

EXTERNAL QUALITY ASSURANCE
FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (0) and CNWRA (0)

Total Allocated FTE FY02: NRC (1) and CNWRA (0.7)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
I. Quality Assurance Program											
QA	1100		09/27/2002	JOINT		0	0	1	0.7	0	0
QA	1110		09/30/2002	NRC		0	0	0	0	0	0
QA	1120		09/30/2002	NRC		0	0	0	0	0	0
QA	1130	H	09/30/2002	CNWRA		0	0	0	0	0	0
					Totals	0	0	1	0.7	0	0

Igneous Activity (IA)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (1) and CNWRA (1.8)

Total Allocated FTE FY02: NRC (1) and CNWRA (2.2)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
A. Issue Resolution/IRSRs											
IA	301	IRSR on Igneous Activity Rev 1	H	07/30/1998	GEOS						
IA	302	IRSR on Igneous Activity Rev 2	H	07/09/1999	GEOS						
IA	302.1	CNWRA Input to IA IRSR Rev 2	H	05/28/1999	CNWRA	MM					
IA	303.1	CNWRA Input to IA IRSR Rev 3	H	05/28/2000	CNWRA	MM					
IA	304	Integrated IRSR	H	07/30/2002	GEOS						
IA	304.1	CNWRA Input to Integrated IRSR	H	05/28/2002	CNWRA	MM					
IA	306	Support TPA development and sensitivity testing	M	09/30/2002	JOINT						
IA	310	Subissue 1: Probability Resolution Activities (FY2001/2002)		09/30/2002	CNWRA		0.05	0	0.1	0.3	0
IA	310.1	Petrology of System	M	09/30/2002	CNWRA	IM	0	0.05	0	0	0
IA	310.2	PVHA- View Rev1 (Request for Additional Funding)*	M	05/30/2001	CNWRA	IM	0	0.05	0	0	0
IA	310.3	Review AEROMAG	H	09/30/2002	GEOS		0.1	0	0	0	0
IA	320	Subissue 2: Consequence Resolution Activities (FY2002)		09/30/2002	CNWRA		0.05	0	0.6	1.6	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
IA	320.1 Improve Mass-Loading basis and evolution of tephra deposit	H	07/30/2001	CNWRA		0	0.05	0	0	0	0
IA	320.2 Subsurface Conduits	M	09/30/2001	CNWRA		0	0.05	0	0	0	0
IA	320.3 Numerical Modeling of magma-repository interactions	H	09/30/2002	CNWRA		0	0.35	0	0	0	0
IA	320.4 Finalization and Publication of Results - Journal Article	M	08/30/2002	CNWRA	IM	0	0.05	0	0	0	0
IA	320.5 Tephra Evolution (Joint with PA)	H	09/30/2002	CNWRA		0	0.05	0	0	0	0
IA	320.6 YM Petrology Study	L	09/30/2001	CNWRA		0	0	0	0	0	0
IA	320.7 Eruption character from cone		09/30/2002	CNWRA		0	0	0	0	0	0
IA	320.8 Remobilization of tephra-fall deposits	H	09/30/2002	CNWRA		0	0	0	0	0	0
IA	320.9 Evaluate Thermo-Mechanical Effects (Joint with RDTME)	H	09/30/2001	CNWRA		0	0.15	0	0	0	0
IA	330 Analog Models (Request for additional Funding)	H	09/30/2001	CNWRA		0	0.3	0	0	0	0
IA	340 Review appropriate PMRs	H	09/30/2000	JOINT		0.1	0.15	0	0	0	0
IA	350 ISI Integration	H	09/30/2002	JOINT		0.05	0.05	0	0	0	0
IA	360 Interactions with DOE	H	09/30/2002	JOINT		0.05	0.05	0	0	0	0
D. Yucca Mountain Review Plan											
IA	700 Yucca Mountain Review Plan	M	09/30/2001	JOINT		0.4	0	0	0	0	0
IA	701 Develop input to YMRP, Rev 0 thru Rev 2	M	09/30/2002	JOINT		0	0.2	0	0	0	0
F. Review DOE Submittals											
IA	800 Review of DOE Submittals		09/30/2002	JOINT		0	0	0	0	0	0
IA	801 Review Final VA and Prepare Comments for Commission Paper	H	02/22/1999	JOINT		0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
IA 802	Environmental Impact Statement - KTI input to review of draft	H	10/14/1999	JOINT		0	0	0	0	0	0
IA 803	License Application - review working draft	H	09/30/2000	JOINT		0	0	0	0	0	0
IA 804	Input to Staff Strategy and Guidance for SR Review	H	09/30/2000	GEOS		0	0	0	0	0	0
IA 810	SR Preparation and Review	H	09/30/2001	GEOS		0.2	0.15	0.1	0.1	0	0
G. License Application/SER Development											
IA 900	License Application and preparation of SER		09/30/2004	JOINT		0	0	0	0	0	0
H. Hearing Support											
IA 1000	Hearing Support		09/30/2004	JOINT		0	0	0	0	0	0
I. QA Program Support											
IA 1100	Participate in QA observation audits	M	09/30/1999	JOINT		0	0	0	0	0	0
J. Issue Resolution during Performance Confirmation											
IA 1200	Issue Resolution during Performance Confirmation	H	09/30/2002	JOINT		0	0	0	0	0	0
K. Public Outreach											
IA 1300	Provide Support to the Public Outreach Program	H	03/31/1998	GEOS		0	0	0	0	0	0
Totals						1	1.8	1	2.2	0	0

Structural Deformation/Seismicity (SDS)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (1.6) and CNWRA (4.2)

