for us project guys to question. Ours is, that performance baseline. When you put it out there. We are the guys that get hung for that. We're the ones that have to bring it in for that. In terms of what the capabilities are from a programmatic need, that's at a much higher level. That's at the administrator's level and, with the executive office. So, uh, I won't even dare enter into that. That's uh, that's uh, a big question, and I can appreciate it. But that's not for Rick [Holmes] and I to answer.

[UNIDENTIFIED PERSON]
[Words off microphone]

[BRUCE MACALLISTER, FACILITATOR]
Comment back here? Hold on.

[UNIDENTIFIED PERSON]
Please.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
Roger Snyder. I'm with the local NNSA, and I under— I appreciate your question. I'll give you the reference for Biden's article. It's in the *Wall Street Journal*. It's a full-page spread. If you haven't had a chance. But also there were several questions about nonproliferation tonight. And I wanted to give you a reference that you might wanna go read 'cause it's fairly recent. Administrator D'Agostino [Thomas, NNSA Administrator] gave a remar—, gives some remarks at the Second Annual Nuclear Deterrent Summit. I saw it on CSPAN 3. I haven't read the actual detail, but I saw most of it on CSPAN 3 the other day. And he tried to draw the integration between the nonproliferation and the weapons side of the house together and also the response that we have worldwide. So there is some good remarks that augment that are very current that might be good reading. I just want to point you to them. So you've got the *Wall Street Journal* and how that folds into, from the vice president's perspective, and a, a fair, substantial portion of Congress is also lined up with that, and then also how that leads into nonproliferations worldwide that Administrator D'Agostino brought together just, just recently on February 17th. So those are the two articles I would suggest you might, might give you some direction in that. Realizing that this is a projects meeting, but that gives you some program side. I just wanted to add that to give you a little additional source.

[BRUCE MACALLISTER, FACILITATOR]
Okay. We have a question over here? [Other inaudible words.]

[MARIAN NARANJO, HONOR OUR PUEBLO EXISTENCE]
Good evening. Marian Naranjo, from Honor Our Pueblo Existence, based at Santa Clara Pueblo. And, on page 14 of the presentation, the Radiological Laboratory/Utility Office Building, it's very impressive for the awards that were received. Congratulations.

[LANL Slide 14]
My question is, who recognizes and, um, presents these awards to LANL and Los Alamos?

[UNIDENTIFIED PERSON]
Hi Marian.

[BRUCE MACALLISTER, FACILITATOR]
Okay.

[STEVE FONG]
Uh, two, two players. The first one, in terms of the LEED certification is a US Green Building Council for the United States. That's an independent council. We'll submit our application. We are planning to do so this summer. That's independently validated and, they basically, they are not paid by us. We submit into a body an application fee. They come back and provide us and tell us. They add up all the factors that go into that and see whether or not we are indeed sil—, LEED silver certified. We hope, we're hoping for maybe even gold, in some cases. But, uh, that's up to an independent panel, US Building, uh, Green Building Council.

[STEVE FONG]
The pollution prevention awards in which Rick [Holmes] had alluded to, I believe, is out of NNSA if not DOE, at headquarters. So that's within the Department itself. Looking at all the projects and all the operations throughout the complex that is DOE or NNSA. So we are up against all the other laboratories and offices.

[BRUCE MACALLISTER, FACILITATOR]
Okay. We are almost at the end, we are at the end of this window. But there are a couple of hands that were raised. I'd like to let them answer, ask their questions. And then we'll have another question and answer session after the other presentation.

[DAVE MCCOY, ALBUQUERQUE]
Yes, Dave McCoy. And I understand that the Nuclear Posture Review will be essentially what it has been for the last fifty years, which is, "I tuck myself under a chair in the fetal position." Now as I was looking at this building here, I was thinking to myself, "Gee, it looks like it'd make a really nice university building, or a nice hospital building. But what we're gonna get is something that's related to making nuclear bombs." Ya'know. And then the thought occurred to me, ya'know, "What a waste of minds and concrete and money when there's so many needs in this country, ya'know." And you can talk about Joe Biden or any of the others, and it, it's not gonna really register with the Americans who don't have reasonable jobs and that are living out in encampments and this kind of thing. And for my money as a citizen, this is just a ***big waste of time***. It's a dangerous effort. It's not going to improve world relations whatsoever, and, uh, you can, you can talk about all the technical cost figures and the timelines and all that stuff, and it's just a ***net zero***.

[BRUCE MACALLISTER, FACILITATOR]
Okay. I'm not sure there's a question there, but if there's a—

[Audience applause]

[BRUCE MACALLISTER, FACILITATOR]
Last question before we move on?

[PENELOPE MCMULLEN, LORETTO COMMUNITY]
Penelope McMullen with the Loretto Community. I have a comment and then a question. And the comment is about Dan's question and the response being that, that the reason all this money is given to have the capacity for more nuclear weapon— nuclear plutonium pits, is that it is in the [U.S.]president's request. However, the administration met with the, um, the leaders of the labs, and it's because the labs want it that the president requests it.

[PENELOPE MCMULLEN, LORETTO COMMUNITY]
Okay. Now my question is about the, ah, $25 million that's in the Fiscal Year '11 proposed budget. How much of that is for the nuclear facility? And then I have a follow-up question.

[RICHARD A. HOLMES]
This is Rick Holmes. The, the spread would be somewhere in the order of magnitude of $55 million to the radiological laboratory equipment installation activities and then the balance would be about $170 million, would go towards nuclear facility activities, some of which are design, some of which are award of vendor contracts for them to do design, and some would be for the start of the initial infrastructure construction, the warehouse and preparation of laydown spaces and that kind of thing. And that will shift a little bit. But just generally about a $55 million and a $170 million split between the two.

[PENELOPE MCMULLEN]
Okay. That partially answered my follow-up question. What was it for? So there is a hunk. Um, I guess most of it is for salary. And I'm wondering, wow! How much are these people being paid, 'cause that's a lot of money. But you then you also said some of it was for construction, but you can't start any construction in Fiscal Year '11 because you have to get the air permit first.

[RICHARD A. HOLMES]
The infrastructure package, so, what we would do, go to the—, keep going forward in charts. So— Back one.

[LANL Slide 21]
[RICHARD A. HOLMES]
So the preparation of the laydown space is not part of the nuclear facility construction itself. This could support other construction projects at the Laboratory. Certainly they are not as big as ours. So this is not part of that particular permit activity. And, as Steve [Fong] talked about, there was the consultations done to make sure that this land could be used for its purpose and we'll share that information as we can go and get it. And that was done. And so this activity does not tie to the need for the air permit. What we've had in discussions is the permits for the nuclear facility are necessary before we start building the actual nuke facility itself.

[STEVE FONG]
Just one clarification. There's is the batch plant we're, we're staging out here.

[RICHARD A. HOLMES]
Yeah.

[STEVE FONG]
That would, that would obviously need an air permit.

[RICHARD A. HOLMES]
Correct.

[STEVE FONG]
And that was on this slide. So.

[RICHARD A. HOLMES]
Thanks.

[UNIDENTIFIED PERSON]
Thanks for that clarification, Steve [Fong].

[JONI ARENDS]
That would be a NEPA— That you don't need an air permit for this work here?

[STEVE FONG]
No, I'm saying that the batch plant will need the permit.

[JONI ARENDS]
I understand, but for this work here, will you need an air— Have you already met with NMED [New Mexico Environment Department] about this?

[STEVE FONG]
I— That's a determination we make ourselves on what is an applicable source, and what we need to go in for a permit.

[BRUCE MACALLISTER, FACILITATOR]
Okay. And we need to, we are running a little—

[UNIDENTIFIED PERSON]
Yeah. Discussion too—

[BRUCE MACALLISTER, FACILITATOR]
We are running over our schedule a little. And I don't want to cut the parties presentation off. So, if we can move along.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]

Um, I think, I'll try it this way. Thank you. Uh, Steve. Rick.

[Interested Party Slide 1]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
My name is Scott Kovac with Nuclear Watch New Mexico. There may be a few of these [copies of the interested party slides], I've printed up a few. So there may be some on the table. On our limited budget. Uh, thank you. This is our, next one.

[Interested Party Slide 2]
[SCOTT KOVAK]
Thank you. This is a list of our interested parties, many of whom are here.

[UNIDENTIFIED PERSON]
[Inaudible words off microphone]

[SCOTT KOVAK]
Many of whom are here tonight. Now that's my— I tried to get fancy. Okay.

[BRUCE MACALLISTER, FACILITATOR]
Can we maybe dim the lights a little for you?

[SCOTT KOVAK]
Well, they're, they're—

[BRUCE MACALLISTER, FACILITATOR]
If you need to, I'll dim the lights.

[SCOTT KOVAK]
Okay. Next.

[Interested Party Slide 3]
[SCOTT KOVAK]
This is welcome to our ninth meeting. Thank you very much. Next.

[Interested Party Slide 4]
[SCOTT KOVAK]
All righty. Um, this is a little graphic I put together of the increases of cost estimates per year, starting in 2004. The original estimate was six— these are in, in thousands, so that's six hundred million, was the original estimate. And then, this year just came out as around $4.5 million. We've, Steve [Fong] kind of addressed the billion, 4.5 billion, sorry. Um, Steve addressed kind of the cost increases. I'd asked some questions about, and I'll ask them again when I'm done here, and, and if there is a, an area in particular, that maybe showed the larger increase. Was it the concrete that was driving this price up? Um, is there, can you narrow that down for us? Maybe the top two or three areas that were the largest increases.

[SCOTT KOVAK]

Okay. Next.

[Interested Party Slide 5]
[SCOTT KOVAK]
This is just a page out of the budget for the Fiscal Year 2011 budget showing the estimate of the nuclear facility at two point, I mean at $3.4 billion dollars. Um, that is, it also shows the, here's the, the one point, I mean the $99 million for the equipment, rad lab equipment, and here's the $160 [million] for, for the rad lab itself. So, next one please.

[Interested Party Slide 6]
[SCOTT KOVAK]
So we take all those numbers together and what happens is there's a, there's a contingency here, and I'm gonna ask a question also of Steve [Fong] or Rick [Holmes] about how much of that estimated 4.5 billion in Fiscal Year '11 is the contingency. Is it that $782 million? Which would be approximately a quarter, a fifth of the actual estimate. Um, and this is, and then I'm assuming the other project costs, where is the batch plant? And is it in "other project costs" or is it in the, is it in the, the NF facility itself? So maybe we can, we can have some explanation of these in a little bit.

[SCOTT KOVAK]
Okay, next.

[Interested Party Slide 7]
[SCOTT KOVAK]
Um, just a, kind of a humorous note. The, at the uranium facility was originally estimated at $2.3 billion, and they, NNSA then added a contingency of $1 billion, which brought it up to $3.5 billion. So, this is, just trying to figure out this whole contingency thing. If it's, if, if, if the estimates, ya'know, as the estimates get more honed down, I would hope that the contingency would go down too. Next.

[Interested Party Slide 8]
[SCOTT KOVAK]
The, um, all of this request for this $225 million this year is in weapons activities, which is a category of, in the NNSA weapons activities budget. And so, this is, ya' know, as we can see, part of the, ya'know, it's a small portion of this. But weapons activities at the Lab for Fiscal Year 2011 are running around 65% of the request. There's some others numbers, but um, and we had to estimate the work for others because that number's not given to us, but we, kind of, on a running average, around $350 or $300 million.

[SCOTT KOVAK]
All right. Thank you.

[Interested Party Slide 9]
[JONI ARENDS]
Could you point out the renewable research budget?

[SCOTT KOVAK]
Um, sure. The question was for the renewable energy. And it's in this category here, .63%, less than one percent. And it's even less than that because it's in with "energy efficiency and renewable energy." So, the Lab's, ya'know, budget is less than one percent, for renewable energies.

[JAY COGHLAN]
If you don't mind, weapons is 65% of total institutional funding, not just the DOE request.

[BRUCE MACALLISTER, FACILITATOR]
You may wanna repeat that since it's not on the mike.

[SCOTT KOVAK]
The, yeah, 65% of total institutional funding, not just the DOE request. Okay.

[SCOTT KOVAK]
Um, I, ah, in 2002, the mission need appeared to be much larger than it is now. The purpose and need, ya'know, was much less. Now without any reliable replacement warhead, without any, now that the W88 pit production is over, today's mission need is less clear.

[Interested Party Slide 10]
[SCOTT KOVAK]
Thank you. Um, so, the question is— One of my other questions is, what, ya'know, has any, any thought been given to making the nuclear facility any smaller? What options has NNSA explored? Next.

[Interested Party Slide 11]
[SCOTT KOVAK]
Back in Fiscal Year 2010, the Senate Authorization Committee stated that the, ya'know, the CMRR has significant unresolved issues, including the appropriate size of the facility. Next.

[Interested Party Slide 12]
[SCOTT KOVAK]
However, we have now learned that the, in the Fiscal Year 2011 budget, that the total size of the CMR Replacement Project, CMRR Project has now grown larger than the building that it is replacing. The original CMR building is estimated at 571,000 square feet. When you add these total here, the replacement project is now 614 [thousand square feet], a difference of approximately 42,000 square feet larger. So, um— And the, and the budget actually tells us that the, it's just a preliminary estimate on the square footage too and it'll be updated as the design develops. So maybe we could get some sort of idea if that's actually being considered to go up? And I also had a question on, there's a new NNSA policy, uh, saying that the offset factor is now 1.5, starting in Fiscal Year 2009. Um, DOE and NNSA had a policy of, for every square footage of new building that is built, they are required to take down an equal square footage. And now I'm assuming that this means for every new square footage, every new building built, that DOE is requiring that the sites tear down or demolition 1.5 square feet. Next.

[Interested Party Slide 13]
[SCOTT KOVAK]
Um, today we learned that the, um, um, from part of the, there's a seismic hazard analysis done in 2007. And today we learned that there's a five percent chance of a major earthquake at Los Alamos during the life of CMRR, which is about 50 years. And so, the seismic design is still, as I understand, still not finalized.

