

Department of Energy

Washington, DC 20585

January 5, 2006

MEMORANDUM FOR JERALD S. PAUL

PRINCIPAL DEPUTY ADMINISTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION

JAMES A. RISPOLI

ASSISTANT SECRETARY FOR ENVIRONMENTAL

MANAGEMENT

ROBERT L. MCMULLAN

ACTING DIRECTOR, OFFICE OF ENGINEERING AND

CONSTRUCTION MANAGEMENT

FROM: MARK B. WHITAKER, JR.

DIRECTOR, DEPARTMENTAL REPRESENTATIVE TO THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD

SUBJECT: Defense Nuclear Facilities Safety Board Public Meeting –

Safety in Design – Path Forward

In his December 5, 2005 memorandum the Deputy Secretary directed programs to identify any specific implementation actions they will take to address the weaknesses and expectations described above and provide a listing of their implementation actions and schedules by January 31, 2006. Attached are two documents that are intended to assist you in meeting this deadline.

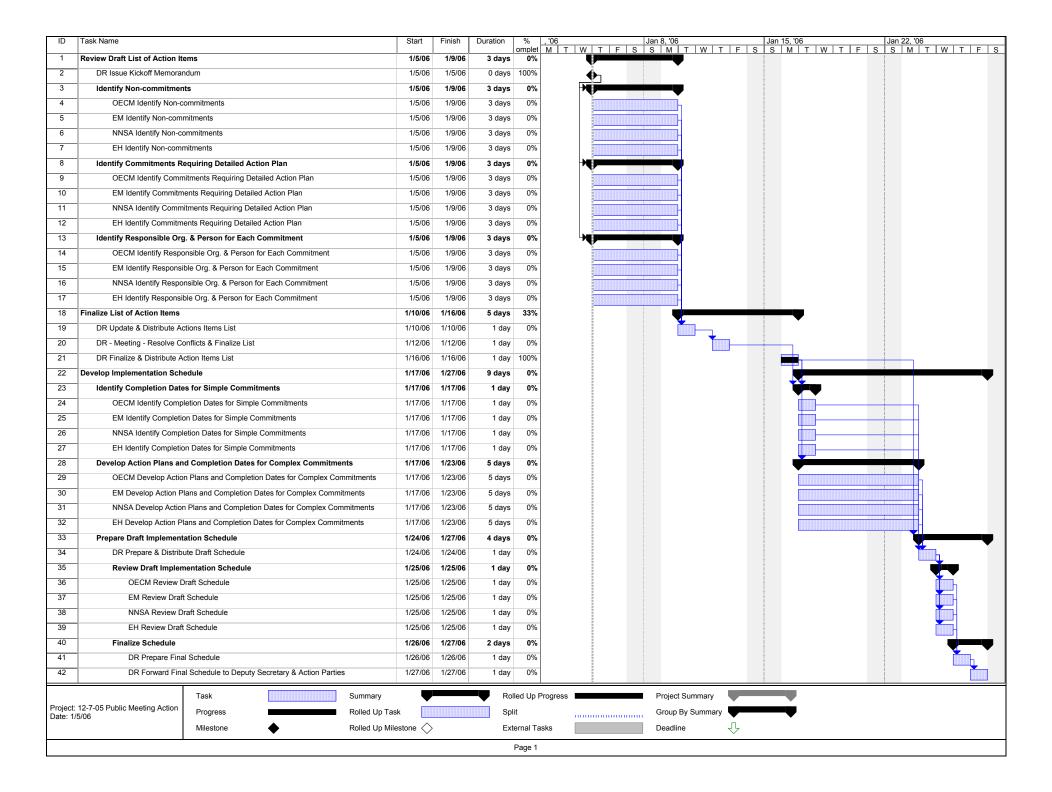
The first document is a detailed schedule which, when implemented will result on an integrated path forward for implementing the various commitments made by the Department during the public meeting. The second document is a table of the commitments included in the Department's testimony that has been derived from the Department's written testimony, the draft transcript of the meeting, and the videotape record.

My office will coordinate this effort and monitor progress against the attached schedule. Please submit the information identified in the schedule to Bob McMorland.

Attachments

cc (enc): Clay Sell

Adam B. Ingols
Ingrid A. C. Kolb
John Spitaleri Shaw
James J. McConnell
Richard H. Lagdon, Jr.
David J. Pepson
Charles S. O'Dell
Frank B. Russo
Theodore A. Wyka, Jr.