Total Allocated FTE FY02: NRC (1.8) and CNWRA (2.7)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>		
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	
A. Issue Resolution/IRSRs												
SDS	300	Input to Integrated IRSR	H	09/30/2002	CNWRA	IM	0	0.2	1.1	0	0	0
SDS	300.1	CNWRA Input to integrated IRSR	H	07/16/2002	CNWRA	MM	0	0	0	0	0	0
SDS	300.2	Technical Assesment of SDS at YM	H	09/27/2002	CNWRA	MM	0	0	0	0.1	0	0
SDS	310	Resolution of Seismicity subissue	H	09/30/2000	GEOS		0.25	0.3	0	0	0	0
SDS	310.2	Evaluate DOE estimates of postclosure seismicity and use of updated seismic parameters in DOE PA	H	09/24/2000	CNWRA		0	0	0	0	0	0
SDS	310.4	Input AMR/PMR review to Resolution	H	09/30/2001	CNWRA		0	0	0	0	0	0
SDS	310.5	Field review new Seismic sources (Carrara)	H	09/30/2001	JOINT		0	0.1	0	0	0	0
SDS	310.7	Interaction with DOE on Seismicity	H	09/30/2001	JOINT		0	0	0	0.05	0	0
SDS	320	Resolution of tectonics subissue	H	09/30/2000	GEOS		0.25	0.1	0	0	0	0
SDS	320.1	Evaluate Wernicke strain rates	H	09/30/2000	JOINT		0	0.08	0	0	0	0
SDS	320.2	Strain distributions (1.1,1.2,1.3,1.4)- GPS Campaign	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS	320.3	Episodic nature of strain (2.0, 2.2, 2.1, 2.3)	H	09/30/2000	JOINT		0	0	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
SDS	320.4 Sensitivity of Dose to Strain Rate	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS	320.6 Interaction with DOE - Tectonic strain	H	09/30/2000	JOINT		0	0	0	0.05	0	0
SDS	320.8 Review Geophysics gravity/magnetic data	M	09/29/2000	CNWRA	AI	0	0	0	0	0	0
SDS	320.9 Evaluate use of tectonic models and updated strains in DOE PA / AMRs/PMRs	M	09/30/2001	CNWRA		0	0	0	0	0	0
SDS	330 Resolution Fracture Subissue	H	09/30/2000	GEOS	AI	0.3	0.2	0	0	0	0
SDS	330.1 Evaluate effects of faults and fractures on flow	H	09/30/2000	CNWRA		0	0	0	0	0	0
SDS	330.2 Constrain models of faults and fractures at different scales	H	09/24/2000	CNWRA		0	0	0	0	0	0
SDS	330.3 Interaction with DOE on Fracture Resolution	H	09/27/2002	JOINT		0	0.1	0	0.05	0	0
SDS	330.4 Evaluation of Valley Fill Model and Sinkhole	M	09/27/2002	CNWRA	AI	0	0.2	0	0.05	0	0
SDS	330.5 Evaluate consistent use of fracture models and updated data in DOE PA/ AMRs/PMRs and ISA	M	09/30/2000	JOINT		0	0	0	0	0	0
SDS	330.6 Stratigraphic and Structural Controls on flow	M	09/30/2002	CNWRA	IM	0	0.1	0	0.4	0	0
SDS	340 Resolution of Faulting Subissue	H	09/24/2000	GEOS		0	0.3	0	0	0	0
SDS	340.1 Continue to estimate the sensitivity of dose to fault disruption (FAULTO)	H	09/24/2000	JOINT		0	0.3	0	0	0	0
SDS	340.2 Evaluate Geological Characterization of fault as flow paths	H	09/24/2000	JOINT		0	0.3	0	0	0	0
SDS	340.3 Evaluate use of fault models and updated data in DOE PA/AMRs/PMRs	H	09/24/2000	JOINT		0	0.3	0	0	0	0
SDS	340.4 Interaction with DOE -Fault slip Hazard	H	09/24/2002	JOINT		0	0.3	0	0.05	0	0
SDS	340.5 Resolve selected data relationships for faults and fractures	H	08/12/2002	CNWRA	IM	0	0.3	0	0.1	0	0
SDS	350 Support Geological Computer Activities for Issue Resolution		09/30/2002	CNWRA		0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
SDS 350.1	Upgrade Models/Codes such as 3 D stress development	H	09/16/2002	CNWRA	IM	0	0	0	0.25	0	0
SDS 350.2	GIS data archive	H	07/27/2002	CNWRA	AI	0	0.4	0	0.2	0	0
SDS 360	Site Description Resolution		09/30/2002	Joint	IM	0	0	0.65	0	0	0
SDS 360.1	Site Geography	M	09/30/2002	JOINT		0	0	0	0.05	0	0
SDS 360.2	Regional Demography	M	09/27/2002	JOINT		0	0	0	0.05	0	0
SDS 360.3	Preclosure Meteorology and Climatetology	M	09/27/2002	CNWRA		0	0	0	0.1	0	0
SDS 360.4	Preclosure Surface and Groundwater Hydrology	H	09/27/2002	CNWRA		0	0	0	0.1	0	0
SDS 360.5	Site Geology and Seismology including ISM, natural resources, soils, rock properties	H	09/27/2002	JOINT		0.2	0	0	0.35	0	0
SDS 360.6	Review of DOE Site Data including geophysics, borings, cross sections	H	09/30/2002	CNWRA		0	0	0	0	0	0
SDS 360.7	Evaluate geology of additional YM areas	H	09/27/2002	CNWRA		0	0.07	0	0.3	0	0
SDS 360.8	Igneous Rocks	H	09/27/2002	JOINT		0	0	0	0.1	0	0
SDS 360.9	Geomorphology	M	09/27/2002	JOINT		0	0.05	0	0.05	0	0
SDS 361	Pre- Closure Geochemistry	M	09/27/2002	CNWRA		0	0	0	0.05	0	0
SDS 370	Issue Closure for SDS	H	09/27/2002	JOINT	AI	0	0	0	0.2	0	0
B. Regulatory Framework											
SDS 600	Support 10 CFR Part 63 Rulemaking	H	09/30/2000	GEOS		0	0	0	0	0	0
C.TPA Code Development											
SDS 400	Develop specifications for TPA 4.0	M	09/30/2000	JOINT		0	0	0	0	0	0
D. Yucca Mountain Review Plan											
SDS 700	Develop YM Standard Review Plan Rev 0	H	09/30/2000	JOINT		0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
SDS 701	Input to Yucca Mountain Review Plan, Rev 2	H	09/30/2001	JOINT		0.6	0.5	0	0	0	0
SDS 710.1	Evaluate/Integrate Acceptance Criteria/RM	H	09/30/2000	GEOS		0	0	0	0	0	0
SDS 710.2	Review Process Model Reports: Integrated Site Model; Tectonic Hazards, Flow and Transport	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS 710.3	Evaluate TR#3, DBE Reports, DSHA	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS 710.6	ISI: Mechanical Disruption of Waste Package - Lead	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS 710.7	Support Sensitivity Studies in ISI that import fracture, fault parameters	H	09/30/2000	CNWRA		0	0	0	0	0	0
SDS 710.8	Support other interactions with DOE such as natural barrier system effectiveness	M	09/30/2000	JOINT		0	0	0	0	0	0
F. Review DOE Submittals											
SDS 800	Review Draft Environmental Impact Statement and prepare comments for Commission Paper	M	09/30/2000	JOINT		0	0	0	0	0	0
SDS 801	Review Final Environmental Impact Statement	H	09/30/1999	JOINT	AI	0	0	0	0	0	0
SDS 803.1	Input to Staff Strategy and Guidance for SR Review	H	09/30/2000	GEOS		0	0	0	0	0	0
SDS 804	License Application - review working draft	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS 805	Review Final VA and Prepare Comments for Commission Paper	H	02/22/1999	GEOS		0	0	0	0	0	0
G. License Application/ SER Development											
SDS 900	Review License Application and prepare SER	H	09/30/2004	JOINT		0	0	0	0	0	0
H. Hearing Support											
SDS 1000	Hearing Support	H	09/30/2004	GEOS		0	0	0	0	0	0
I. QA Program Support											