[Interested Party Slide 14]
[SCOTT KOVAK]
Um, part of the problem I think is that some unusual volcanic geology created a thick weak non-welded tuff of volcanic ash below more competent tuff at the site selected by LANL. The facility will be less than 20 feet above the weak ash, leading to concerns about the possibility of the ash matrix collapsing and densifying under earthquake loading and causing the settlement of the facility.

[Interested Party Slide 15]
[SCOTT KOVAK]
Um, and one, at our last meeting we learned that, um, the plans to deal with the volcanic ash, I believe, were either to replace or pressure grout inject the soil directly underneath the facility to make it more robust in a seismic event. So, I was wondering if, if any thought had been given to, either replacing or pressure grouting the hillside underneath that and what that would look like.

[Interested Party Slide 16]
[SCOTT KOVAK]
Thank you. I also had another question. Is the NF still being designed to be LEED certified? An earlier, this earlier slide, we have the NF as a certified building. And I was just, I haven't seen it in lately. Okay. Skip.

[Interested Party Slide 17]
[SCOTT KOVAK]
The, um, to build the CMR NF is not ultimately about the future mission diversity, or not, at LANL. It's not ultimately about future mission diversity or not at LANL. LANL should be seeking a slice of the mission diversification pie rather than building for future retrenchment in the shrinking nuclear weapons business. Next.

[Interested Party Slide 18]
[SCOTT KOVAK]
Um, earlier this week, speaking of the Nuclear Posture Review [NPR], um, Barack Obama, President Obama sent the NPR back, and uh, because he's, he's thought that the document fails to reflect his aspirations for a nuclear-weapons-free world and an end to cold-war thinking. Thank you.

[BRUCE MACALLISTER, FACILITATOR]
Okay. Thank you.

[BRUCE MACALLISTER, FACILITATOR]

Um, I listed the questions that you raised in your presentation here [on the flip chart] so that there's, if you'd like to spend the question and answer time going over these first, or, uh, shall we respond to these first? Or, go ahead get the other questions?

[UNIDENTIFIED PERSON]
Go ahead and finish the questions you've got.

[BRUCE MACALLISTER, FACILITATOR]
Okay.

[UNIDENTIFIED PERSON]
Yeah.

[GREG MELLO, NUCLEAR WATCH NEW MEXICO]
Scott, thanks very much. This was a, this is a suggestion. In looking at the square footage of the CMRR versus the CMR, um, look at the square footage of the existing CMR and it's existing missions. A lot of that square footage has already been shut down in the existing building and a lot is soon to be shut down. And this is a kind of a big mystery as to just what's being replaced here, and I, I think that will expand on your analysis and, um, make it even better.

[BRUCE MACALLISTER, FACILITATOR]
Response to that?

[SCOTT KOVAK]
Yes please. Yes, thank you. Greg [Mello]. Yes. Many of the wings maybe three or four of the existing wings of the CMR Building are presently empty. And have been shut down. Thank you.

[BRUCE MACALLISTER, FACILITATOR]
Other questions relating to the presentation? Okay.

[ERICH KUERSCHNER]
My name is Erich Kuerschner and I'm an economist and I wanna thank Scott [Kovac] for the presentation. And I'm especially interested in his thoughts on, let's see, what thought has been given to making the nuclear facility smaller.

[Interested Party Slide 12]
[ERICH KUERSCHNER]
And in that respect, I want to expand and just tell a little story. And I think, uh, what I was really troubled with tonight, the rest of this issue in the EIS [environmental impact statement] and under the NEPA statement, and I just didn't get a satisfactory response. And I learned my economics under Armand Alchain and all that bunch at UCLA, worked at Rand initially, and, uh, uh, the first thing that you learn when you are an Alchain student, is any time you see a need, look at it as being an obfuscation in terms of what, what, a, a conclusion being reached before the analysis has been done. And, ya'know, like he says, originally the CMRR, Congress determined it wasn't required unless the Reliable Warhead was to be needed, and so I'm just really troubled by not being able to get economist or social science in this thing.

[ERICH KUERSCHNER]
And to give you the story back to when I first worked an EIS for Skidmore Owens and Merrills Environmental Study Group on the Mount Hood Freeway, the Federal Highway Administration was adamant that we limit the use of our funds to a freeway, uh, solution. There was congestion coming in from East Portland and I-80 in, and we fought tooth and nails, and said "No, the NEPA says that you have to look at a 'no-build'." There's never been a, a no, no, uh, uh, facility that has a weapons component, in looking at it in a broad sense. And we were able to argue that land use was a substitute; communication was a substitute; light rail was a substitute. There are many other ways to solve the congestion problem. And as a result, the freeway was never built. And we had a better solution. So, I'm just troubled, and just wondering why we're going ahead with this project without utilizing economists to do a social analysis, and we are still talking needs rather than really articulating what the supply and demand for this facility is.

[BRUCE MACALLISTER, FACILITATOR]
I think the question was, asking you to comment on that.

[Multiple voices off microphone]

[SCOTT KOVAC]
Um, we've

[ERICH KUERSCHNER]
— look at this thing rationally.

[SCOTT KOVAC]
Um, anybody's free to look at it at any time. The, the question is, ya'know, what do you do with that information? Ya'know, the information would have to be taken to your congressmen, to your senators, and, ya'know, lobbying, like that. Um, ya'know, the, the social and economic impacts, ya'know, and requirements of this building, ya'know, we've been discussing, ya'know, for, at these meetings, for a while now. And the need for the facility, ya'know, is still, in my mind, questionable.

[BRUCE MACALLISTER, FACILITATOR]
Thank you. Other questions? Sir?

[DANNY WILLIAMS, BRIDGE TO NOWHERE]
Yes. Can I get to this one [slide]?

[UNIDENTIFIED PERSONS]
[Inaudible voices as the slide is found and displayed.]

[Interested Party Slide 8]
[DANNY WILLIAMS, BRIDGE TO NOWHERE]
Dan Williams with the Bridge to Nowhere. Thank you very much for your presentation. Am I to understand when I look at this graph here, all of that funds that's being given to nuclear weapons

activities, 65%, if we maybe even move just about half of that down to the renewable energy, we all would have electricity.

[SCOTT KOVAK]
Yes.

[BRUCE MACALLISTER, FACILITATOR]
Scott, comment.

[SCOTT KOVAK]
Yes, it's been our, ya'know, many of our positions, that, uh, the, the people at the Lab could do other things with the money. We especially believe that the Laboratory would be really good at nuclear nonproliferation.

[UNIDENTIFIED PERSONS]
[Inaudible voices off microphone.]

[GREG MELLO]
Scott, just one other comment about this, um, about making the nuclear facility smaller. And about the 2002 mission need. It was, um, it was pretty clear in 2002 that, I think you condensed what you're trying to say a little bit, and so it didn't all come out, but there really wasn't any mission need in 2002 either. Ahm, there was a stated mission need, but, um, for making RRWs [reliable replacement warheads], but of course there wasn't a need to make RRWs and so there wasn't a mission need for the building. Um, the, on the matter of making a smaller nuclear facility, it gets hard, as you know, you know the building is something, the labs are something like eight percent of the square footage of the building. It begins to be all shell and no nut. And, it, um, it's an interesting question from Erich's [Kuerschner] perspective what, how, what is the, what is the real benefit of, of this building, just even, I mean when you get the building where it's nearly all concrete, structure, utilities, fans, equipment, and there's very little actual usable space in the building left, and it has to be built that way so it can be safe, then you really, that should be a signal then, to go back to Eric's question, and say, maybe we should look at this whole thing de novo, again. I think it's probably quite hard to shrink. They've—

[BRUCE MACALLISTER, FACILITATOR]
Comment too?

[SCOTT KOVAK]
Ah yes, thank you Greg. I agree with you. I'm still not even convinced that the, ya'know, the facility, the operations that are planned for the new nuclear facility can be absorbed in the existing rad lab and the existing plutonium facility. And, we haven't really seen those numbers or been shown that, um, ya'know, demonstration, demonstrated to us how those numbers can not work yet.

[BRUCE MACALLISTER, FACILITATOR]
Follow-on question? Then you sir.

[DANNY WILLIAMS]
This one's gonna be geared over in this direction. Again, we're back to this, the money. I'm looking at here. I worked at a large nuclear laboratory for a while. I'm a G-6 certified welder.

[UNIDENTIFIED PERSON]
Can you talk louder?

[UNIDENTIFIED PERSON]
Yeah.

[UNIDENTIFIED PERSON]
[Inaudible words] the microphone instead of, turn it in [inaudible words].

[DANNY WILLIAMS]
Okay. There you go. Okay.

[DANNY WILLIAMS]
I worked at Lawrence Berkeley Laboratories in California for a while. I'm also a G-6 certified welder. Ah, what I'm kinda looking at here is all of this money that's being spent to build something new when you haven't fixed things that are here at this Lab throughout, mostly having to do with welding, which we've posted on our website, of welds that are, are ridiculous and dangerous. I think what you need to do is fix what you've got now before you build any more.

[BRUCE MACALLISTER, FACILITATOR]
Is there a question or response there?

[STEVE FONG]
I heard your—

[STEVE FONG]
Steve Fong. It's well noted. I heard your statement.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Jay Coghlan. Nuke Watch New Mexico. Um, concerning the question of whether the nuclear facility should be built or not, ya'know, I'll always remain convinced that the programmatic driver for the nuclear facilities expanded plutonium pit production and the Fiscal '11 budget tell us that production of the W-88 pits is gonna be, uh, come to a close in Fiscal Year '11. There is no clear need for expanded pit production. Or even going beyond the less than 10 that the Laboratory is doing now. And, my understanding that the main mission of the nuclear facility is to do the analytical chemistry, and in turn for each pit that is produced, there can be even up to a hundred analytical chemistry samples conducted. So if you keep the level of pit production down, the need for AC [analytical chemistry] goes down exponentially. And then we already know that in response to the Defense Nuclear Facility Safety Board that materials characterization has already been transferred to PF-4 from CMR. And then again, assuming that nonproliferation programs could largely be absorbed in the rad lab, I just see *no mission need* for the nuclear facility. And I know that the folks here don't have the high pay grades to address

these policy issues, but this is something that's always lacking at these meetings. And these immense projects costing multiple billions just seem to roll on without any clear mission need. So—

[STEVE FONG]
Statement of program—

[UNIDENTIFIED PERSON]
Program attendance. Steve.

[BRUCE MACALLISTER, FACILITATOR]
Okay. I think there was a question here?

[JONI ARENDS]
Joni Arends, Concerned Citizens for Nuclear Safety. I met with the DNFSB this afternoon, and we were talking about the need for the capacity study that we've been asking for for a number of years with regard to, if this building is even needed or not. And they were surprised to learn that at one of these meetings, several of these meetings in the early days, that we were asking that the rad lab be built in such a way that if the nuclear facility wasn't built, that you would be able to have the capacity to do what you needed to do. So I just wanted to put that in the notes tonight, that the public asked the Department of Energy a long time ago to make sure that the rad lab was up to a [Hazard] Cat 2 facility, [Security] Cat I facility, so that if the nuclear facility wasn't built, that we wouldn't be having these arguments. We're here to help you in the decision making . . .

[Words missing as the recording tape is being changed out.]

[JONI ARENDS, CONTINUING]
. . . of getting the permit and I think that that challenges our settlement agreement. Um, I don't think that that's in good faith in terms of what we negotiated several years ago. And I'm very concerned about that, because I think that, umm, it's, it's not what we had talked about earlier. So I'd like to sit down with you all and talk about that. And I think that the other interested parties would like to talk to you about that as well.

[UNIDENTIFIED PERSON]
Thank you.

[STEPHANIE HILLER]
My name is Stephanie Hiller, and this goes back to earlier in the presentation, I'd like to ask Steve [Fong], when you were asked about the escalating costs of nuclear weapons work at the Lab, you said it was driven by the president's budget, that the president, ya'know, had, had made that decision and, uh, so, it sounded like, ya'know, the chief made the decision and the Lab was merely complying. But my question is, who really determines what is the work of the Lab. Is it the president's decision or the Lab's, ya'know, um, shall we say lobbying, for funding for projects that it has in mind?

[STEVE FONG]

Am I on? Okay. The programmatic requirements for the facilities with the Office of Defense Programs within NNSA. So they set the requirements, requirements set for the Laboratory and for the project. So the administrator of NNSA and the, ah, the, I forget the title, but the uh, the head of Office of Defense Programs. They set. So they are the individuals responsible for the mission set.

[STEPHANIE HILLER]
That's what I thought. So in effect it's the Lab that is, those people at NNSA that are influencing policy, um, decisions that may be made by the president, but they have significant input. Is that correct?

[STEVE FONG]
Absolutely. These are federal people at headquarters in Washington who work with a lot of the Congress and a lot of the other of our clients who receive our product, to figure out what is necessary for the nation.

[STEPHANIE HILLER]
Thank you.

[STEVE FONG]
Sure.

[UNIDENTIFIED PERSON]
Do we want to do Scott's [Kovac] questions?

[BRUCE MACALLISTER, FACILITATOR]
Other questions?

[UNIDENTIFIED PERSON]
Well we had, Scott had about fourteen, I think and—

[UNIDENTIFIED PERSON]
Right. Four? Is it four questions?

[BRUCE MACALLISTER, FACILITATOR]
And so, we're, we're clear with the follow-ons, the direct follow-ons to the presentation? Ready to move into the questions that Scott [Kovac] raised? Okay.

[RICHARD A. HOLMES]
This is Rick. I'm gonna try to take a cut at this and Scott [Kovac] will tell me if we get too far off track.