No.	Action Description	Course	Responsible	Completion	Domonto
NO.	Action Description	Source	Org./Mgr	Date	Remarks
Miscel	laneous Open Items				
1.	R. McMullan promised to get back to	R. McMullan	R. McMullan	19 1	
	K. Fortenberry regarding whether the	question	,000 1	INTERNAL CONTROL OF THE CONTROL OF T	
	open decision on the CMRR	response	Section 2. The sectio	erroreste : error	
	ventilation system design is identified		- gamenter	- 1	
	in the monthly project status reports		deline in stabilities in the sta	to a common general company in a delica of the product of the pro	
	to the Deputy Secretary and Under			A GO COLLAND CONTROL C	
	Secretaries.			# 6000	and the second s
2.	J. Paul promised to get back to R.	J. Paul question	J. Paul	100 (100 (100 (100 (100 (100 (100 (100	
	Mathews regarding whether the	response	The second secon		
	NNSA training program provides		and the second s		
	opportunities for personnel to manage progressively more complex		Francisco de la constitución de		
	projects.	11 - 200 - 1			
	projects.	7:	10000000000000000000000000000000000000		
Deputy	y Secretary Directions		TO CONTROL TO THE STATE OF THE		
3.	Programs are requested to identify	C. Sell	PSOs	01-31-06	
	any specific implementation actions	12-5-05	The state of the s		
	you will take to address the	memorandum –	angelor region system angelor Angelor		
	weaknesses and expectations	Path Forward)	**************************************		
	described above. Provide a listing of	The state of the s			
	your implementation actions and				
	schedules by January 31, 2006, to	The second secon			
	Ms. Ingrid Kolb	Mark Taller	700		
4.	I have directed my staff to identify	C. Sell written	PSOs		
	and initiate those actions needed	statement to the		:	
	within the Department so that the	Board, 2nd§			
	Department can function safely and effectively on its own without the	C. Sell verbal			
	need for independent Board	testimony			
	oversight.	testimony			
L	Oversight.				

			Responsible	Completion	
No.	Action Description	Source	Org./Mgr	Date	Remarks

Directives Changes (Also see Integrated Safety Management, Design/Build, Early in Life Cycle, and Integrated Project Teams, And Lessons Learned, Continuous Improvement, & NNSA Pilot Effort)

5.	EH review the existing safety	C. Sell	EH A CONTRACTOR A
	directives and identify those that need	12-5-05	
	to be revised to provide clear	memorandum –	ACTIVITY
	requirements regarding safety in	Path Forward)	The state of the s
	early project phases.	1441110111414	1 mg/s
	tuning project primates.	C. Sell written	
		statement to the	-5-990-we MAN5-991-w5-991
		Board,	resident of the control of the contr
		Path Forward	- response on the contract of
		100 (100 m) 100 (100 m) 100 m) 100 m) 100 m) 100 m) 100 m)	(A) 7-10 (A)
		C. Sell verbal	Saury B 3 Little
		testimony	1
6.	We have an adequate foundation of	C. Sell written	THE CONTRACTOR OF THE CONTRACT
	DOE rules and directives, and we	statement to the	ongs
	need to build on this foundation by	Board,	
	making necessary clarifications and	<u>Program</u>	The state of the s
	amplifications. Our current safety	Strenghts # 4	6 Jahrson 5 No. 66 8 July 1 8 July 1
	directives focus primarily on existing		DY ON THE PROPERTY OF THE PROP
	facilities and we need to augment	1 1 1 1 1 1 1 1 1 1	
	them for new designs.		
7.	Remove watch list requirement from	R. McMullan	OECM
	O 413.3.	question	
	en Africanis de Herris e destruit Anny e men.	response	
8.	a. O 413.3 is primarily a management	A.J. Eggenberger	OECM
	order. When it is revised consider	recommendations	
	how the engineering requirements	during R.	
	for the project will be handled to	McMullan	
	ensure they have "depth &	testimony	

NI -	A.C. D. C.C.	0	Responsible	Completion	D
No.	Action Description	Source	Org./Mgr	Date	Remarks
	integrity". b. ESAAB needs to be able to look at the engineering details.			Company of the Compan	
9.	 a. Add to O 413.3 ability to warn management promptly of safety issues that could impact cost or schedule. b. Consider using Performance Categorization rather than \$400 	K. Fortenberry recommendations during R. McMullan testimony	OECM	The second secon	
	million as the threshold for requiring ESAAB approval; c. Need to establish criteria for conducting EIRs for CD-2 and CD-3. d. Earned value should not be the only criteria for determining whether a project is red, yellow, or green, (since it does not account for open safety issues that could have	100 May 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Company Comp	en class Pro- Mer Mer Mercentage - Mercentage - Mercentag	
10.	significant cost/schedule impacts). Revise Order 413.3 to bring it into agreement with Manual 413.3-1 including:	C. Sell approximate the second	OECM		Begin Order revision by January 2006 and issue as a priority task. (Ref. C. Sell
	 a. More complete description of safety expectations for early design steps as well as for project completion and turnover; b. Clarification of the expected use of 	Program Weaknesses # 1. C. Sell written			12-5-05 memorandum – Path Forward & C. Sell Statement to the Board, Path Forward
	the graded approach by identifying clear expectations, including more complete expectations for	statement to the Board, Program			Note for item g. \$4M in C. Sell memo, but \$5M in C.