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
SDS 1100	Observe QA audits	H	09/30/2000	JOINT		0	0	0	0	0	0
J. Issue Resolution during Performance Confirmation											
SDS 1200	Review/Develop Input to ISA/ISI during Performance Confirmation (e.g; geologic geophysical methods; threshold unusual occurrences)	M	09/30/2000	JOINT		0	0	0	0	0	0
K. Public Outreach											
SDS 1300	Provide input to Public Outreach Program	H	09/27/2002	JOINT	MM	0	0	0.05	0.05	0	0
L. Issue Resolution/Pre Closure											
SDS 1300.1	Evaluate TR#3, DBE Reports, DSHA	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS 1300.2	Evaluate AMRs/PMRs	H	09/30/2000	JOINT		0	0	0	0	0	0
SDS 1300.3	Evaluate Preclosure ISA issues	H	09/30/2001	CNWRA		0	0	0	0	0	0
Totals						1.6	4.2	1.8	2.7	0	0

Evolution of the Near Field Environment (ENFE)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (2.9) and CNWRA (4.2)

Total Allocated FTE FY02: NRC (3) and CNWRA (3.4)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
A. Issue Resolution/IRSRs											
ENFE 301	IRSR on Evolution of the Near Field Environment Rev 1	H	07/31/1998	GEOS		0	0	0	0	0	0
ENFE 302	IRSR on Evolution of the Near Field Environment Rev 2	H	06/04/1999	GEOS		0	0	0	0	0	0
ENFE 302.1	CNWRA input to ENFE IRSR Rev 2	H	04/23/1999	CNWRA	MM	0	0	0	0	0	0
ENFE 303	IRSR on Evolution of the Near Field Environment Rev 3	H	08/31/2000	GEOS		0	0	0	0	0	0
ENFE 303.1	CNWRA input to ENFE IRSR Rev 3	H	07/14/2000	CNWRA	MM	0	0	0	0	0	0
ENFE 304	Input to Consolidated IRSR Rev.1	H	07/30/2002	GEOS		0.2	0	0.4	0	0	0
ENFE 304.1	CNWRA input to Consolidated IRSR, Rev 1.	H	07/19/2002	CNWRA	MM	0	0.2	0	0	0	0
ENFE 306	Interactions with DOE on Features, Events and Processes (FEP) and thermal testing	H	09/30/2002	JOINT		0.05	0.05	0.05	0.1	0	0
ENFE 307	Assist TSPA I KTI in their closure interactions	H	09/27/2002	GEOS		0.1	0.1	0.3	0.2	0	0
ENFE 310	Subissue 1 Resolution Activities: Effects of Coupled Thermal-Hydrological-Chemical (THC) Processes on Seepage and Flow (FY2002)	H		JOINT						0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
ENFE 310.1	Sensitivity study and analysis of effects of design on coupled THC effects on seepage and flow	H	09/27/2002	JOINT		0	0	0.1	0.15	0	0
ENFE 310.2	Letter Report documenting analysis applied to acceptance criteria	H	05/05/2000	CNWRA	IM	0	0	0	0	0	0
ENFE 311.2	Evaluate DOE approach and document resolution	H	03/31/2001	JOINT	IM	0.1	0.2	0	0	0	0
ENFE 312.1	Analysis of coupled THC effects on seepage and flow using TPA and MULTIFLO codes (Additional CNWRA FTE 0.1)	H	09/27/2002	JOINT		0.2	0.05	0.1	0.25	0	0
ENFE 312.3	MULTIFLO Version 1.5 - Letter Report	M	12/14/2001	CNWRA	IM	0	0	0	0.1	0	0
ENFE 312.4	Review and analysis of DOE Reports	H	09/27/2002	JOINT		0.3	0.1	0.2	0.1	0	0
ENFE 312.5	Provide updated input parameters for TPA Code.	H	09/27/2002	JOINT		0.1	0.1	0.05	0.05	0	0
ENFE 312.7	MULTIFLO modifications, User Interface	M	03/29/2002	CNWRA	IM	0	0.4	0	0.4	0	0
ENFE 312.8	MULTIFLO code validation	M	09/27/2002	CNWRA	IM	0	0.4	0	0.2	0	0
ENFE 320	Subissue 2 Resolution Activities: Effects of Coupled THC Processes on Waste Package Chemical Environment (FY2000)	H								0	0
ENFE 320.1	Sensitivity study and analysis of effects of design on coupled THC effects on waste package chemical environment	M	09/27/2002	JOINT		0	0	0.2	0.15	0	0
ENFE 320.2	Letter report documenting analysis applied to acceptance criteria	M	04/14/2000	CNWRA	IM	0	0	0	0	0	0
ENFE 320.3	Review Waste Package (WP) and Engineered Barrier System Transport (EBS) PMRs (Rev 0)	M	09/30/2000	JOINT		0	0	0	0	0	0
ENFE 321.1	Analysis of coupled THC effects on waste package chemical environment using TPA and Multiflo codes (Additional CNWRA FTE 0.1)	M	09/30/2001	JOINT		0.1	0.1	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
ENFE 321.2	Evaluate DOE approach and document resolution (Additional CNWRA FTE 0.1)	H	11/30/2000	CNWRA	IM	0.1	0.15	0	0	0	0
ENFE 321.3	Review Waste Package (WP) and Engineered Barrier System Transport (EBS) PMRs	H	09/30/2001	JOINT		0.1	0.1	0	0	0	0
ENFE 321.4	Provide updated input parameters for TPA Code	H	09/30/2001	JOINT		0.05	0.05	0	0	0	0
ENFE 322.1	Analysis of coupled THC effects on waste package environment using TPA and multiflow codes	H	09/27/2002	JOINT		0	0	0.2	0.25	0	0
ENFE 322.2	Evaluate DOE approach and document resolution	H	09/30/2002	CNWRA		0	0	0.05	0.15	0	0
ENFE 322.3	Review Waste Package (WP) and Engineered Barrier System Transport (EBS) PMRs	H	11/30/2001	JOINT		0	0	0.05	0.05	0	0
ENFE 322.4	Provide updated input parameters for TPA Code	H	09/27/2002	JOINT		0	0	0.05	0.05	0	0
ENFE 330	Subissue 3 Resolution Activities: Effects of Coupled THC Processes on Chemical Environment for Radionuclide Release (FY2002)	H								0	0
ENFE 330.1	Sensitivity study and analysis of effects of design on coupled THC effects on Chemical Environment for Radionuclide Release	H	09/27/2002	JOINT		0	0	0.05	0.05	0	0
ENFE 330.2	Letter report documenting analysis applied to acceptance criteria	H	04/19/2002	CNWRA	IM	0	0	0	0	0	0
ENFE 330.3	Review Waste Package (WP) and Engineered Barrier System Transport (EBS) PMRs	H	09/27/2002	JOINT		0	0	0.05	0.05	0	0
ENFE 331.1	Analysis of coupled THC effects on chemical environment for radionuclide release using TPA and MULTIFLO codes	H	09/30/2001	JOINT		0.15	0.15	0	0	0	0
ENFE 331.2	Evaluate DOE approach and document resolution (Additional CNWRA FTE 0.05)	H	01/30/2001	CNWRA	IM	0.05	0.25	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
ENFE 331.3	Review Waste Package (WP) and Engineered Barrier System Transport (EBS) PMRs	H	09/30/2001	JOINT		0.15	0.15	0	0	0	0
ENFE 331.4	Provide updated input parameters for TPA Code	H	09/30/2001	JOINT		0.05	0.05	0	0	0	0
ENFE 332.1	Analysis of coupled THC processes on chemical environment for radionuclide release using TPA and MULTIFLOW codes	H	09/27/2002	JOINT		0	0	0.2	0.15	0	0
ENFE 332.2	Evaluate DOE abstraction of salt/precipitate formation on waste package/drip shield surface	H	05/03/2002	CNWRA	IM	0	0	0	0.1	0	0
ENFE 332.3	Review Waste Package (WP) and Engineered Barrier System Transport (EBS) PMRs	H	09/27/2002	JOINT		0	0	0.2	0.15	0	0
ENFE 332.4	Provide updated input parameters for TPA Code	H	09/27/2002	JOINT		0	0	0.02	0.05	0	0
ENFE 340	Subissue 4 Resolution Activities: Effects of Coupled Processes on Radionuclide Transport Through Engineered and Natural Barriers (FY2002)	H								0	0
ENFE 340.2	Letter report documenting analysis applied to acceptance criteria	H	02/25/2000	CNWRA	IM	0	0	0	0	0	0
ENFE 340.3	Review ISM PMR Rev 0	H	02/25/2000	JOINT		0	0	0	0	0	0
ENFE 340.4	Review Unsaturated Zone Flow and Transport (UZ) and NFE PMRs	H	09/30/2000	JOINT		0	0	0	0	0	0
ENFE 341.1	Analysis of coupled THC processes on radionuclide transport through engineered and natural barriers using codes	H	09/27/2002	JOINT		0.15	0.15	0.2	0.25	0	0
ENFE 341.2	Evaluate DOE approach and document resolution	H	02/28/2001	CNWRA	IM	0.05	0.25	0	0	0	0
ENFE 341.3	Review WP, EBS, UZ and NFE PMRs	H	09/30/2001	JOINT		0.15	0.15	0	0	0	0
ENFE 341.4	Provide updated input parameters for TPA Code	H	09/30/2001	JOINT		0.05	0.05	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
ENFE 342	Document DOE commitments used for closure	H	09/27/2002	JOINT	0	0	0.13	0.05	0	0	
ENFE 342.1	Sensitivity study and analysis of effects of design on THC effects on radionuclide transport	H	09/27/2002	JOINT	0	0	0.05	0.1	0	0	
ENFE 350	Subissue 5 Resolution Activities: Coupled Processes Affecting Nuclear Criticality in Nearfield (Fy2001)/ Closed in FY1999)	L							0	0	
ENFE 350.1	Review FEP database justification for exclusion	L	09/27/2002	JOINT	0	0	0.15	0.05	0	0	
D. Yucca Mountain Review Plan											
ENFE 700	Develop YM Standard Review Plan Rev 2	H	09/30/2002	JOINT	0.7	1	0	0	0	0	
ENFE 701	ISI - Quantity and Chemistry of Water Contacting Waste Packages and Waste Forms	H	09/30/2002	JOINT	0	0	0	0	0	0	
ENFE 702	ISI - Radionuclide Release and Solubility Limits	H	09/30/2002	JOINT	0	0	0	0	0	0	
ENFE 703	MULTIFLO code modification and sensitivity analyses	H	09/30/2002	JOINT	0	0	0	0	0	0	
F. Review DOE Submittals											
ENFE 800	Review DOE Submittals	M	09/27/2002	JOINT	0	0	0.1	0.2	0	0	
ENFE 802	Review Final Environmental Impact Statement	H	07/30/2002	JOINT	0	0	0	0	0	0	
ENFE 803	Review site sufficiency documents and prepare comments for Commission Paper	H	03/31/2001	JOINT	0	0	0	0	0	0	
G. License Application/SER Development											
ENFE 900	License Application Review and Preparation of SER	H	09/30/2004	JOINT	0	0	0	0	0	0	
H. Hearing Support											
ENFE 1000	Hearing support		09/30/2004	GEOS	0	0			0	0	
I. QA Program Support											