[RICHARD A. HOLMES]
So, major sources of, of cost increases— And I'm not gonna necessarily bend these in, in numerical order, but I'm gonna try to articulate a couple of where the drivers come from. One is time. At CD-0, the nuke facility was to be done in 2012. And so the time spent waiting on

making decisions and, and continuing work is a manifestation of the, of the decision process, the pause for Complex Transformation, while things went on, and all those kind of things. Time is a big driver. And it manifests itself not just in the carrying costs, but because everything cost more the further you move out in time. So time is a pretty big component in that algorithm in terms of where cost comes from.

[RICHARD A. HOLMES]
Another source of cost in the job comes from implementation of the seismic requirements. And I think they are, they're getting pretty close to zeroing in, the deviations that we get now from these reports as the come out is much, much smaller than it used to be. We've done the big jump in, in response from the building as the ten year update is. We've made the building stiffer, increased the amount of concrete inside of the building. Ah, we will, I'm probably gonna jump down to the bottom [of the questions on the flip chart] here, we will replace the soil underneath the building. It is easier and more certain in terms of an activity as opposed to testing a jet grouting process and proving to everybody that the jet grouting works and would be the subject of the next twenty-two of these meetings that we would have.

[JONI ARENDS]
How much soil are you gonna replace?

[RICHARD A. HOLMES]
Um, I think it's on an order of magnitude of about 50 fifty feet. It's 225,000 cubic yards. So we will put in, we'll put in piers around the outer shell and then excavate out, and it goes down, it takes all that material away. So we go down to what is known to be stable, and I think it's an additional fifty feet beyond where the basemat is. Tom's [Whitacre] is nodding his head up and down, so I think I got that pretty close to right. So, if you take where the current road is, you bend by the site, that's where the current excavation is, we're gonna go another 75 or so feet below that, replace the material, build it up to where the basemat is, ten foot basemat, and then build the structure on top of that.

[JONI ARENDS]
Where is the 225,000 cubic yards of material gonna go?

[RICHARD A. HOLMES]
Some of that will become the cap for MDA-C. Some of that will support the cap down at Area G, depending upon, again, the quality of the fill and how much work it has to have. But there are plenty of users and needs to benefit the area from that material. So, those are the two places that have said, we needed, I think the timing's gonna work pretty well for MDA-C once they come up with a plan. 'Cause they don't have a full-up plan yet, but they've gotta agree to. But some of it go there, and then, if not, if they are not ready for it, it probably all can be consumed down for cap at Area G.

[UNIDENTIFIED PERSON]
[Inaudible words]

[RICHARD A. HOLMES]
And I don't know anything about the cap at Area G. I just know they need dirt.

[Laughter]

[BRUCE MACALLISTER]
Just a second. We've got, we've got one—

[GREG MELLO]
Is any of that soil contaminated? Have you measured it for radionuclides, heavy metals, volatiles?

[RICHARD A. HOLMES]
So, we are down, in time, in geologic time, we are looking at about 10 to 15 million years ago in time. So, I don't think— I know there's been soil samples done. I don't think they found anything of that type. We are way below the depth of any, any manmade activity.

[GREG MELLO]
Two hundred and twenty-five thousand cubic yards of soil removed. What will that be replaced with, and that's obviously more than 130,000 cubic yards of concrete?

[RICHARD A. HOLMES]
Uh, yeah, that's— This is Rick, and I'll probably just keep bouncing back and forth in terms of, I'm the guy that sounds like Dan Aykroyd. So, um—

[Laughter]

[RICHARD A. HOLMES]
Or he sounds like me. Um, so, the plan today is we'll replace it with lean concrete. So that's, uh, that's concrete without stone. And that'll give us an adequate, it's got Portland cement and sand and water and, essentially all the right materials, no aggregate in it. That will provide an adequate certainty of the characteristics so that any question that someone would ask in terms of, "Well how do you know what's going underneath the building is okay, uh, is okay?" Um, so that is not part of the 130,000 cubic yards of structural concrete in the building, but it would also come from a batch plant type operation. So, back on—

[JONI ARENDS]
So, Rick, just a clarifying question. So where are those reports. Where's your work plan? How do we get ahold of it to be able to review it?

[RICHARD A. HOLMES]
So we are putting together that design now. So, um, it's still in process. In fact, engineers were in my office today where I approved of the release of the design work, so that'll be a future activity, and as we get that, we'll come in and talk about it.

[UNIDENTIFIED PERSON]

[Inaudible words]

[JONI AREND]
Can you send it to us?

[RICHARD A. HOLMES]
When it's ready, but it's gonna be, it'll be late this calendar year by the time they are done, by the time they are done, done with it. But the answer is "yes."

[DANNY WILLIAMS]
How large of an earthquake is this facility supposed to, uh, stand up to?

[UNIDENTIFIED PERSON]
[Inaudible words]

[MORRISON BENNETT, TRANSCRIBER]
Name please?

[UNIDENTIFIED PERSON]
It's Tom's—

[DANNY WILLIAMS]
Danny Williams.

[TOM WHITACRE]
Tom Whitacre here with Los Alamos Site Office. The, ah, simplest answer is about a one in twenty-five hundred year earthquake event. If you consider flood events, the one hundred year flood, it's about a one in twenty-five hundred year earthquake event.

[DANNY WILLIAMS]
Now are we saying like a 9.5?

[TOM WHITACRE]
No, it's somewhere, ah, the way the process works, a ball park is somewhere around a magnitude 7.

[DANNY WILLIAMS]
That's what we [inaudible words off microphone] —was in California with a couple of 'em, that's low.

[UNIDENTIFIED PERSON]
How often would it come along?

[TOM WHITACRE]
So this is the, the one in twenty-five hundred year event, determined by the process.

[UNIDENTIFIED PERSONS]
[Inaudible words off microphone] not high— than a seven.

[TOM WHITACRE]
There's different geology there than here.

[UNIDENTIFIED PERSON]
Rick?

[RICHARD A. HOLMES]
This is Rick [Holmes]. Back to, back to the list from Scott [Kovac]

[JONI ARENDS]
What's that gonna cost?

[RICHARD A. HOLMES]
To remove the fill?

[JONI ARENDS]
To remove the fill, go down fifty feet, put in the concrete.

[RICHARD A. HOLMES]
I haven't split that out from the overall estimate, but I can get that for you next time.

[JONI ARENDS]
I mean ball park.

[RICHARD A. HOLMES]
In the tens of millions.

[JONI ARENDS]
And is this under the design work?

[RICHARD A. HOLMES]
The design, yeah, the design. Yeah, it's a portion of the design. So as we went through and answered questions and thought about what is the building response gonna be? What is that shelf gonna look like if the earthquake should occur? We made the decision that said, "it is in the right interest of the project," just like we decided to make the basemat be ten feet thick as opposed to five feet thick, which was in the original plan, in order to give us certainty in the building response. Also to recognize that we are designing this building for a fifty-year life. Also with recognition that we have equipment that has to continue to operate during the earthquake event and after the earthquake event, that we want the building in the response to be as minimum as can be contemplated by design activities. So that you can increase the likelihood that you can get that equipment and have it run right, and you're gonna be right, should that activity occur. So, the design of that work is part of the design, but the total cost of that effort is in the tens of millions, if you ask me, for a ball park.

[JONI ARENDS]
Fifty million? I mean tens—

[RICHARD A. HOLMES]
I'm gonna stick with tens of millions for right now.

[RICHARD A. HOLMES]
Should I, you wanna go back to Scott's [Kovac's] or go here.

[BRUCE MACALLISTER, FACILITATOR]
Let's go here real quick and then we'll go back to Scott's.

[ERICH KUERSCHNER]
This is just a real short question. I think it's directed towards Dr. Tim Nelson, I believe. I heard someone from NASA, NNSA. Is there any way that someone could share an economist or group of economists that are working on, on this thing, to give us the assurance that the best interests of the nation are looked at in a broad sense and it's not driven slowly, I mean someone that would be willing to collaborate and, so we can we can look at this issue in a national, in a broader national interest?

[STEVE FONG]
Yeah, I think I should probably address that one. Uh, this project is about— the scope cost and schedule, and we are going to provide you the best information that goes on with the project: how we developed, how much it's gonna cost, what are, what our contingencies are, what are we looking at in terms of risk. But in terms of economies over a national scale and some things in a broader scope, is far beyond me, in that sense.

[ERICH KUERSCHNER]
If I could—

[STEVE FONG]
And, maybe if you wanted Tim to—

[ERICH KUERSCHNER]
I think you misunderstood my question.

[STEVE FONG]
Okay.

[ERICH KUERSCHNER]
I'm talking in terms of the demand for this thing. 'Cause "needs" to me is basically stating that we are not gonna justify this project. When you use the term "needs" that precludes any rational discussion of whether there is a mission or demand for this thing. So I just wanna know if there's economists working on it at some point that we can touch base, that economists for security, can touch base with?

[STEVE FONG]
I'm looking at Tim, and he's not knowing that— I'm seeing this like—

[BRUCE MACALLISTER, FACILITATOR]
I will pose that as a question.

[STEVE FONG]
___ certain at this time.

[BRUCE MACALLISTER, FACILITATOR]
In the interest of making sure we get through the questions that are already posed in the room, why don't we let Rick [Holmes] finish going through those questions. Then we can take the follow-on questions, the other follow-on questions. But rather than leave these questions kinda hanging until the next meeting if we run out of time. Does that sound fair?

[UNIDENTIFIED PERSON]
[Inaudible words off microphone]

[BRUCE MACALLISTER, FACILITATOR]
Okay.

[RICHARD A. HOLMES]
Okay. So we were still— we had made it through half of one question thus far.

[Laughter]

[RICHARD A. HOLMES]
So, other sources of cost increase. So, we, I started to talk about the seismic response of the building and equipment and that led to a number of things making, that'll show up in the extent of the amount of concrete, the amount of structural steel for overhead structures, for supporting ventilation duct, the thickness of the ventilation duct itself, and a whole host of other sources of things inside of the design of the building itself. So seismic response and making sure that we have that right, so that when the earth shakes, the building responds in a known fashion according to the design so that the equipment that has to operate will still operate during and after the, during and after the seismic event. That's another big source of cost inside the totality of the estimate that is driven by, and you'll see it in a lot of host of different, different commodities. I'm trying to think if there's any other— This job's got a lot of ventilation duct in it. This job has a lot of electrical conduit and cable. Does not have a lot of pipe in it.

[RICHARD A. HOLMES]
Um, the building did get larger in size for the utility structure. Remember, this building is three structures on a common basemat. You have the auxiliary portion of the building, which houses the fire water tanks and other utilities that cleared people but not operators have to get to, or glovebox operators. You have the Haz Cat 2 structure itself, which has the laboratories in it, and then you have the vault. So, I don't think the vaults are gonna get any smaller, are gonna change

in terms of size. The laboratory footprint, which is a major portion of the building structure, if you started to remove individual laboratories, said I don't want that capability, Greg's [Mello] point is right that the building is not gonna change much in terms of size if you do that, because it's full in the basement with the ventilation system and the utility structure that's above that.

[RICHARD A. HOLMES]
When the building went from 40,000 square feet of laboratory space down to the 22,500 square feet of laboratory space that's in there today, you might have been able to at that point, but no one had a design for that structure, been able to contemplate, yes, if I take away, then it could get smaller. The utility structure of the auxiliary building, we did make bigger from an operations and a constructability review. 'Cause we had stuff that was just packed too tight. So, I've already had, looking at the design, to make sure that there's room to get the valves and get the gauges and do the right work that has to be done inside of there. We had maintenance people from TA-55. I brought in external maintenance people. I had construction people look at it to make sure that they felt like that there was adequate clearance. And as part of that exercise, I made that building a little bit bigger to give them the room that they thought they needed to get the stuff. Now, it's gonna be full. 'Cause they always wind up full. So, we have done some of those things to make the building footprint bigger. I think we're at the point where we're about to freeze that portion of the design, so that it's not gonna change very much at all from here.

[RICHARD A. HOLMES]
I'm not gonna get into the comparisons to other facilities, because we could have that discussion for a really long time. In terms of what footprint do I count? Because I'm building a training center, do I count the training complex that's in Los Alamos town that I'm gonna not use any more as part of the footprint, and all that stuff. But I think our footprint is pretty much getting close to being stable in terms of size, and others, in terms of things. That was a source of change as we did go through some things.

[RICHARD A. HOLMES]
The, the, in the contingency number, in the data sheet that NNSA had sent, they are showing that number at about $700 million dollars of contingency. At this stage of a project, having 25 or 30% contingency in your plan is smart. If I came in here and told you I know everything I need to know to go build this job, you should have me fired. 'Cause I don't. Nobody, nobody can. And so, having that contingency— That was not an offer, by the way.

[Laughter]

[RICK HOLMES]
Joni's back there laughing. I mean it's— So,

[JONI ARENDS]
It's an astronomical amount of money.

[Interested Parties Slide 6]
[RICHARD A. HOLMES]
Well, because this is a *very large* job. This is a *big* building with a *lot* of things in it. There will be a large number of construction people to build this building. And so, when you talk about contingency in terms of a percentage, 25, 30 percent at this stage of a job is about what you ought to have. And your point is right. As you get forward and move forward in those baselines, that contingency number should go down. And when I look at the estimate, I say, "Okay, I have, I had a number in contingency, but I now have put into my estimate the work that contin— that that is intended to avoid, that bad outcome from happening. So therefore, my contingency number should go down as you move forward in, in the process. And I think it has changed. At this point you are not stable enough to say whether or not the contingency should go down. But you should see that occur in subsequent budgets submitted by DOE, etcetera. You would see numbers go into, into the base estimate and come out of contingency. It's not intended to hide things. It's just the way that these work out.