			Responsible	Completion	
No.	Action Description	Source	Org./Mgr	Date	Remarks
	acceptable use of design/build	<u>Weaknesses</u>		900. B (1970)	Sell Statement to the
	approaches;	# 1		Characteristics (Annual Characteristics) (Annu	Board.
	c. Clear requirements regarding			900 9	
	safety qualification of individuals	R. McMullan	de transporter de la constante	general	
	involved in project management	written statement	i na na haisa mehabapat na na na haiyadah n Ada masar madah na na	1	
	and integrated project teams;	to Board, <u>Ideas</u>		in a contact a military a secondary and secondary and secondary and secondary	
	d. Clear references to the required	and Actions for	2 Section 2 Sect	MacContaction (I) (economic months) """ economic months (I) (economic months) "" economic months (I) (econ	
	safety rules, directives, and	<u>Improvements</u> 1 st		CONTROL OF THE	
	standards;	§	Section of the sectio	**************************************	
	e. More complete coverage of			3000 5°° 1000 1	
	tailoring and safety issues at	R. McMullan	The second secon		
	ESAAB meetings;	verbal testimony	100 1000000		
	f. Provisions for safety oversight by	10 00 00 00 00 00 10 00 00 00 00 00 10 00 00 00 00 00 00 10 00 00 00 00 00 10 00 00 00 00 00 10 00 00 00 00 00	10 mm 1 m		
	the Chiefs of Nuclear Safety;	1,000 - 100 y y 100 - 100 y 10	- 50-00-1000 - 00-00-100 - 00-00-00-100 - 00-00-100 - 00-00-00 - 00-00 - 00-0		
	g. Provisions for safety engineering	STATE OF THE STATE	**************************************	HX *	
	reviews by the Office of		1		
	Environment, Safety and Health	000000			
	for projects over \$5 million;	And the second of the second o			
	h. More complete requirements for	**************************************	m (fr.) 		
	after-action reports to promote	1744414 17444144 174677 174677 174677	"1" THE MIND		
	effective learning from experience.		white in		

Tailoring/Graded Approach & ESAAB Meetings (Also see Directives Changes)

11.	In strengthening our existing process,	C. Sell written	OECM	See item 10.b
	we must ensure that we preserve our	statement to the		
	capability to wisely use a graded	Board,		
	approach to tailor the process based	Program		
	on complexity and risk; however, this	Strenghts # 2		
	graded approach must have			
	appropriate guidelines and			
	expectations to maintain necessary			

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
		<u> </u>	T	· · ·	
	checks and balances.			A**	
12.	Would not tailor: a. High hazard situations;	C. Sell question response	OECM	The property of the second of	
	b. Areas involving safety requirements. Tailoring is not expected to reduce safety	R. McMullan question	- Little records (1) The records (2) The records (3) The records (4) The records (4) The records (5) The records (6) The records (7) The records (8) The records (9) The records (1) The records (2) The records (3) The records (4) The records (5) The records (6) The records (6) The records (7) The records (8) The records (9) The records (1) The records (2) The records (3) The records (4) The records (5) The records (6) The records (6) The records (7) The records (7) The records (8) The records (9) The records (1) The records (1) The records (1) The records (1) The records (2) The records (3) The records (4) The records (5) The records (6) The records (6) The records (7) The records (7) The records (7) The records (7) The records (8) The records (9) The records (1) The records (2) The records (3) The records (4) The records (5) The records (6) The records (7) The records (7) The records (8) The records (8) The records (9) The records (1) The records (2) The records (3) The records (4) The records (5) The records (6) The records (7) T	The second secon	
	requirements.	response	15 (1997) 15 (19		*** *** *** *** *** *** *** *** *** **
		J. Paul question response.	TOPOSTOCIAL PROPERTY OF TOPOST		
13.	We don't eliminate essential CD	R. McMullan	OECM OECM		
	elements when tailoring	question response	VERTICAL TO A CONTROL OF THE CONTROL OF T	To the second se	
14.	No required documents can be omitted when tailoring	J. Rispoli question	OECM		
15.	EM will use CD process for all	response	EM		
13.	projects regardless of project estimated cost.	J. Rispoli question response	1		
16.	yes we do have a list of precisely what should be included before each critical decision. And we have incorporated the new CTA function into that list.	J. Rispoli question response	OECM		The list referred to in this item was e-mailed to J. Batherson on 12-16-05
17.	I expect staff work and presentations to the ESAAB to be sufficiently complete so that they highlight tailoring issues and safety issues that need management attention. I expect every ESAAB review to include a	C. Sell 12-5-05 memorandum – Expectations # 5.	PSOs		See item 10.e