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
ENFE 1100	Conduct observation quality assurance audit	M	09/27/2002	GEOS		0	0	0.05	0	0	0
J. Issue Resolution during Performance Confirmation											
ENFE 1200	Issue Resolution During Performance Confirmation		09/30/2002	JOINT		0	0	0	0	0	0
ENFE 1201	Performance Confirmation program identification	M	09/30/2000	JOINT		0	0	0	0	0	0
ENFE 1202	Subissue 1 Resolution Activities: Effects of Coupled Thermal-Hydrological-Chemical (THC) Processes on Seepage and Flow (FY2001)		09/30/2002	JOINT		0	0	0	0	0	0
ENFE 1203	Subissue 2 Resolution Activities: Effects of Coupled THC Processes on Waste Package Chemical Environment		09/30/2002	JOINT		0	0	0	0	0	0
ENFE 1204	Subissue 3 Resolution Activities: Effects of Coupled THC Processes on Chemical Environment for Radionuclide Release		09/30/2002	JOINT		0	0	0	0	0	0
ENFE 1205	Subissue 4 Resolution Activities: Effects of Coupled Processes on Radionuclide Transport Through Engineered and Natural Barriers		09/30/2002	JOINT		0	0	0	0	0	0
K. Public Outreach											
ENFE 1300	Provide support for Public Outreach Program	H	09/27/2002	GEOS		0	0	0.05	0	0	0
Totals						2.9	4.2	3	3.4	0	0

Container Life/Source Term (CLST) FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (2.7) and CNWRA (3.5)