[RICHARD A. HOLMES]
The batch plant is in, not in OPC [other project costs]. The batch plant is in the capital costs. So it's in the costs of the nuclear facility. 'Cause you need to mobilize the plant. That's part of that cost. You gotta buy aggregate. You gotta make the concrete. You gotta deliver the concrete. And one of the reasons to do this is, is to take the time sensitive, you know, getting stone up to the Hill, 'cause there isn't one pebble that's on the Hill today that goes into nuke facility construction. So therefore everything has to come up the Hill. And by, by putting the warehouse inside of the security corridor, by putting the batch plant inside of the security corridor, the intent is to minimize the time sensitivity as to when that material shows up. And so that you get it in at the hours when you don't impact traffic as much and all those kind of things; and therefore, the time sensitive items, delivery of concrete, 'cause once you make it, you gotta use it, in terms of, in terms of having that inside of that security corridor. So, cost of the batch plant is inside of the base number.

[RICHARD A. HOLMES]
Um, there were a whole number of studies that I think others can share in terms of— I'm not sure how [many] they are, but there's been a whole number of studies done looking at how can it be made, could it be made smaller, looking at the missions, and all those kind of things.

[Interested Parties Slide 16]
[RICHARD A. HOLMES]
Um, seismic measures. I think we are getting pretty stable in terms of where the design comes in in the spectrum and we know how to go deal with that. And the nuke facility still will be LEED certified, to get a Haz Cat 2, just a plain vanilla LEED. I'm not going for gold, silver, or anything else right now. I think we have, I think right now, in my plan, I think I do have 27 points. I've let somebody external to the project come and review that to make sure that we were doing the smart things to get there from here. And we did not have to make a whole lot of change to get there. Things were being done in a, in a pretty good fashion to get there from this particular point in time, so— And we have actually registered the nuke facility in the, in the LEED system so that we were under the current structure that's out there, because they are changing all of, they

are changing those criteria all the time. So we are registered for the nuke facility into that to get the LEED.

[ROGER SNODGRASS]
The offset factor?

[Interested Parties Slide 12]
[RICHARD A. HOLMES]
Um, that's part of what I try to, I try to, as the guy responsible for delivering this, uh, the footprint, you could talk in terms of a whole host of different things, ah, in terms of things. I don't know— I'm not sure I've seen this table, or I can remember seeing this table. Came from—

[STEVE FONG]
The data sheet.

[RICHARD A. HOLMES]
Oh, came from the data sheet. Okay.

[STEVE FONG]
It's my table.

[RICHARD A. HOLMES]
So.

[STEVE FONG]
I did that.

[UNIDENTIFIED PERSON]
Steve did that.

[RICHARD A. HOLMES]
Okay.

[STEVE FONG]
It's my table.

[RICHARD A. HOLMES]
Oh.

[Laughter]

[RICHARD A. HOLMES]
So, I think then, I think we are pretty close to stability in terms of the numbers overall. And again, you could talk about, ya'know, again, do I take the training center out of town, and all

those kind of things in there. You can make that, you can make that story kinda go either way, I think.

[STEVE FONG]
I think that the story is that, in terms of programmatic space, if you look at— And we tried doing this in pie charts last time, and time before, and we ended up comparing apples and oranges. But, the numbers I kind of judge, was it's about 130,000 gross square feet of current programmatic space in CMR. We're placing 19,500 in radiological space and 22,500 in the nuclear facility, so that's roughly about what? 40,000 square feet? So there's programmatically, the amount of programmatic space is going down significantly. But the requirements for all of the safety systems that we have to design on in makes this nut, rather as Greg's [Mello] noted, rather large and robust. So, uh, that is reduction of programmatic space, greater footprint. But then again, when you start adding apples and oranges, and the nuclear facility, we are adding in interstitial space, whether or not that's actual operating space, and stuff in the basement, that you typically don't go in, but it does have a floor and walls, count that as hard space. So there are things that really go into that equation that makes it an apple and orange type of, of comparison.

[BRUCE MACALLISTER, FACILITATOR]
Okay, we have about five minutes left. I've got two people right now in the cue for questions. Three. So.

[DAVE MCCOY]
Yes, looking at this—

[MORRISON BENNETT, TRANSCRIBER]
Name?

[DAVE MCCOY]
Ah, Dave McCoy. Looking at this from a legal perspective, it seems to me that when you are talking about excavating this large volume of material, and— It seems that you have basically, ah, changing designs, changing awareness and recognition of seismic hazards that weren't previously identified, ah, you've got new traffic concerns, new air concerns, ah, It just seems to me that you need to take another look at, at least, a supplement to your EA. Ah, you need to redo it, you need to re-open it to the public. There's plenty of public concern here. You can't deny that. I think you need to be looking at, at uh, the EIS for this business, 'cause you've got some substantial changes that you've made here.

[DAVE MCCOY]
That's a question. Oh—

[UNIDENTIFIED PERSON]
Uh, what's the question?

[STEVE FONG]
Cindy [Blackwell], we have an EIS for the CMR facility 2004. I think I wanna say November or February. I get those dates for five years. And then the, that looked at the construction impacts

for the facility in terms of its programmatic need, where it fits— That's looked at in the LANL SWEIS [Sitewide Environmental Impact Statement] in terms of the uh, the impacts overall to the institution and then the programmatic impacts were looked at in the [Nuclear Weapons] Complex Transformation. So, a lot of NEPA going on. Heard your statement, heard your point. Thank you.

[BRUCE MACALLISTER, FACILITATOR]
Two last questions.

[JAHLADIN, CITIZEN OF THE WORLD]
Um, you know this is a sort of, I guess, a hypothetical question.

[MORRISON BENNETT, TRANSCRIBER]
Your name?

[JAHLADIN]
Oh yeah, my name is Jahladin. Um, so, and I'm a graduate of the University of California. Um, so, assuming that there was some sanity in the Department of Energy and NNSA, how much, like how much, ah, solar panels or wind farms would we be able to create if we didn't want to spend $5 billion dollars to build this new facility to build nuclear weapons?

[STEVE FONG]
It's a good question.

[UNIDENTIFIED PERSON]
Maybe, and next time you can come up with the answer.

[Laughter]

[STEVE FONG]
Comparison.

[PENELOPE MCMULLEN]
I'm a little concerned that you've already begun digging for the nuclear facility and to me that seems like it should be part of the construction costs, and that that can't happen, according to our agreement I don't think that should have happened yet. And I was one of those, involved many hours in negotiations and so that upsets me. Then I have request. Is there some reason why the proceedings of these meetings can't be on the website within a week or two, 'cause we can't take notes fast enough, as fast as people talk.

[STEVE FONG]
Sure.

[PENELOPE MCMULLEN]
And then to get many months later, it's like it's gone from our mind ya'know, what we've been doing here, and so, I would like to request that you try to get it on the website fast.

[STEVE FONG]
In terms of the first area, in terms of the laydown area where, uh, what's adjacent to the radiological facility, we needed to clear that space to construct the rad lab. During that time, we utilized that time wisely, and we did a lot of geophysical mapping for faults and other things, so we gained a lot of information that drove the risk down. So we knew what we're supposed to build in terms of, for seismic requirements and seismic responses for the nuclear facility.

[STEVE FONG]
In terms of, of getting out the transcriptions out on the web sooner, we, we agree that we should try to get those out as quickly as possible. Uh, no apologies for the last time. It's just that our favorite transcriber over here broke her wrist, and, it's a little bit hard to whip somebody, and, when they've got a cast on. So, we understand that, we'll try to get that out as soon as reasonable. Sooner rather than later is understood. And that we'll take our best effort at.

[STEVE FONG]
Okay.

[BRUCE MACALLISTER, FACILITATOR]
Folks, it's now 8:31, we are a minute overtime. I apologize. Um, I have one last request for you. Those of you who came in and missed the sign-up sheet, will you please sign it on the way out, so that we have a good full record of attendance. And I will make sure that the questions and comments are provided to LANL. And we'll see you at the next meeting. Thank you very much.

[The meeting then adjourned, but a substantial portion of the attendees remained afterward talking in the room.]

CERTIFICATION

I hereby certify that the foregoing is a true and correct transcription of the audio recording of the public meeting on the Chemistry and Metallurgy Research Replacement project at the Hilltop House, Los Alamos, New Mexico, on March 3, 2010.

/s/ Morrison Bennett
Transcription completed March 27, 2010

III. Presentation Slides – CMRR Project

Chemistry and Metallurgy Research Replacement (CMRR) Project

Welcome

CMRR Project Update

Los Alamos, New Mexico
March 3, 2010

Bruce MacAllister, *Meeting Facilitator*

LA-UR 10-01115

Agenda

6:30 - 6:40	Welcome	*Bruce MacAllister*
6:40 - 7:10	CMRR Project Presentation	
	• Project Overview	*Steve Fong*
	• Project Update	*Rick Holmes*
7:10 - 7:30	Questions/Comments	*Bruce MacAllister*
7:30 - 8:00	Settlement Parties Presentation	*Settlement Parties*
8:00 - 8:25	Final Questions/Comments	*Bruce MacAllister*
8:25 - 8:30	Closure and Adjourn	*Bruce MacAllister*

Background and Purpose of Meeting

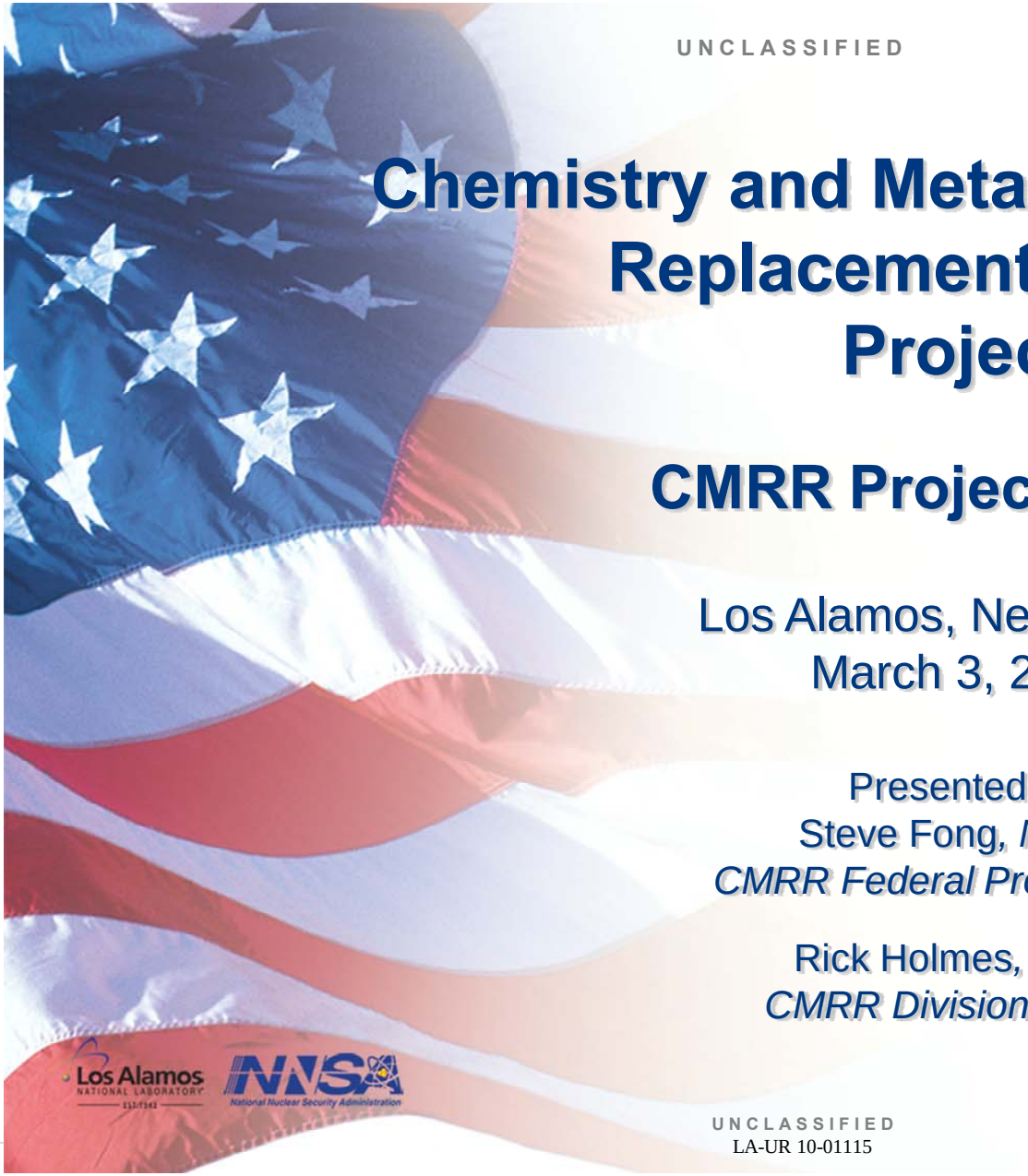
- Settlement allowed for air permitting to be segmented to match phased project-development and for public involvement
- Parties include
  - New Mexico Environment Department
  - Department of Energy
  - University of California
  - Concerned Citizens for Nuclear Safety
  - Nuclear Watch of New Mexico
  - Peace Action New Mexico
  - Loretto Community
  - TEWA Women United
  - Embudo Valley Environmental Monitoring Group
  - New Mexico Environmental Law Center
- Meeting is held every six months to update the public on CMRR construction progress

Los Alamos NATIONAL LABORATORY EST.1943 NNSA

CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Ground Rules

- Listen respectfully
- Share the conversation time with other participants
- Turn cell phones off or place on mute
- No personal attacks
- Topic requests for future meetings can be left on the flip chart at any time
- Say your name each time you speak



Chemistry and Metallurgy Research Replacement (CMRR) Project

CMRR Project Update

Los Alamos, New Mexico
March 3, 2010

Presented by
Steve Fong, *NNSA*
CMRR Federal Project Team

Rick Holmes, *LANL*
CMRR Division Leader

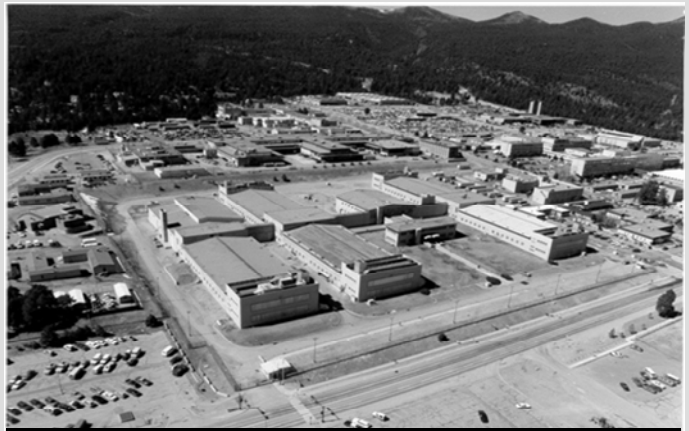
Los Alamos NATIONAL LABORATORY
NNSA National Nuclear Security Administration

CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

CMRR Mission Need Statement

"The CMR Replacement (CMRR) Project seeks to relocate and consolidate mission-critical CMR capabilities at LANL to ensure continuous support of NNSA stockpile stewardship and management strategic objectives; these capabilities are necessary to support the current and directed stockpile work and campaign activities at LANL beyond 2010."