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
	discussion of relevant safety issues.	C. Sell written statement to the Board, Expectations # 5.		The second secon	
		C. Sell verbal testimony	un unique, 183, un unique, 183, un unique 183, un unique 183, uniq	The authorities I set THIS I will be a set of the authorities of the	
Design	-Build		Section of the control of the contro	CTT COMPOSITION CONTROL OF CONTRO	
18.	In response to J. Bader question regarding whether revised O 413.3 would include specific requirements to define the level of maturity of the design and how the design will be frozen before adopting a design/build approach R. McMullan responded that how to use a design/build approach will be addressed in the revised Order.	R. McMullan question response response **The state of the state of th	OECM 100 Million of a death of the control of the c	The Second Secon	See item 10.b
19.	In response to a J. Bader suggestion the design build not be used for first time, one-of-a-kind, or fast track projects, R. McMullan agreed.	R. McMullan question response	OECM		See item 10.b
20.	I do believe that when we're talking about design build on a one-of-a-kind projects that I certainly believe that there should be a "devil's advocate", if you will, Dr. Mansfield, and that role would be played by the people I just mentioned and the organizations	R. McMullan question response	OECM/CTAs/E H		

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
	I just mentioned [CTAs & EH].			4.84	
Early i	in the Life Cycle			The second of th	
21.	Need: a. Credible project baselines including safety reviews; b. Selection of the most appropriate contract types; c. Realistic schedules; d. Early & frequent communications with stakeholders, regulators, committees, Congress, and contractors.	J. Rispoli verbal testimony	OECM	Per control of the co	
22.	Need initial hazards assessment after CD-0 /before CD-1.	C. Sell question response J. Rispoli & R. McMullan question (to C. Sell) response	Applications of the control of the c	The Act I make you want to be a second or you wa	See item 10.a
23.	Hazards analysis done prior to CD-1 to identify performance category that is to be used in the conceptual design	R. McMullan question response	OECM		See item 10.a
24.	We must institute safety reviews earlier in the design process.	J. Rispoli written statement to the Board, 11 th § J. Rispoli verbal testimony	OECM		See item 10.a
25.	Need to better review/resolve safety issues at CD-1	C. Sell question response	OECM		See item 10.a

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
		J. Rispoli verbal testimony	1 m m		
26.	Analysis, design, and procurement specification work must be complete and reviewed for quality early enough to be used as the basis for key decisions. For nuclear projects, the overall safety strategy and preliminary hazard analysis, accepted by the authorization basis manager, should be completed prior to CD-1.	J. Paul written statement to the Board, 3 rd § 2 nd ○ J. Paul verbal testimony	OECM TO THE STATE OF THE STAT	The state of the s	See item 10.a
27.	Controversial, complicated, and/or potentially expensive issues must be resolved in a timely manner	J. Paul written statement to the Board, 3 rd § 3rd \circ J. Paul verbal testimony	OECM THE PROPERTY OF THE PROP	go g	See item 10.a
28.	Establish Performance Category, ventilation approach (i.e. active vs. passive), fire protection design concept at CD-1. Use conservative assumption at this time, but allow for later reduction in requirements if defensible based on design development.	J. Rispoli question (to J. Paul) response.	OECM		See item 10.a
29.	Second, the Department of Energy does not have a manual that sets design function expectations for hazardous nuclear facilities. I believe	J. Bader opening remarks	OECM		See item 10.a

No	A.C. D. C.	G	Responsible	Completion	D
No.	Action Description	Source	Org./Mgr	Date	Remarks
	the existence of such a manual would reduce the number of occasions where significant design changes are made at late stages of projects				
30.	In order to determine the best design approach, it is essential to analyze the safety aspects of each alternative being considered It is of paramount importance that this occurs prior to CD-1 The hazards analysis conducted prior to CD-1 also identifies the project risks, from a safety perspective, which will need to be addressed during preliminary design.	R. McMullan written statement to the Board R. McMullan verbal testimony	OECM TOTAL STATE OF THE STATE	AND THE CONTROL OF TH	See item 10.a
31.	Certainly we need to look by CD-1 at whether or not we need an active confinement system.	J. Rispoli question response	OECM restrict to the control of the		
32.	Need an updated hazards assessment before CD-2	C. Sell question response	OECM		See item 10.a
33.	Line programs also need to more clearly define contractual expectations regarding the early integration of safety into the alternative studies and project design.	C. Sell 12-5-05 memorandum – Program Weaknesses # 2. C. Sell written statement to the Board, Program	PSOs/Office and Site Managers		