Total Allocated FTE FY02: NRC (5) and CNWRA (4.8)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
A. Issue Resolution/IRSRs											
CLST	300	Issue Resolution	09/27/2002	PEGS		0	0	0.3	0.15	0	0
CLST	302	IRSR on Container Life/Source Term, Rev 2	H	09/17/1999	PEGS	0	0	0	0	0	0
CLST	302.1	CNWRA Input to IRSR on Container Life/Source Term, Rev 2	H	08/06/1999	CNWRA	MM	0	0	0	0	0
CLST	303	IRSR on Container Life/Source Term, Rev 3	H	11/15/2000	PEGS	0	0	0	0	0	0
CLST	303.1	CNWRA Input to IRSR on Container Life/Source Term, Rev 3	H	06/30/2000	CNWRA	MM	0	0	0	0	0
CLST	304	Input to Integrated IRSR	H	09/30/2002	PEGS	0.3	0	0.8	0	0	0
CLST	304.1	CLST Input to Integrated IRSR	H	07/16/2002	CNWRA	MM	0	0.5	0	0	0
CLST	307	CNWRA Operations and Planning	H	09/30/2002	PEGS	0	0	0.2	0	0	0
CLST	308	ACNW / NWTRB Support	H	09/30/2002	JOINT	0	0	0.2	0.1	0	0
CLST	310	Subissue 1 Resolution Activities: The Effects of Corrosion Processes on the Lifetime of the Containers (FY2002)				0	0	0	0	0	0
CLST	311	Improve overpack corrosion model in EBSFAIL module of TPA code	M	07/26/2002	PEGS	0.1	0.6	0.2	0.2	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE N</i>	<i>FY01 FTE C</i>	<i>FY02 FTE N</i>	<i>FY02 FTE C</i>	<i>FY03 FTE N</i>	<i>FY03 FTE C</i>
CLST 311.1	Stress Corrosion Cracking and Hydrogen embrittlement of overpack materials (include effects if impurities)	H	05/01/2002	CNWRA	IM	0.1	0.4	0.3	0.5	0	0
CLST 311.2	Passive Dissolution of Overpack Materials (modeling and experiment)	H	08/29/2002	CNWRA	IM	0.1	0.3	0.3	0.6	0	0
CLST 312.1	Provide Updated Input Parameters for TPA	H	09/30/2002	JOINT		0	0	0	0.1	0	0
CLST 312.2	Conduct Sensitivity Analyses using TPA code	H	09/30/2002	JOINT		0	0	0.1	0.05	0	0
CLST 313	Natural Analogues	M	01/24/2002	CNWRA	IM	0	0	0	0.2	0	0
CLST 320	Subissue 2 Resolution Activities: The Effects of Phase Instability and Initial Defects on the Mechanical Failure and Lifetime of the Containers (FY2001)					0	0	0	0	0	0
CLST 322	Evaluate DOE Approach; use IRSR/YMRP acceptance criteria	M	09/30/2002	JOINT		0	0	0	0	0	0
CLST 322.1	Effect Of Fabrication Processes on Material Stability (Characterization and Corrossion)	H	05/27/2002	CNWRA	IM	0.1	0.1	0	0.4	0	0
CLST 322.2	Provide updated input parameters for TPA code	M	09/30/2002	JOINT		0	0	0.1	0.1	0	0
CLST 322.3	Conduct Sensitivity Analyses using TPA code	M	09/30/2002	JOINT		0	0	0.1	0.05	0	0
CLST 330	Subissue 3 Resolution Activities: The Rate at which Radionuclides are Released from the EBS through the Oxidation and Dissolution of Spent Fuel (FY2001)									0	0
CLST 331	Improve Release Models in EBSREL module of TPA code	H	09/30/2002	JOINT		0	0	0.1	0.1	0	0
CLST 331.1	Process Modeling - Spent Fuel Dissolution (may includes radiolysis, P O2, colloid formation, WP corrosion products, etc.)	H	09/30/2002	JOINT		0.1	0.3	0.2	0.3	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
CLST	331.2 Evaluate Models for Cladding as a metallic barrier (SF Surface Area) and incorporate as appropriate in EBSREL	M	09/30/2002	JOINT	IM	0.1	0.3	0.1	0.25	0	0
CLST	331.3 Evaluate DOE Approach; use IRSR/YMRP acceptance criteria	M	09/30/2002	JOINT		0.1	0.1	0	0	0	0
CLST	331.4 Provide Updated Input Parameters for TPA code	M	09/30/2002	JOINT		0.1	0.1	0.1	0.1	0	0
CLST	331.5 Conduct Sensitivity Analyses using TPA code	M	09/30/2002	JOINT		0	0	0.1	0.05	0	0
CLST	331.6 Spent Fuel Verification Experiments	M	05/01/2002	CNWRA		0	0	0	0.1	0	0
CLST	340 Subissue 4 Resolution Activities: The Rate at which Radionuclides in HLW Glass are Released from the EBS (FY2001)									0	0
CLST	340.1 Glass leaching and In-Package Chemistry (Forward rate reaction)		09/13/2002	CNWRA	IM	0	0	0	0.3	0	0
CLST	340.2 Evaluate DOE Approach: Use IRSR/YMRP acceptance Criteria	M	09/30/2002	JOINT		0.1	0.1	0	0	0	0
CLST	340.3 Provide Updated Input Parameters for TPA	M	09/30/2002	JOINT		0	0	0	0.05	0	0
CLST	340.4 Conduct Sensitivity Analyses Using TPA codes	M	09/30/2002	JOINT		0	0	0	0.05	0	0
CLST	350 Subissue 5 Resolution Activities: The Effects of the WP and EBS Designs on the Potential for Nuclear Criticality (FY2002)									0	0
CLST	351 Criticality Analysis Methodology	M	09/30/2001	PEGS		0	0	0	0	0	0
CLST	351.4 Provide Updated Input Parameters for TPA code	M	09/30/2001	PEGS		0.1	0	0.1	0.05	0	0
CLST	351.5 Conduct sensitivity analyses using TPA code	M	09/30/2002	PEGS		0	0	0	0.05	0	0
CLST	351.6 SER of DOE SNF for disposal criticality	M	09/30/2001	PEGS		0.25	0	0	0	0	0
CLST	352 Evaluate DOE Approach: Use IRSR/YMRP acceptance Criteria	M	09/30/2002	CNWRA		0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
CLST	360	Subissue 6 Resolution Activities: The Effects of Alternate EBS Design Features on Container Lifetime and Radionuclide Release from the EBS (FY2002)								0	0
CLST	361	Improve DS Corrossion Model in TPA code	M	09/30/2002	JOINT	0	0	0.1	0.1	0	0
CLST	361.1	Corrosion , Hydride Cracking and Scc of DS	M	09/30/2002	CNWRA	0.1	0.3	0	0.2	0	0
CLST	362	Evaluate alternate WP design performance issues, Evaluate DOE approach; Use IRSR/YMRP Acceptance Criteria	H	09/30/2001	JOINT	0.1	0.2	0	0	0	0
CLST	362.1	Provide Updated Input Parameters for TPA	M	09/30/2002	JOINT	0	0	0.1	0.1	0	0
CLST	362.2	Conduct Sensitivity Analyse Using TPA codes	M	09/30/2002	JOINT	0.1	0	0.05	0.05	0	0
CLST	370	Issue Closure letter for CLST	H	09/30/2002	JOINT	AI	0.1	0.1	0.1	0	0
CLST	380	Issue Closure letter for Criticality	H	09/30/2001	JOINT	AI	0.1	0.1	0.1	0	0
C.TPA Code Development											
CLST	400.3	TPA 4.0 Sensivity Studies	H	06/15/2000	JOINT	0	0	0	0	0	0
D. Yucca Mountain Review Plan											
CLST	701	Development of acceptance criterial for ISI components	H	09/30/2001	JOINT	0	0	0	0	0	0
CLST	702	Input to YMRP Rev 1 through 2	H	09/30/2002	JOINT	0	0	0	0	0	0
F. Review DOE Submittals											
CLST	800	Review Draft Environmental Impact Statement and prepare comments for Commission Paper	H	09/30/2002	JOINT	0	0	0	0	0	0
CLST	801	Review Final Environmental Impact Statement	H	09/30/2002	JOINT	0	0	0	0	0	0
CLST	802	Review working draft license application and prepare comments for Commission paper	H	09/30/2002	JOINT	0	0	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
CLST	803 Review Site sufficiency documents and prepare comments for Commission Paper	H	09/30/2001	JOINT		0	0	0	0	0	0
CLST	804 Input to TSPAI review of PMRS, ISM, sufficiency comments licensing activities and hearing support	H	09/30/2002	PEGS		0	0	0	0	0	0
CLST	805 Review Final VA and Prepare Comments for Commission Paper	H	02/22/1999	GEOS		0	0	0	0	0	0
G. License Application/SER Development											
CLST	900 License Application Review and Preparation of SER	H	09/30/2004	JOINT		0	0	0	0	0	0
H. Hearing Support											
CLST	1000 Hearing Support	H	09/30/2004	PEGS		0	0	0	0	0	0
I. QA Program Support											
CLST	1100 QA observation audit support	H	09/30/2002	JOINT		0	0	0	0	0	0
J. Issue Resolution during Performance Confirmation											
CLST	1200 Development of performance confirmation methodologies	H	09/30/2002	JOINT		0	0	0	0.2	0	0
K. Public Outreach											
CLST	1300 CNWRA support to Public Outreach program		09/30/2002	PEGS		0	0	0	0	0	0
L. Criticality Topical report											
CLST	500 Criticality Topical Report Review - Acceptance Review	H	02/28/1999	JOINT		0	0	0	0	0	0
CLST	501 Criticality Topical Report Review - RAI's issued		08/18/1999	JOINT		0	0	0	0	0	0
CLST	502 Criticality Topical Report Review - Technical Exchange		10/06/1999	JOINT		0	0	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
CLST	517 Criticality Topical Report Review/Navy Addendum - Technical Exchange on Draft SER		10/15/2000	JOINT		0	0	0	0	0	0
CLST	518 Criticality Topical Report Review/Navy Addendum - Final SER completed		11/30/2000	JOINT		0	0	0	0	0	0
CLST	519 Review of Revision 1 of Disposal Criticality Analyses Methodology Topical report		11/07/2001	JOINT	IM	0	0	0.25	0.1	0	0
CLST	520 Rev.1 SER of Commercial SNF Criticality	M	09/27/2002	PEGS	IM	0.4	0	0.5	0.2	0	0
CLST	521 Final SER of Navy SNF for disposal Criticality	M	09/27/2002	JOINT	IM	0.2	0	0.5	0	0	0
Totals						2.65	3.5	5	4.8	0	0