1949 CMR Construction Site



Existing Chemistry and Metallurgy Research Building

Los Alamos NATIONAL LABORATORY EST.1943 NNSA

CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

CMRR Overall Project Structure

CMRR Project

Two closely interrelated facilities in differing phases of development.

Nuclear Facility (NF)

- Baseline under Development:
- CMR Laboratory Replacement Capability
- Nuclear "Hazard Category 2" Facility
- 22,500 Net Square Feet Lab Space
- Special Nuclear Material storage (6M tons)
- Special Facility Equipment
- Robust "Security Category 1"

Status: In design

Radiological Laboratory/Utility/Office Building (RLUOB)

Building Shell

- Facility Performance Baseline ($164M TPC):
- 19,500 NSF radiological lab space (<8.4g 239 Pu equivalent)
- Centralized utilities/services for all CMRR facility elements
- Office space for 350 CMRR workers
- Consolidated training facility
- Facility incident command; emergency response capabilities

Status: Substantially Complete

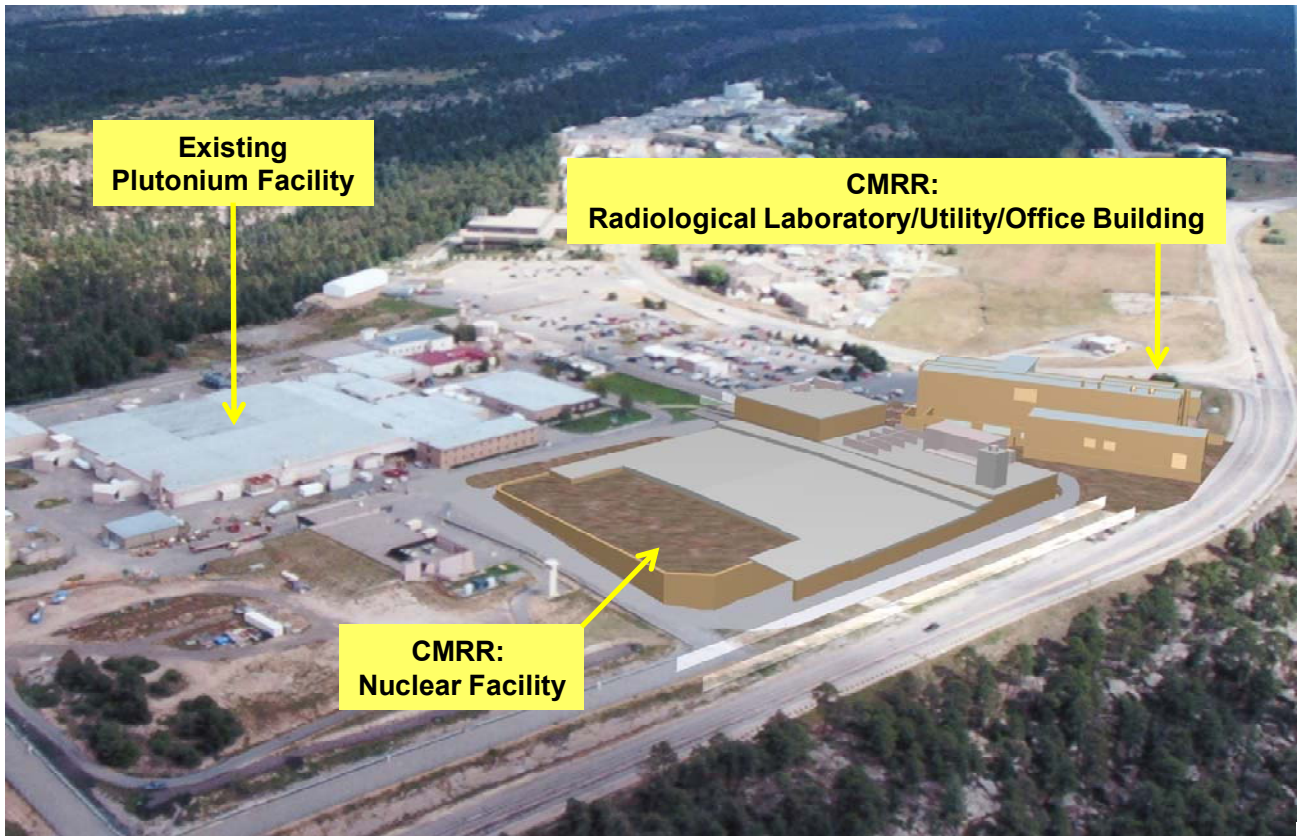
Equipment

- RLUOB Equipment Installation (REI)
- Operational equipment to complete functionality of RLUOB

Status: Performance Baseline Approved – July 2009
TPC = $199.4M
Completion – 2013

One project on the Congressional Data Sheet – multiple efforts within NNSA/DOE.

CMRR at Technical Area-55



Project Overview

- Program Requirements – Work scope unchanged over the years (i.e., same amount of lab space and functionality of CMR capabilities)
- Budget Authority – $97M for FY10
- President's Request – $225M for FY11
- NNSA Headquarters Program Direction
  - Complete RLUOB within approved performance baseline **– Complete**
  - Complete REI according to performance baseline **– Ongoing/Ahead of schedule**
  - Plan for CMRR NF completion by 2020 with operations in 2022
- NF Final Design
  - Technical Safety Strategy ready for Definitive Design
    - **NNSA and DNFSB validation of nuclear safety approach**
  - Executive and Congressional support
  - Nuclear Posture Review – Expected March 2010

Program Requirements

NF shall include laboratory and research capabilities for:

- Missions assigned to LANL for Analytical Chemistry and Materials Characterization
- Special Nuclear Material long-term storage
- Capability to handle Large Vessel Handling Mission in future
- Mission support operations necessary to perform the above including, material handling, short-term storage, waste management, sample management, and sample preparation

Additional NF Design Requirements

- Laboratory spaces shall be designed to be flexible and modular to accommodate changes in mission
- Service life shall be 50 years
- Gloveboxes, hoods, and other nuclear specialty equipment shall utilize standard design platforms as much as practical

High-Level Schedule

Complete

- 2002 CMRR Critical Decision (CD)-0 (*Approve Mission Need*)
- 2004 CMRR EIS Record of Decision (ROD) signed
- 2005 CMRR CD-1 (*Approve Alternative Selection and Cost Range*)
- 2005 CMRR RLUOB CD-2/3 (*Approve Performance Baseline/Construction*)
- 2007 CMRR RLUOB Equipment, Final Design Authorization
- 2008 NNSA Complex Transformation Supplemental EIS ROD
- 2009 CMRR REI CD-2/3 (*Approve Performance Baseline/Procurement Installation*)
- 2009 CMRR NF Safety Basis and Design Integration, and Technical Reviews
  - NNSA & DNFSB Certification Safety Issues Resolved

This Year

- 2010 CMRR RLUOB Facility (CD-4)
- 2010 Nuclear Posture Review (March)
- 2010 CMRR NF Final Design Authorization

Future Years (tentative)

- 2011 CMRR RLUOB Staff Occupancy
- 2011 NF Early Infrastructure Packages (CD-2/3)
- 2011/12 NF Basemat/Structural Packages (CD-2/3)
- 2013 CMRR RLUOB Radiological Laboratory Operations
- 2014 CMRR NF Balance of Facility (CD-2/3)
- 2020 CMRR NF Construction Complete (planning)

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

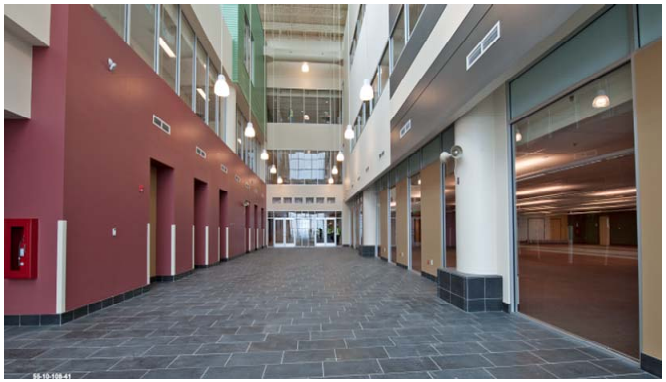
Radiological Laboratory/Utility/Office Building (RLUOB)

Radiological Laboratory/Utility/Office Building

- Over two million man-hours worked with no lost time accidents
- Leadership in Energy and Environmental Design (LEED) – "Silver" certification award anticipated
- FY10 NNSA Pollution Prevention Award, Best in Class for Sustainable Building
- Highest Quality Standards – Nuclear Quality Assurance (NQA-1)

Los Alamos NATIONAL LABORATORY EST.1943 NNSA CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

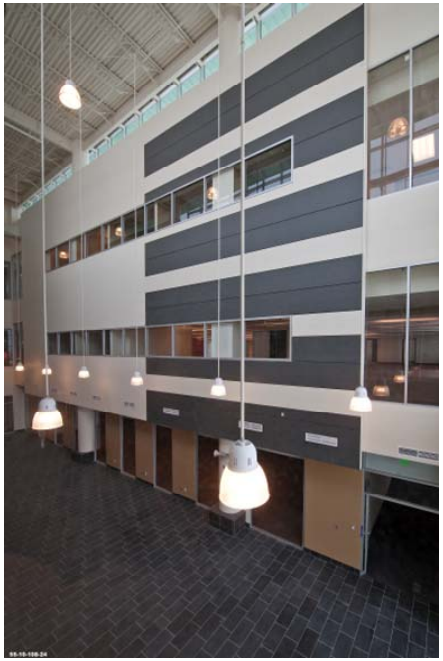
RLUOB Progress Photos



Los Alamos NATIONAL LABORATORY EST.1943 NNSA

CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

RLUOB Progress Photos



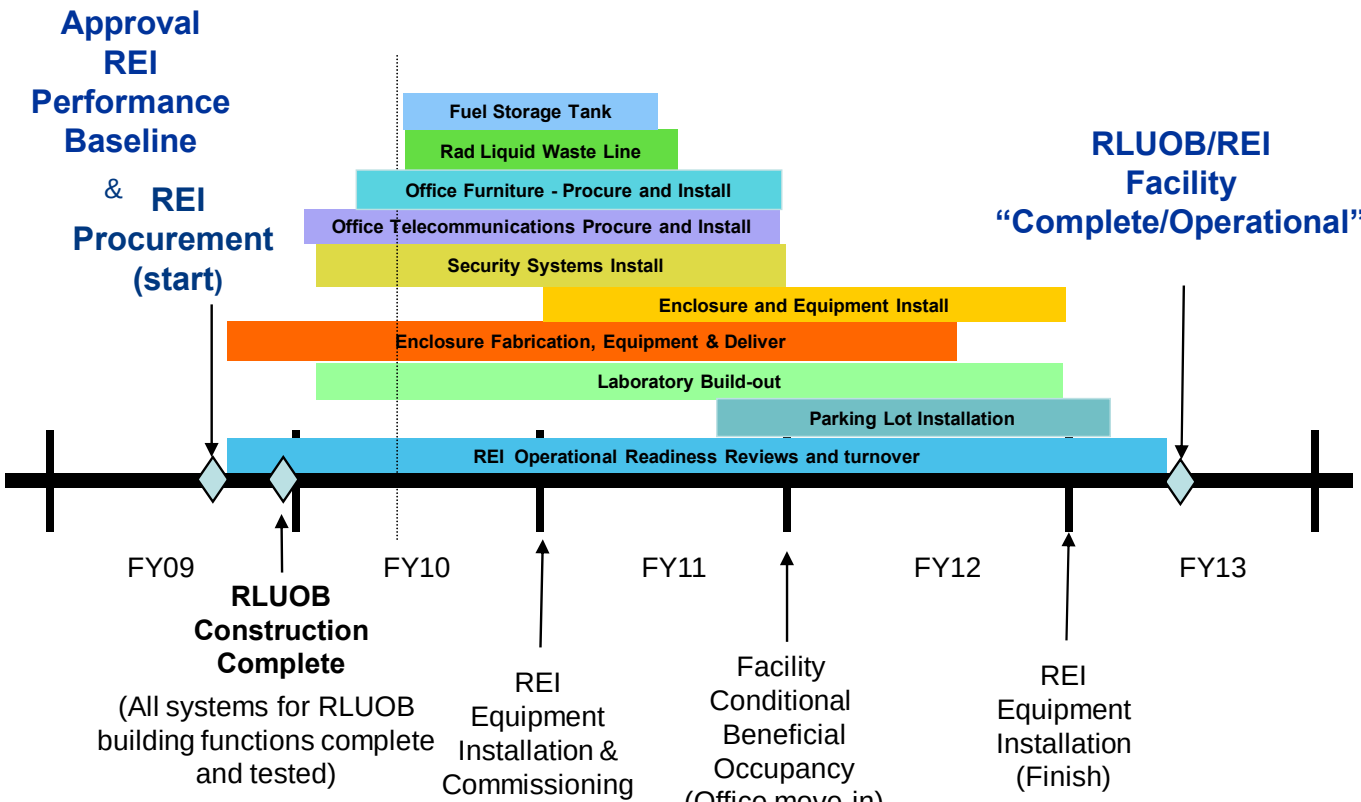
Los Alamos NATIONAL LABORATORY EST.1943 NNSA

CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

RLUOB Equipment Installation (REI)

RLUOB Equipment Installation Plan

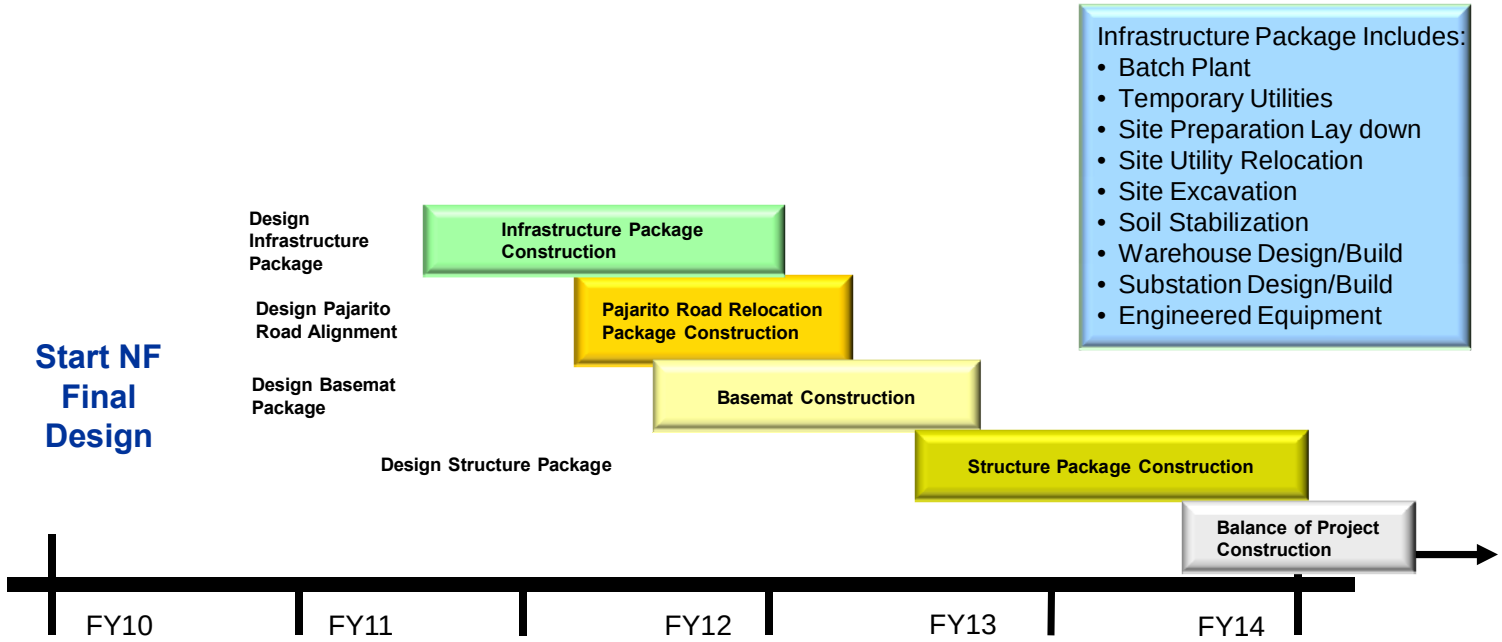
Total Project Cost = $199.4M



Los Alamos NATIONAL LABORATORY EST.1943 NNSA CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

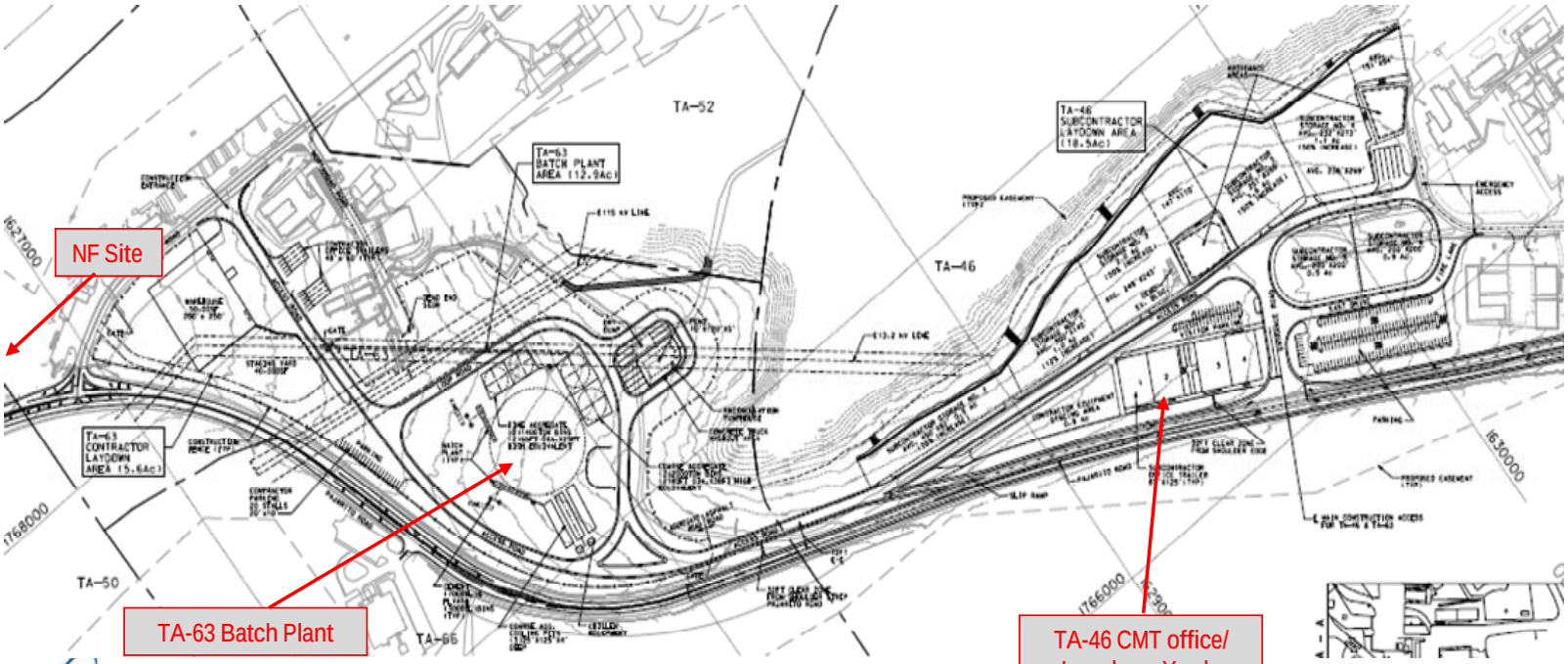
Nuclear Facility (NF)

Planned Nuclear Facility Baselines



Construction Site Infrastructure

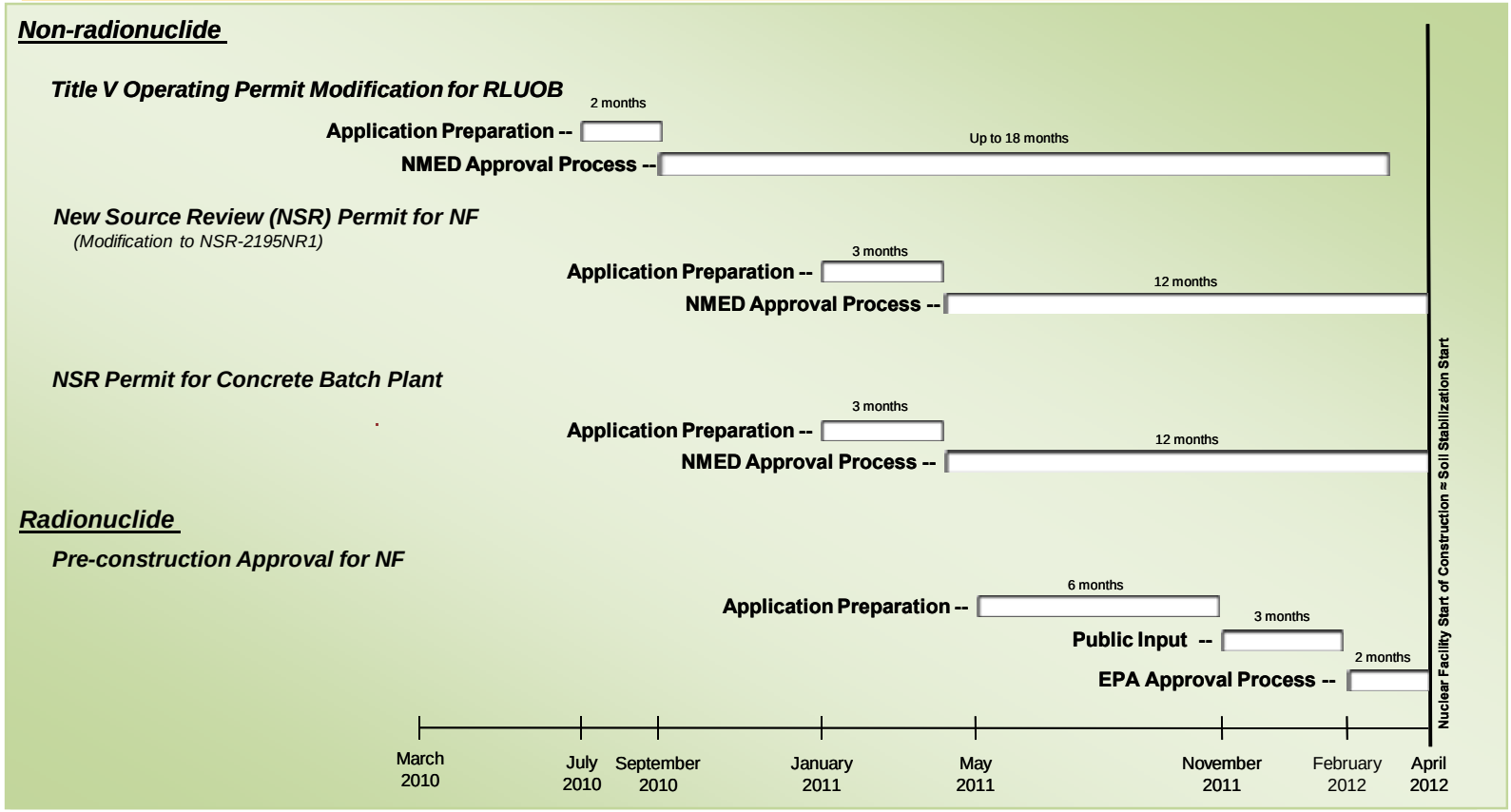
Lay-down/fabrication yards offices will be established approximately 1 mile from the NF construction site at TA-63 and TA-46 due to lack of available space at the NF construction site.



Los Alamos NATIONAL LABORATORY EST.1943 NNSA

CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Air Quality Permit Schedule



Chemistry and Metallurgy Research Replacement (CMRR) Project

Thank you for attending.

IV. Presentation Slides – Interested Parties

Interested Parties
CMRR Presentation
March 3, 2010

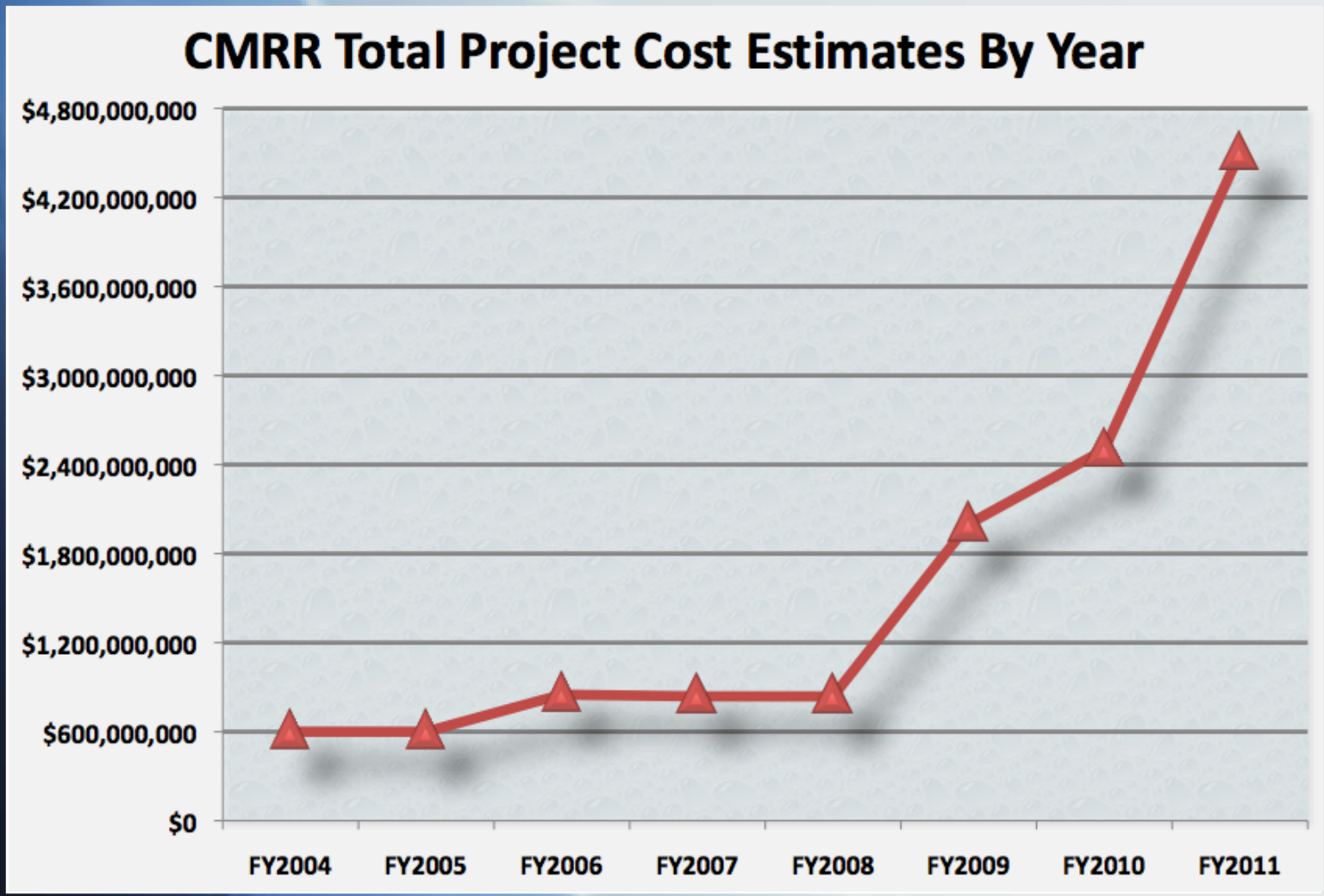
Interested Parties

Who we are:

- Concerned Citizens for Nuclear Safety
- Embudo Valley Environmental Monitoring Group
- Loretto Community
- Peace Action New Mexico
- TEWA Women United
- New Mexico Environmental Law Center
- Nuclear Watch of New Mexico
    - www.nukewatch.org

Welcome to Our 9th Meeting!