NI	A. C. D. C. C.	6	Responsible	Completion	n 1
No.	Action Description	Source	Org./Mgr	Date	Remarks
		Weaknesses # 2.		A 19 Sept. S	
		C. Sell verbal testimony		March	
34.	Ensure that the design requirements are consistent with the specified safety standards	C. Sell written statement to the Board, 3 rd §	PSOs/Office and Site Managers	among the control of	
35.	I expect safety to be fully integrated into design early in the project. Specifically, by the start of preliminary design, I expect a hazards analysis of alternatives to be complete and the safety requirements for the design to be established.	C. Sell 12-5-05 memorandum Expectations # 1. C. Sell written statement to the Board, Expectations # 1 C. Sell verbal testimony	CASTON AND AND AND AND AND AND AND AND AND AN		OECM resolve need to revise Order and/or Manual.
36.	The conceptual design phase requires a hazard analysis and selection of safety related systems, structures, and components.	J. Rispoli written statement to the Board, 6 th §	OECM		OECM resolve need to revise Order and/or Manual.
37.	It is imperative that we establish an appropriate safety strategy which includes identification of safety class safety significant structures, systems	J. Paul written statement to the Board, 2 nd § 3 rd	OECM		OECM resolve need to revise Order and/or Manual.

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
				<u> </u>	
	and components for nuclear projects early in the project's life.	J. Paul verbal testimony		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
38.	In response to a J. Bader request for a	C. Sell question	OECM	on Marian	See item 10.a
36.	more formal CD-1 process and better	response	OECM	Supplemental I managemental	See hem 10.a
	definition of safety requirements, C.	response	-0 000 -0 1000 -0 1000 -0 1000 -0 1000	University of the second of th	
	Sell replied that a greater emphasis		and the second s	100 (100 (100 (100 (100 (100 (100 (100	
	on safety design requirements will be		The second of th	The state of the s	
	implemented for CD-1		100 100	10 A	
	implemented for CD-1			WHAT	
Risk I	dentification & Management		PO 0000 C 00000 P P P P P P P P P P P P P		
39.	Need to do better with:	J. Rispoli verbal	OECM		
	a. Identifying project uncertainties;	testimony			
	b. Developing better risk	200 200 3 20 3 20 3 20 20 20 20 20 20 20 20 20 20 20 20 20	101 101 102 103	rajo S. Salvos . Salv	
	management systems.			olection:	
40.	Need effective identification and	J. Rispoli verbal	OECM		
	management of risk	testimony	9,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0		
	The state of the s				
	And Application and Applicatio		Position of the control of the contr		
Later i	n the Life Cycle	CONTRACTOR	Top own proper in annual in Approximate, annual in Approximate, annual in Approximate in annual		
41.	Ensure that construction is consistent	C. Sell written	Office and Site		
	with the design requirements	statement to the	Managers		
	**************************************	Board,			
	**************************************	3 rd §			
42.	A Preliminary Documented Safety	J. Rispoli written	OECM		OECM resolve need to
	Analysis must be prepared and	statement to the			revise Order and/or
	approved by DOE as a prerequisite	Board, 6 th §			Manual.
	for approval of the final design for				
	Hazard Category 3 or higher				
	facilities.				

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
Person	nel – General				
43.	Need qualified personnel	J. Rispoli verbal testimony	OECM	No. 1 State and 1	
44.	Goal – Re-establish technical competence and expertise of the DOE staff.	C. Sell verbal testimony	PSOs/Office and Site Managers	Secretary Secret	
45.	Line programs need to better staff their project teams with the necessary design engineering and safety expertise to ensure safety requirements are properly identified, translated into the project's design documents, and maintained in effect throughout the procurement, construction, and testing phases of the project.	C. Sell 12-5-05 memorandum — Program Weaknesses # 2. C. Sell written statement to the Board, Program Weaknesses # 2. C. Sell written statement to the Board, Program Weaknesses # 2.	PSOs/Office and Site Managers Verification Verification	The second content of	
46.	I expect line project teams to have the necessary experience, expertise, and training in design engineering, safety analysis, construction, and testing.	C. Sell 12-5-05 memorandum – Expectations # 3. C. Sell written statement to the Board,	PSOs/Office and Site Managers		

Follow Up Actions From the December 7, 2005 DNFSB Safety in Design Public Meeting