Thermal Effects on Flow (TEF) FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (0.8) and CNWRA (1.1)

Total Allocated FTE FY02: NRC (1.7) and CNWRA (2.4)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
A. Issue Resolution/IRSRs											
TEF	303	IRSR on Thermal Effects on Flow Rev 3	H	09/30/2000	GEOS						
TEF	303.1	CNWRA input to TEF IRSR Rev 3	H	05/24/1999	CNWRA	MM	0	0	0	0	0
TEF	305	Integrate IRSR	H	07/08/2002	GEOS		0	0	0.3	0	0
TEF	305.1	CNWRA input to Integrate IRSR	H	05/24/2002	CNWRA	MM	0	0	0	0	0
TEF	310	Subissue 1: FEPs Related to TEF		09/30/2002	JOINT		0.5	0.5	0.7	0.2	0
TEF	310.1	Review material provided as per NRC/DOE Agreements		10/09/1998	GEOS		0	0	0	0	0
TEF	310.2	Interface with DOE on open acceptance criteria related to subissue 1		09/30/2001	JOINT		0	0	0	0	0
TEF	320	Subissue 2: Thermal Effects on T, H, S, and Flux		09/30/2002	JOINT		0.3	0.6	0.7	1.5	0
TEF	320.1	Conduct Process-Level Sensitivity Analysis - Status Report		07/30/2001	CNWRA	IM	0	0	0	0	0
TEF	320.2	Review Material provided as per NRC/ DOE Agreements	H	04/12/2002	GEOS		0	0	0	0.2	0
TEF	320.3	Support Development of MULTIFLO as needed (Support to ENFE)		09/30/2000	CNWRA		0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TEF	320.4	Interface with DOE on open acceptance criteria related to subissue 2 (Appendix 7)	09/30/2001	JOINT		0	0	0	0	0	0
TEF	320.5	Conduct independent experiments on thermal effects on flow (Journal Article or Presentation)	09/29/2001	CNWRA	IM	0	0	0	0	0	0
TEF	320.6	Attend DOE Quarterly Thermal Test Meeting	09/30/2001	JOINT		0	0	0	0	0	0
TEF	320.7	Cold trap experiment and modeling ,(journal Article of Presentation)	07/26/2002	CNWRA	IM	0	0	0	0.1	0	0
TEF	320.8	Mountain-Scale TH Analysis - Status Report	01/30/2000	JOINT	IM	0	0	0	0	0	
TEF	322	Conduct System-level Sensitivity Analysis - Status Report	07/30/2001	CNWRA	IM	0	0	0	0	0	0
TEF	323	Support Development of TEF related aspects of TPA code as needed	09/30/2001	JOINT		0	0	0	0	0	0
TEF	324	Interface with DOE on open acceptance criteria related to subissue 3 (Appendix 7)	09/30/2001	GEOS		0	0	0	0	0	0
D. Yucca Mountain Review Plan											
TEF	700	Develop YM Standard Review Plan Rev 2	09/30/2002	JOINT		0	0	0	0	0	0
TEF	701	Review of PMR/AMR's - Evaluate against TEF related Acceptance Criteria	01/30/2001	JOINT	IM	0	0	0	0	0	0
TEF	702	Develop YM Standard Review Plan Rev 1	09/30/2002	JOINT		0	0	0	0	0	0
TEF	703	ISI Integration	09/30/2002	JOINT		0	0	0	0	0	0
F. Review DOE Submittals											
TEF	800	Review of DOE Submittals	09/30/2002	JOINT		0	0	0	0	0	0
TEF	801	Review Final VA and Prepare Comments for Commission Paper	02/22/1999	GEOS		0	0	0	0	0	0
TEF	802	Environmental Impact Statement - review draft	09/30/2000	JOINT		0	0	0	0	0	0
TEF	803	Site Sufficiency Document Review	09/30/2000	JOINT		0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TEF 804	License Application - review working draft	H	09/30/2003	JOINT		0	0	0	0	0	0
G. License Application/SER Development											
TEF 900	License Application - Review and Prepare SER		09/30/2004	JOINT		0	0	0	0	0	0
TEF 901	Conduct TEF related system-level sensitivity analysis as needed to support LA review		09/30/2002	CNWRA		0	0	0	0	0	0
H. Hearing Support											
TEF 1000	Hearing support		09/30/2004	GEOS		0	0			0	0
I. QA Program Support											
TEF 1100	Observe DOE QA audit of TH program		09/30/2001	JOINT		0	0	0	0	0	0
J. Issue Resolution during Performance Confirmation											
TEF 1200	Issue Resolution during Performance Confirmation		09/30/2002	JOINT		0	0	0	0	0	0
TEF 1201	Evaluate Long-term DOE test results, model concepts, and data (Status Report)		09/27/2002	CNWRA	IM	0	0	0	0.4	0	
K. Public Outreach											
TEF 1300	Provide in put to Public Outreach Program		09/30/2002	GEOS		0	0	0	0	0	0
Totals						0.8	1.1	1.7	2.4	0	0