- Public Involvement as Per Settlement Agreement
- Outline of Our Presentation
  - Cost
  - Size
  - Seismic


CMRR Total Project Cost Estimates By Year
$4,800,000,000
$4,200,000,000
$3,600,000,000
$3,000,000,000
$2,400,000,000
$1,800,000,000
$1,200,000,000
$600,000,000
$0
FY2004
FY2005
FY2006
FY2007
FY2008
FY2009
FY2010
FY2011

CMRR Cost

7. Schedule of Total Project Costs

(dollars in thousands)

		Prior Years	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Outyears	Total
FY 2005	TEC	159,130								159,130
RLOUB	OPC	4,068	802							4,870
Baseline	TPC	163,198	802	0	0	0	0	0	0	164,000
FY 2009	TEC	38,100	40,000	59,000	15,800					152,900
REI	OPC	5,602	11,900	12,100	12,400	4,498				46,500
Baseline	TPC	43,702	51,900	71,100	28,200	4,498	0	0	0	199,400
	TEC	159,130								159,130
FY 2010	OPC	4,068	802							4,870
RLOUB	TPC	163,198	802	0	0	0	0	0	0	164,000
	TEC	38,100	40,000	59,000	15,800					152,900
FY 2010	OPC	5,602	11,900	12,100	12,400	4,498				46,500
REI	TPC	43,702	51,900	71,100	28,200	4,498	0	0	0	199,400
	TEC	131,600	57,500	129,000	289,200	300,000	300,000	300,000	1,504,631	3,011,931
FY 2010	OPC	34,481	2,000	2,500	3,000	3,500	4,000	4,550	300,500	354,531
NF	TPC	166,081	59,500	131,500	292,200	303,500	304,000	304,550	1,805,131	3,366,462
	TEC	159,130								159,130
FY 2011	OPC	4,068	802							4,870
RLOUB	TPC	163,198	802	0	0	0	0	0	0	164,000
	TEC	38,100	40,000	59,000	15,800					152,900
FY 2011	OPC	5,602	11,900	12,100	12,400	4,498				46,500
REI	TPC	43,702	51,900	71,100	28,200	4,498	0	0	0	199,400
	TEC	131,600	57,500	166,000	289,200	300,000	300,000	300,000	1,532,769	3,077,069
FY 2011	OPC	34,481	2,000	2,500	3,000	3,500	4,000	4,550	300,500	354,531
NF	TPC	166,081	59,500	168,500	292,200	303,500	304,000	304,550	1,833,269	3,431,600

Note: NF data above are pre-baseline planning figures

CMRR Cost

6. Details of Project Cost Estimate

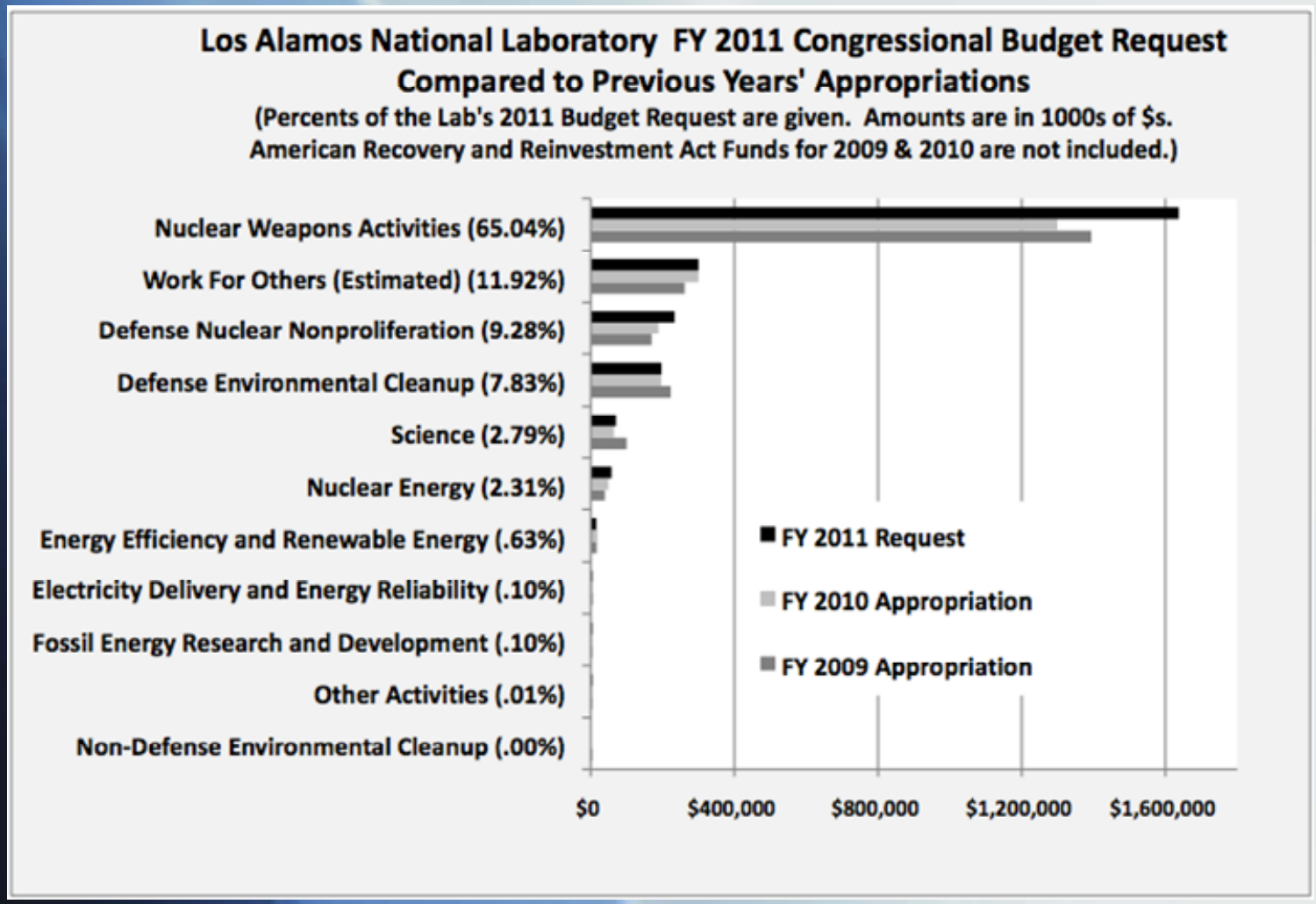
(dollars in thousands)

	Current Total Estimate	Previous Total Estimate	Original Validated Baseline
Total Estimated Cost (TEC)			
Design (PED & TEC)			
Design	465,276	TBD	TBD
Contingency	80,000	TBD	TBD
Total, Design (PED 03-D-103, TEC 04-D-125)	545,276	TBD	TBD
Construction			
Site Preparation	300,000	TBD	TBD
Equipment	235,000	TBD	TBD
Other Construction	1,606,823	TBD	TBD
Contingency	702,000	TBD	TBD
Total, Construction	2,843,823	TBD	TBD
Total, PED & TEC (PED 03-D-103, TEC 04-D-125)	3,389,099	TBD	TBD
Contingency, TEC	782,000	TBD	TBD
Other Project Cost (OPC)			
OPC except D&D			
Conceptual Planning	5,000	TBD	TBD
Conceptual Design	26,497	24,895	TBD
Start-Up	280,404	TBD	TBD
Contingency	94,000	TBD	TBD
Total, OPC except D&D	405,901	TBD	TBD

NNSA Contingency

Uranium Processing Facility contractor showed that, by adding contingency reserves, the project would have 95 percent confidence of success in completing the project with a $2.3 best estimate. NNSA headquarters officials then added more than $1 billion in contingency to the contractor's estimate, bringing the high end of the project's estimated cost range up to $3.5 billion.

CMRR Cost


Los Alamos National Laboratory FY 2011 Congressional Budget Request
Compared to Previous Years' Appropriations
(Percents of the Lab's 2011 Budget Request are given. Amounts are in 1000s of $s.
American Recovery and Reinvestment Act Funds for 2009 & 2010 are not included.)
Nuclear Weapons Activities (65.04%)
Work For Others (Estimated) (11.92%)
Defense Nuclear Nonproliferation (9.28%)
Defense Environmental Cleanup (7.83%)
Science (2.79%)
Nuclear Energy (2.31%)
Energy Efficiency and Renewable Energy (.63%)
Electricity Delivery and Energy Reliability (.10%)
Fossil Energy Research and Development (.10%)
Other Activities (.01%)
Non-Defense Environmental Cleanup (.00%)
FY 2011 Request
FY 2010 Appropriation
FY 2009 Appropriation
$0
$400,000
$800,000
$1,200,000
$1,600,000

CMRR Design Issues

- The CMRR project is now in its eighth
- In 2002, the mission need appeared to be much larger than it is now.
- Today's mission need is not clear.

Will NNSA Design a Smaller NF?

- Can taxpayers money be saved on the NF project?
- What other options has NNSA explored?

Senate Questions
CMRR Size

FY2010 Senate Authorization Committee:

- "The committee continues to believe that replacing the existing facility is essential but the ***CMRR has significant unresolved issues including the appropriate size of the facility***. Some of these decisions will not be made until the Nuclear Posture Review is completed at the end of the year."

  - Senate Report 111-035 - National Defense Authorization Act For FY2010

CMRR Size

Area	Gross Square Feet (gsf)
TA-55-400 (Radiological Laboratory & Office Building) TA-55-440 (Central Utility Building)	187,127 20,998
TA-55-500 (Security Category I/Hazard Category II Nuclear Facility)	406,000 (beneficial occupancy post FY 2018)
TA-3, Building 29 (CMR)	(571,458)
LANL "banked excess" necessary to offset one-for-one requirement	42,667

Total CMRR square footage = 614,125

The gross square feet of the CMRR NF is a preliminary estimate and will be updated as the design develops.

(NNSA policy modified the offset requirement factor to 1.5 starting in FY 2009)

CMRR Seismic

2007 seismic hazard analysis tells us there is 5% chance of a major earthquake at Los Alamos during the life of CMRR (50 years)

Seismic design still under consideration

CMRR Fragile Volcanic Ash

- Unusual volcanic geology created a thick, weak non-welded tuff (volcanic ash) stratum below more competent tuff at the site selected by LANL.
- The facility will be less than 20 feet above the weak ash leading to concerns about the possibility of the ash matrix collapsing and densifying under earthquake loading and causing settlement of the facility.
- July 2005 ~ AEG NEWS 48

CMRR Grout

- From last meeting – either replace or pressure grout inject the soil directly underneath the facility to make it more robust in a seismic event.

LA-UR 10-02173

CMRR LEED

- Is the NF still being designed to be LEED certified?