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
110.	Action Description	Source	Org./Mgr	Date	Remarks
		Expectations			
		# 3.		Anger count of the county of t	
		C C 11 1 . 1			
		C. Sell verbal testimony	1	Control of the Contro	
47.	There are two key areas in need of	J. Rispoli written	PSOs		
•,,	immediate attention the experience	statement to the	. BO T B . CO.	State for all and the state of	
	level of our people.	Board, 8 th §	The state of the s		
			report of contract	Analogue and The Control of the Cont	P.
	We will review the Integrated Project	J. Rispoli written	000 (000000000000000000000000000000000	## 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1	
	Teams, especially projects requiring	statement to the	** NATA TRANSPORTED SEASON ** ** ** ** ** ** ** ** ** ** ** ** **		
	nuclear facility expertise, to assure	Board, 10^{th} §	The second of th		
	they are appropriately staffed with	00 000000 uses 7	And the second of the second o		
	sufficient expertise in areas such as	Company Committee (Market Committee) (Committee) (Comm		00000000000000000000000000000000000000	
40	engineering and quality assurance.	****	**************************************		· · · · · · · · · · · · · · · · · · ·
48.	[DOE] technical expertise needs to	J. Rispoli	PSOs		
	equal or exceed that of its	question			
40	contractors.	response			
49.	EM ongoing technical skills gap	J. Rispoli	EM		
	analysis will look at projects	question	OPPORTUNITY OF THE PROPERTY OF		
50.	currently using contracted resources. The resources (time, people, and	response J. Paul written	PSOs		
30.	expertise) applied to the evaluation of	statement to the	PSOS		
	changes to analysis, design, and	Board, 3 rd §			
	procurement specifications and to	4 th 0			
	physical construction deviations are				
	sufficient to identify and resolve	J. Paul verbal			
	issues that can adversely affect the	testimony			
	safety of the final facility or activity.				
	Table	1		L	

Integrated Project Team (IPT) – (Also see CTAs, CNS, and CDNS)

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
		Source	J 318//1181		TOME IN
51.	The IPT must possess the requisite	J. Rispoli written	OECM		See item 10.c
	skills for safety basis authorization,	statement to the		27 Maria	OECM resolve need to
	which could be vested in the Federal	Board, 7 th §			revise Order and/or
	project Director himself or one or			er i Service i Service i	Manual.
	more of the IPT members.				
52.	There are two key areas in need of	J. Rispoli written	PSOs	2	See item 10.c
	immediate attention the experience	statement to the	2 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	T VIII TO THE TOTAL	
	level of our people.	Board, 8 th §	The Property of the Property o	1	'
			The second control of	1999 1111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	As we put certified Federal project	J. Rispoli written	Application of the control of the co		
	Directors in place, the certification	statement to the	1 (1997) 1 (
	process will assure that each	Board, 10 th §	MARTINI, DORTHUM. MONTHAL THE STATE OF THE		
	individual has the specific training	99900000 26175 (1.1) 11900000000 4117 (1.1) 120000000 4117 (1.1) 120000000 4117 (1.1) 1200000000 4117 (1.1) 1200000000 4117 (1.1) 120000000000000000000000000000000000	10 (1000)		
53.	and experience requirements.	J. Paul written	PSOs		See item 10.c
33.	the Federal project Director and one or more members of the IPT	statement to the	PSUS		OECM resolve need to
	must have the requisite safety	Board, 3 rd § 1 st \circ	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		revise Order and/or
	management experience to execute	Board, 5 g 1			Manual.
	complicated projects with significant	J. Paul verbal	21		Wanuai.
	nuclear safety implications.	testimony			
54.	our IPTs require access to needed	J. Paul written	PSOs		See item 10.c
	experts in a wide variety of	statement to the			OECM resolve need to
	disciplines, including project	Board, 3 rd § 1 st \circ			revise Order and/or
	management, safety basis	The course of th			Manual.
	development, and specific scientific	J. Paul verbal			
	and engineering functions.	testimony			
55.	We expect that the IPT members will	J. Paul written	NNSA		See item 10.c
	be actively involved with project	statement to the			OECM resolve need to
	deliverables as the project proceeds	Board, Last page			revise Order and/or
	and will work with their contractor	item #1.			Manual.
	counterparts to ensure that project				

			Responsible	Completion	
No.	Action Description	Source	Org./Mgr	Date	Remarks
		 			
	deliverables properly integrate safety				
	into design			Lines a common	
56.	Ensure that NNSA project managers	J. Paul written	OECM		
	and IPT members have the	statement to the		The second secon	
	appropriate trainingwe will	Board, Last page		St. Tool Best St	
	ensure that Federal Project Directors	item #3.	0.00 pt	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
	and IPT personnel have adequate			1 - 60 (1995) (1997) (1	
	training to understand the principle of		Professional Control C	2013 - 1745 2013 - 1745 23 2745 23 2749	# #*
	integrating safety into design.	testimony	2000/2006/100 1.00	- 1000000 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
CITE :	ONG LODNG				
	CNS, and CDNS		2 50 - 20 YEST AND THE COMMENT OF TH	F	
57.	Chiefs of Nuclear Safety will:	C. Sell	CNS/CDNS		
	a. Provide effective oversight on the	12-5-05	A - 5, 100-000 DMT =T- 		
	selection of safety requirements	memorandum –		Experiment of the control of the con	
	and standards for design and	Program	Vicinity of the second of the		
ļ	construction, and translation of	Weaknesses	weed to the second seco		
	expectations into contract	THE SECTION AND THE SECTION AN			
	requirements.	A SEASON AND A SEASON AND A SEASON AND A SEASON AS A S	eras		
	b. Review project team make-up and	C. Sell written	100001 10000 10000 10000 10000 10000		
	contractor oversight.	statement to the	Control of the Contro		
	c. Sample safety hazards analyses,	Board,	•		
	facility hazard classification, safety	Program			
	analyses, safety system	Weaknesses			
	identification and performance	# 3.			
	categorization, and resolution of	900 900 900 900 900 900 900 900 900 900			
	design and construction safety	C. Sell verbal			
	issues so that they can provide	testimony			
	feedback and input to their Central	4 4 4			
	Technical Authority regarding				
	whether they have confidence that				
	the project teams have effectively				