Repository Design/Thermal-Mechanical Effects (RDTME)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (2.35) and CNWRA (5.25)
 ()
 Total Allocated FTE FY02: NRC (6) and CNWRA (6.3)
 Total Allocated FTE FY03: NRC (0) and CNWRA (0)

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
A. Issue Resolution/IRSRs											
RDTME 300	Input to integrated IRSR	H	09/30/2002	PEGS		0	0	0.4	0	0	0
RDTME 301.1	RDTME Input to integrated IRSR	H	07/30/2002	CNWRA	MM	0	0	0	0.3	0	0
RDTME 302.1	RDTME Issue Resolution Review	H	09/17/2002	JOINT		0	0	0.4	0.4	0	0
RDTME 303.1	CNWRA input to IRSR Rev 3	H	07/28/2000	CNWRA	MM	0	0	0	0	0	0
RDTME 304	IRSR on Repository Design and Thermal Mechanical Effects Rev 4	H	09/30/2001	PEGS		0.3	0	0	0	0	0
RDTME 304.1	CNWRA input to Integrated IRSR	H	08/01/2001	CNWRA	MM	0	0.35	0	0	0	0
RDTME 310	Subissue 1 Resolution Activities: Design Control Process (FY2002)	H	09/27/2002	JOINT		0	0	0	0	0	0
RDTME 310.1	Review of Design Control Process	H	09/30/2001	JOINT	AI	0.15	0.25	0	0	0	0
RDTME 310.2	Review of Design Control Process	M	09/27/2002	JOINT		0.15	0.25	0.1	0.05	0	0
RDTME 320	Subissue 2 Resolution Activities: Seismic Design Methodology	H	06/11/2000	JOINT	AI	0	0	0	0	0	0
RDTME 320.1	Review of Seismic Topical Report # 3	H	09/25/2003	JOINT	IM	0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
RDTME	330 Subissue 3 Resolution Activities: Thermal Mechanical Effects		09/30/2002	JOINT		0	0	0	0	0	0
RDTME	331.1 Evaluate DOE Approach using YMRP Acceptance Criteria		09/28/2001	JOINT		0.05	0.3	0	0	0	0
RDTME	331.2 Conduct Independent Analyses of Repository Design		09/28/2001	JOINT		0.1	0.6	0	0	0	0
RDTME	331.3 Review of Stability and Design of Underground Openings	H	06/28/2002	JOINT	IM	0.05	0.1	0.6	0.5	0	0
RDTME	331.4 Rockfall Study	H	08/29/2002	JOINT	IM	0.05	0.1	0.3	0.2	0	0
RDTME	331.5 Participation in DECOVALEX Project/Coupled Process Study	H	09/27/2002	JOINT	IM	0.1	0.3	0.2	0.3	0	0
RDTME	331.6 Review Surface Design/Operation		09/28/2001	JOINT		0.15	0.65	0	0	0	0
RDTME	331.7 Review Subsurface Design/Operation		09/28/2001	JOINT		0.15	0.2	0	0	0	0
RDTME	331.8 Review and Analyses of Ventilation Design	M	09/21/2002	JOINT		0	0	0.15	0.1	0	0
RDTME	332.1 Evaluate DOE Approach using YMRP Acceptance Criteria		09/27/2002	JOINT		0	0	0	0	0	0
RDTME	332.2 Conduct Independent Analyses of Repository Design		09/27/2002	JOINT		0	0	0	0	0	0
RDTME	332.3 Conduct Sensitivity Analyses Using TPA Code		09/27/2002	JOINT		0	0	0	0	0	0
RDTME	332.4 Effects of drift Collapse	H	09/27/2002	JOINT		0	0	0.25	0.3	0	0
RDTME	340 Subissue 4 Resolution Activities: Seal Design and Performance (FY2002)	L	09/30/2002	JOINT		0	0	0	0	0	0
RDTME	370 Validation of Computer Codes	H	09/30/2002	JOINT		0	0	0.2	0.4	0	0
D. Yucca Mountain Review Plan											
RDTME	700 Develop input to YMRP, Rev 0	H	02/28/2000	JOINT	AI	0	0	0	0	0	0
RDTME	701 Develop input to YMRP, Rev 1	H	09/30/2001	JOINT		0.6	1.3	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
RDTME	702 Develop input to YMRP, Rev 2	H	09/30/2002	JOINT		0	0	0	0	0	0
E. Develop Integrated Safety Assessment Review Methology											
RDTME	500 ISA Prediction Tool Development	H		JOINT	IM	0	0	0	0	0	0
RDTME	501 ISA Prediction Tool Development - Progress Report	H	09/27/2001	JOINT	IM	0.2	0.75	0	0	0	0
RDTME	502 Review of Hazard Identification for GROA	H	06/11/2002	JOINT	IM	0	0	0.6	0.5	0	0
RDTME	505 Review of Hazard Analyses	H	07/07/2002	JOINT		0	0	0.3	0.3	0	0
RDTME	506 Review of Event Sequence Analyses	H	09/27/2002	JOINT		0	0	0.3	0.2	0	0
RDTME	507 Review of Consequence analyses	H	09/21/2002	JOINT		0	0	0.3	0.2	0	0
RDTME	508 PCSA Tool development and Verification	H	09/27/2002	JOINT		0	0	0.3	0.5	0	0
RDTME	509 Review of Identification of SSC's Important to Safety	H	09/10/2002	JOINT	IM	0	0	0.35	0.4	0	0
F. Review DOE Submittals											
RDTME	510 Review of Design to Permit Performance Confirmation	H	09/27/2002	JOINT	AI	0	0	0.05	0.05	0	0
RDTME	511 Review of Design and analyses of EBS	H	08/19/2002	JOINT	IM	0	0	0.35	1	0	0
RDTME	512 Review of Retriability Plan	M	09/27/2002	JOINT		0	0	0.1	0.1	0	0
RDTME	513 Preclosure Criticality	L	09/27/2002	JOINT		0	0	0.1	0.05	0	0
RDTME	514 Decontamination , Decommissioning , and Permanent Closure	L	09/30/2002	JOINT		0	0	0	0	0	0
RDTME	801 Review of Geotechnical information	H	09/27/2002	JOINT		0	0	0.1	0.15	0	0
RDTME	802 Dynamic Soil Structure Interaction Analyses	H	05/25/2002	JOINT		0	0	0.05	0.1	0	0
RDTME	803 Review of design and analyses of Surface Facility Structures	L	09/27/2002	JOINT		0	0	0.1	0.2	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
RDTME 805	Review PMR on Rockfall Model	H	09/28/2001	JOINT		0	0.1	0	0	0	0
RDTME 806	Review Final EIS	H	09/28/2002	PEGS		0.1	0	0.2	0	0	0
G. License Application/SER Development											
RDTME 900	Review License Application and prepare SER	H	09/30/2004	JOINT		0	0	0	0	0	0
H. Hearing Support											
RDTME 1000	Hearing Support	H	09/30/2004	JOINT		0	0	0	0	0	0
I. QA Program Support											
RDTME 1100	QA support - Audit Observation and Reports	M	09/30/2002	PEGS		0.2	0	0.2	0	0	0
J. Issue Resolution during Performance Confirmation											
RDTME 1200	Issue Resolution during Performance Confirmation	H	09/30/2002	PEGS		0	0	0	0	0	0
K. Public Outreach											
RDTME 1300	Provide Support to Public Outreach program		09/30/1997	PEGS		0	0	0	0	0	0
Totals						2.35	5.25	6	6.3	0	0