CMRR Operational in 2022

Close in 2065

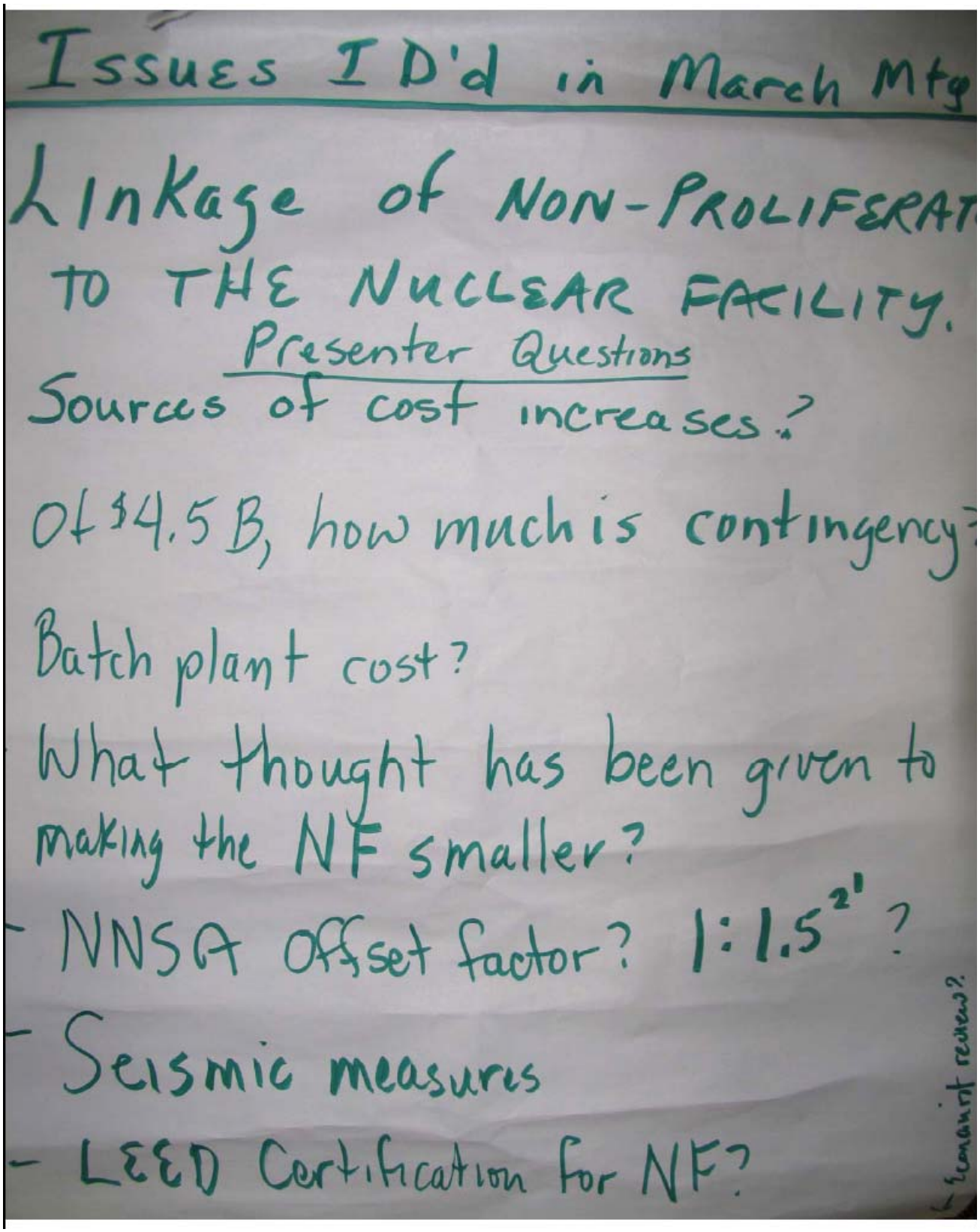
The Nuclear Facility stands in the way of LANL's future

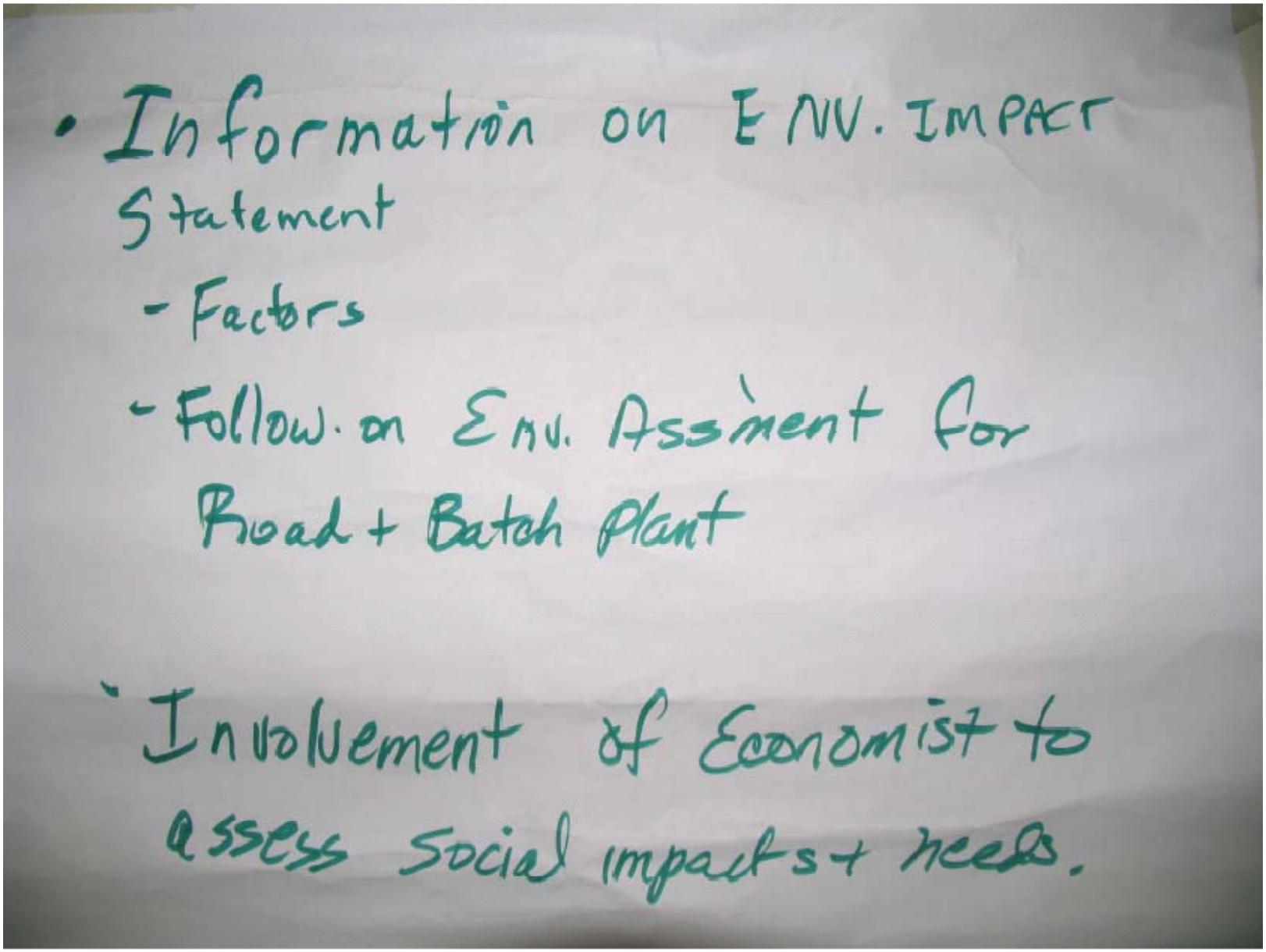
- To build the CMRR-NF or not is ultimately about future mission diversification or not at LANL.
- LANL should be seeking a slice of the mission diversification pie rather than building for further retrenchment in the shrinking nuclear weapons business.

Sunday 28 February 2010

President Barack Obama has ordered the rewriting of the draft new US Nuclear Posture Review (NPR), amid frustration in the White House that the document fails to reflect his aspirations for a nuclear-weapons-free world and an end to "cold war thinking".

V. Meeting Flip Chart Notes


Issues ID'd in March Mtg
Linkage of NON-PROLIFERAT
TO THE NUCLEAR FACILITY.
Presenter Questions
Sources of cost increases?
Of $4.5 B, how much is contingency?
Batch plant cost?
What thought has been given to making the NF smaller?
- NNSA offset factor? 1:1.5[21]?
- Seismic measures
- LEED Certification for NF?
Remaining reviews?


• Information on ENV. IMPACT Statement
- Factors
- Follow. on Env. Assment for Road + Batch plant
• Involvement of Economist to assess social impacts + needs.

VI. Statement from Sisters of Loretto

At a moment in history when we as a state, country and world face the threat of climate change and do not have the resources to implement energy efficiency, renewable energy, adaptation and mitigation, it is abominable to spend an estimated $4.5 billion for the CMRR Nuclear Facility Project. As many ordinary people are struggling to find work, pay health insurance and care for their children, it is a disgrace that the taxpayers are being taxed to spend $225 million alone in 2011 for this project. There are many life promoting projects for the well being of New Mexico and the planet that could better use this money and help us to truly be secure and a country respected on the grounds of moral integrity throughout the world.

The direction being taken to create 125 plutonium triggers for nuclear weapons annually from a current rate of approximately 10 per year is truly insane and immoral. Why is this being proposed? How can people who call themselves leaders even consider this project given the current economy, needs of the world and the fact that true security comes from working together not spending our inheritance on destabilizing projects such as this one. We as a civilization are past the nuclear weapons paradigm as warfare. Nuclear weapons do not stop terrorist actions which are usually accomplished by individuals utilizing their own bodies as weapons. Nuclear weapons do not stop millions of climate refugees who because of hunger and lack of water become part of nation conflicts leading to failed states and global insecurity.

We are digging our own demise economically as a nation by going further into debt on such projects. We are digging our own graves by not directing the brightest and best intelligence and talent to address climate change on a state, national and planetary level. We are sabotaging our children's future by polluting our water, air and soil with toxins that last for thousands of years.

The proposed CMRR Nuclear Facility is immoral and not even worthy of consideration by citizens like the ones who work here in Los Alamos and elsewhere who try to live moral lives and work to create a future for the children and all brothers and sisters on the planet. Unfortunately, these meetings which affect everyone in New Mexico and the planet are planned so that some of us who work and live at a distance are unable to attend. Yet, we send our outcry on the wings of the wind through prayer and lamentation as you meet here tonight. We pray that you make choices to act for life and not for death.

Sister Joan Brown, osf
joankansas@swcp.com

Sister Marlene Perrotte, rsm
marlenep@swcp.com
1004 Major Ave. NW
Albuquerque, New Mexico 87107

VII. Sign-In Sheet

Los Alamos
NATIONAL LABORATORY

Wednesday, March 3, 2010
CMRR Public Meeting @ Best Western "Hilltop House" – SIGN IN SHEET

NAME (please print)	ADDRESS	TELEPHONE NUMBER	E-MAIL
Toni Chiri	3747 W. Jemez Rd LA	667-6691	tchiri@doeal.gov
Denny Hjeresen	600 Barranca / LA	667-9337	dlh@lanl.gov
KEVIN ROARK		665-9202	kroark@lanl.gov
COURTNEY PERKINS	1183 DIAMOND DR. STE B / LA	661-2667	cperkins@lanl.gov
Kim Granzow	1183 Diamond Dr. Ste B LA	661-4008	kgranzow@lanl.gov
Scott Kovac	NWNM	989-7342	
SUSAN TERP	Los Alamos	665-8889	scterp@lanl.gov
Susan Gordon	ANA	473-1670	
Jay Coghlan	NUKEWATCH NM	989.7342	
greg mello	2501 Summit Pl. Abq	265-1200	gmello@lasg.org

Page 1 of 4

Los Alamos
NATIONAL LABORATORY

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NAME (please print)	ADDRESS	TELEPHONE NUMBER	E-MAIL
Joe Honea	820 Los Pueblos LA, NM 87544	505 4120774	
Bruce MacAllister	1473 Bishops Lodge Rd Santa Fe, NM 87506	505-660-7800	Bruce@bizexteam.com
Cindy Blackwell	P.O. Box 1663, MS A187 Los Alamos, NM 87545	505 667-7512	clblackwell@lanl.gov
LORRIE BONDS LOPEZ	PO BOX 1663	667-0216	lomel@lanl.gov
ERICH KUERSCHNER	HCR 74 BOX 24614 EL PRADO, NM 87529	575 770-3338	erichwuk@gmail.com
CARL FROSTENSON	PO Box 1663 Los Alamos	665-4980	frosty@lanl.gov
Barbara Williams	P.O. Box 848	685-0026	Contact@DoortoDreamNetwork.NET
[illegible] Williams	Po Box 848 Abiquiu	"	Contact@TheBridgeToNowhere.org
Robin Collier	Cultural Energy HCR 74 Box 21912	505 758-9791	energy@culturalenergy.org
Marvin Bennett	P.O. Box 160 Los Alamos, NM 87544	505-661-0701	mbennett@lanl.gov

Page 2 of 4

LA-UR 10-02173

Los Alamos
NATIONAL LABORATORY

Wednesday, March 3, 2010
CMRR Public Meeting @ Best Western "Hilltop House" – SIGN IN SHEET

NAME (please print)	ADDRESS	TELEPHONE NUMBER	E-MAIL
TRISH WILLIAMS-MELLO	2901 SUMMIT PL NE ABQ 87106	265-1200	twm@lasg.org
MIKE WHEELE	1055 Los Pueblos	662 5577	wheely@newmexico.com
Roger Snodgrass		662-4185	roger@lamonitor.com
MYRON KOOP	505 OPPENHEIMER # 108	577-7243	MYRONKOOP@SWBELL.NET
Selena Sauer	728 42nd St. Los Alamos NM	661-2589	ssauer@lanl.gov
MARIAN NARANJO	RT. 5 Box 474 ESPAÑOLA NM ex 87532	747-4652	mariannj@windstream.net
Mariah Klusmire	P.O. Box 4099 ABQ 87196		mklusmire@gmail.com
Jahladin	Citizen of the World	NO MORE	NUKES
D McCoy	POB 4276 Abq.		
S Hiller	1500 Pacheco St #111 Santa Fe 87505		hiller.stephanie@gmail.com

Page 3 of 4

Los Alamos
NATIONAL LABORATORY

Wednesday, March 3, 2010
CMRR Public Meeting @ Best Western "Hilltop House" – SIGN IN SHEET

NAME (please print)	ADDRESS	TELEPHONE NUMBER	E-MAIL
Penelope Mc Mullen	113 Cam. Santiago SF 87501	983-1251	pmcl@cybermesa.com
JONI ARENDS	107 Ciruega SF NM 87507	986-1973	jarends@nuclearactive.org
Basia Miller	2345 Vereda de Pueblo SF NM 87507	438-3796	bmiller@sjcsf.edu
Denise Thronas	P.O. Box 988, Ohkay Owingeh 87566	667-2589	thronasd@yahoo.com
Teresa Chavez	6000 San Ildefonso #101 87544 ~~Hilltop de~~ Los Alamos NM	/	teresajchavez@yahoo.com.
Nathana Bird	Ohkay Owingeh, NM		berriesbird@yahoo.com
Raymond Naranjo	Santa Clara Pueblo, NM		naranjo_raymond@yahoo.com
Tom Nelson	~~EP&HS~~, LANL	667-2326	tom@lanl.gov

Page 4 of 4