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
	integrated safety considerations into design and construction work activities.			THE STATE OF THE S	
58.	I expect that the Chiefs of Nuclear safety will provide safety oversight during the design, construction, and testing phases of our projects.	C. Sell 12-5-05 memorandum — Expectations # 4. C. Sell written statement to the Board, Expectations # 4. C. Sell verbal testimony	CNS/CDNS 100 100 100 100 100 100 100 100 100 10	1	
59.	For all nuclear projects, NNSA CTA via the Chief of Defense Nuclear Safety, will review and offer counsel on the composition of the IPT that is approved by the Site Manager. The CTA review will validate that the federal personnel assigned to the IPT are appropriately qualified and that the level of effort expected from them is appropriate	J. Paul written statement to the Board, Last page item #1.	CDNS CONS CONS		
60.	In response to a J. Bader question regarding whether the \$400,000 threshold would be reduced for CD-2 and CD-3 EIRs, R. McMullan	R. McMullan question response	OECM/EH		

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
1100	rection Description	Source	Org.//vigi	Date	Remarks
	replied: We have discussed how we				
	can ensure that we have properly			A CONTRACTOR OF THE CONTRACTOR	
	addressed the safety aspects of our				
	projects. And we believe that the		and the second s	5 · · · · · · · · · · · · · · · · · · ·	
	increased focus on and involvement			- Control of the Cont	
	of the Chiefs of Nuclear safety as		2	100 100 100 100 100 100 100 100 100 100	
	well as the Office of Environment,		Company Compan	*** 1	
	Safety and Health, we would like to		10000	**************************************	
	see how that works.		Comment	*** A 61 *** SARATA** (*** A 62 *** A 6	
Extern	al Oversight Reviews				
61.	Need better funding source for	C. Sell question	OECM		
	External Independent Reviews	response			
	(EIRs). Working with CFO to	- 1,000 - 1,00			
	determine if EIRs can be funded from	R. McMullan	**************************************		
	working capital funding.	written statement	The state of the s		
	Services, amount of the control of t	to the Board 11 th	1700 SW		
		§			
	And Andrew Control of the Control of	Water Courts Vogs Courts 4 courts 1 colors	100000 10000 101.00 		
	1 Configuration	R. McMullan	Thermal Community of the Community of th		
		verbal testimony	400 f 1 cel f 2 cel f		
62.	We will continue to increase our	R. McMullan			
	focus on the safety aspects of EIRs to	written statement			
	better ensure the incorporation of	to the Board			
	safety systems. We will also	Ideas and			
	emphasize that the review of start-up	Actions for			
	testing plans include an assessment of	<u>Improvement</u>			
	whether the safety is adequately	2 nd §			
	addressed in the start-up tests to be				
	performed, as well as whether the	R. McMullan			
	Performance Baseline includes	verbal testimony			

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
	sufficient costs and schedule for conducting these tests.			Agents - The Control of the Control	

Oversight

63.	Goal - Continue to institutionalize	C. Sell verbal	PSOs/Office	1
	[DOE] oversight.	testimony	and Site	\$\sigma\$ \(1.5\sigma\$ \) \(25\) \(\sigma\$ \) \(\sigma*
			Managers	- FERRENCE - CONTROL - CON
		C. Sell question	00000000000000000000000000000000000000	*************************************
		response	**************************************	rate, falls, fall view
64.	Implement planned improvements in	C. Sell verbal	PSOs	
	HQ oversight.	testimony.	William State Management of the Control of the Cont	
65.	We are also looking for	J. Rispoli written	PSOs	
	enhancements to the	statement to the	THE CONTROL OF THE CO	New Arrange Control of the Control o
	mechanism/processes used to ensure	Board, 10^{th} §	**************************************	
	technical competence of Federal staff		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
	who oversee project management	**************************************	V	
	activities.	** I Deep 1 ** 1 ** 1 ** 1 ** 1 ** 1 ** 1 ** 1	Aug.	
66.	DOE oversight must be present	J. Rispoli written	PSOs	
	throughout an entire project using	statement to the		
	qualified and technically competent	Board, 11 th §	** # *	
	personnel.	- All Andrews - All Andrews - Andrew		

Lessons Learned, Continuous Improvement, & NNSA Pilot Effort

67.	e. Need real time feedback of lessons	J. Rispoli verbal	OECM	
	learned "Management of the second of the sec	testimony		
68.	I expect that we will learn effectively	C. Sell	EH(?)	See item 10.h
	from our project experience so that	12-5-05		
	future projects are more likely to be	memorandum –		
	completed on time and on budget	<u>Expectations</u>		

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
	with all mission and safety objectives	# 6.			
	satisfied.				
		C. Sell written			
		statement to the	2 min	The second secon	
		Board,	10 10 10 10	ph-160	
		Expectations # 6.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		# 0 .	Been and a second secon	"HINNED BAIL AND SOME STATE OF THE STATE OF	
		C. Sell verbal		TORROGO SON TORROG	
		testimony	100 100	**************************************	
69.	Goal – Establish a system on	C. Sell verbal	EH (?)		See item 10.h
	continuous improvement	testimony	1211 (.) ***********************************		See Rem 16.11
	venimus us mipro venient	Marie Mari	TOTAL PROBLEMS TO THE PROBLEMS		
		C. Sell question	A 194090		
		response	* * * * * * * * * * * * * * * * * * *	entron entron	
70.	Perform a lessons learned review of	A.J. Eggenberger	PSÖs		
	previous projects to better understand	recommendation	1999 SOURCE A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	how/why decisions were made so as	during R.	w.		
	not to repeat the same mistakes.	McMullan	Collection of the Collection o		
	engle i mangani. - mangani i mangan	testimony	1975000 (1775) 1975000000000000000000000000000000000000		
71.	If a lessons learned review is	J. Bader	PSOs		
	performed look at 5 nanophase labs	recommendation			
	lessons learned.	during R.			
	10 Sec. 10 Sec	McMullan			
70	Version of the Control of the Contro	testimony			
72.	Lessons learned from prior	J. Paul written	PSOs		
	experience and the experiences of	statement to the			
	others are reflected in systematic	Board, 3 rd §			
	improvements to processes and	5 th 0			
	procedures for designing and	I Doul work of			
	constructing defense nuclear facilities	J. Paul verbal			

No.	Action Description	Source	Responsible Org./Mgr	Completion Date	Remarks
		testimony			
73.	training should include case studies where nuclear safety issues were not addressed in a timely manner in an effort to ensure we learn from our past. An existing training module on this topic in the NNSA Project Management Career Development Program will be considered as a prospective template for the content of the requisite training.	J. Paul written statement to the Board, last page item #3. J. Paul verbal testimony	OECM	Company of the compan	See item 10.c
74.	EM developing a set of lessons learned.	J. Rispoli verbal testimony (during J. Paul testimony)	EM "100 (100 to 100 to		
75.	finally I would add to my list based on some of the comments I heard earlier, a commitment on our part to consider some form of a lessons learned project.	J. Paul verbal testimony Application of the state of the	NNSA Sabel S		
76.	Pilot an effort to improve the implementation of existing guidance by focusing on a document titled "Project Management Practices," and subtitled "integrated Safety." NNSA will share the result of our pilot project with the other program offices and will use our experience to suggest further improvements in the directives	J. Paul written statement to the Board, last page item #2. J. Paul verbal testimony	NNSA		

			Responsible	Completion	
No.	Action Description	Source	Org./Mgr	Date	Remarks

Integra	ated Safety Management			The second of th	
77.	The Department has strong Integrated	C. Sell written	Office and Site	27	
	Safety Management systems	statement to the	Managers	500 - 1000-000-000-000-000-000-000-000-000-0	
	implemented at our facilities We	Board,	= = = = = = = = = = = = = = = = = = =	emporarilli emporarilli emporarilli	,
	need to build on this program and	<u>Program</u>	100 min	**************************************	
	better understand how to apply it to	Strenghts # 5	TOWN THE SELECTION OF T	10 to order on order or	
	design and construction phases.		130000000 130000000 18.461 Vade 11100000	control (control (con	
78.	Goal – Strengthen safety culture of	C. Sell verbal	PSOs/Office	, (m	
	DOE.	testimony	and Site		
			Managers		
79.	DOE Order 413.3does not provide	R. Kasdorf	OECM		The theme of developing
	specific requirements for applying	opening remarks	er i pari		more specific requirements
	integrated safety management		1 1000 1 2000 1 1000 1 1000 1 1000	Maria Cara Cara Cara Cara Cara Cara Cara	is repeated throughout R.
	principles to the design and	Ann	Company Comp	19 17	Kasdorf's remarks.
	construction process. The staff				
	believes that correction of this		* dentries region 150 years of the control of the c		
	fundamental problem requires the	AND TRANSPORT OF THE PROPERTY			
	development of more specific	2001 M. Anaeming 	19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	requirements and guidance based on	1111 1146 *	. 1500° 		
	DOE and industry experience and	1500000 100000 100000 100000 100000 1000000 10000000 100000000	History State Stat		
	practice.	A			