TSPA/Technical Integration (TSPA)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (12) and CNWRA (14.3)

Total Allocated FTE FY02: NRC (8.5) and CNWRA (7)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
A. Issue Resolution/IRSRs											
TSPA 300	Input to Integrated IRSR Rev 1		05/15/1998	PAIS						0	0
TSPA 303	IRSR on Total System Performance Assessment Rev 3	H	09/30/2000	PAIS		0	0	0	0	0	0
TSPA 303.1	CNWRA input to TSPA IRSR Rev 3	H	07/30/2000	CNWRA	MM	0	0	0	0	0	0
TSPA 305	TSPA Issue Resolution Activities	H	07/30/2002	JOINT	AI	0	0	0	0	0	0
TSPA 305.1	Issue Resolution : Multiple Barriers	H	09/27/2002	JOINT		0	0	0.3	0.2	0	0
TSPA 305.2	Issue Resolution- Scenario Analyses	H	09/27/2002	JOINT		0	0	0.2	0.3	0	0
TSPA 305.7	Issue Resolution- Integration	H	09/27/2002	JOINT		0	0	0.5	0.1	0	0
TSPA 305.8	TSPAI Input to Rev. 0 Integrated IRSR	H	02/15/2002	CNWRA		0	0	0	0	0	0
TSPA 305.9	Revised TSPAI Issue Resolution Blue Print	H	05/15/2002	CNWRA	IM	0	0	0	0.2	0	0
TSPA 307.4	Support Other Pre- Licensing Interactions	M	09/27/2002	CNWRA		0	0	0.2	0.2	0	0
TSPA 310	Subissue 1 Resolution Activities: Model Abstraction (FY2002)		09/30/2002							0	0
TSPA 310.1	Issue Resolution- Model Abstraction Engineered Barriers		09/27/2002	JOINT	AI	0	0	0.4	0.3	0	0
TSPA 310.2	Issue Resolution - Model Abstraction - Geosphere		09/27/2002	JOINT	AI	0	0	0.4	0.3	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TSPA 310.3	Issue Resolution : Model Abstraction- Biosphere		09/27/2002	JOINT		0	0	0.3	0.2	0	0
TSPA 310.4	Issue Resolution : Overall Performance Objectives		09/27/2002	JOINT	AI	0	0	0.4	0.2	0	0
TSPA 310.9	Appendix 7: Principles of Transparency and Traceability in documentation	M	08/30/2001	JOINT	AI	0.1	0.1	0	0	0	0
TSPA 312	Activities Related to Resolving Qualitative Review Methods	H	09/27/2002			0	0	0	0	0	0
TSPA 312.1	Activities Related to Resolving Model Abstraction Subissue	H	03/31/2002	JOINT	AI	0	0	0	0	0	0
TSPA 312.2	Letter Report: Evaluation of TSPA-SR (TSPA-SR Model Document and TSPA-SR Technical document)	H	01/15/2001	JOINT	IM	0.3	0.3	0	0	0	0
TSPA 312.3	Input to Evaluation of TSPA- SR Model in Goldsim	H	04/29/2002	CNWRA	IM	0.2	0.2	0.5	0.4	0	0
TSPA 312.4	Appendix 7: Discuss NRC comments on Goldsim, applicable to Model Abstraction Subissues!	L	08/30/2001	JOINT	AI	0.1	0.1	0	0	0	0
TSPA 312.5	Letter Report: Evaluation of Model support and Integration (Review DOE technical documents related to TSPA, SR-AMRs and PMRs: Input to IRSR)	H	11/30/2000	JOINT	IM	0.4	0.3	0	0	0	0
TSPA 312.6	Update to Letter Report: Evaluation of Model support and Integration (Review DOE technical documents related to SR-AMRs and PMRs: Input to IRSR)	L	03/15/2001	JOINT	AI	0.05	0.05	0	0	0	0
TSPA 312.7	Issue resolution Activities related to to the Biosphere (Joint activities with IA on mass loading and redistribution; input into IRSR and TPA 5.0 Users Guide)	M	05/15/2001	CNWRA	AI	0.1	0.1	0	0	0	0
TSPA 320	Subissue 2 Resolution Activities: Scenario Analysis (FY2000)	H								0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>		
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	
TSPA	320.1	Review of DOE FEP Screening	H	06/19/2000	JOINT	IM	0	0	0	0	0	0
TSPA	320.2	Activities Related to Resolving Scenario Analyses Subissue	M	09/30/2001	JOINT	AI	0	0	0	0	0	0
TSPA	321	Activities Related to Resolving Scenario Analyses Subissue	M	03/31/2002	JOINT	AI	0	0	0	0	0	0
TSPA	321.1	Letter Report: Evaluation of FEP Screening and formation of Scenario Classes (Review of DOE technical documents related to SR- FEP database, FEP AMR's; Input to IRSR	H	10/30/2000	JOINT	IM	0.2	0.2	0	0	0	0
TSPA	321.2	Update to Letter Report: Evaluation of FEP Screening and formation of Scenario Classes (Review of DOE technical documents related to SR- FEP database, FEP AMR's; Input to IRSR	M	03/15/2001	JOINT	AI	0.05	0.05	0	0	0	0
TSPA	321.3	Technical exchange; FEP Analysis and scenario Screening	H	12/12/2000	JOINT	AI	0.1	0.1	0	0	0	0
TSPA	330	Subissue 3: Resolution Activites: Demonstration of Multiple Barriers (FY2002)		09/30/2002							0	0
TSPA	330.1	Appendix 7: Repository Safety Strategy (Identification and capability of barriers)	M	10/30/2000	JOINT	AI	0.1	0.1	0	0	0	0
TSPA	330.2	Appendix 7: Identification and capability of barriers)	M	02/15/2001	JOINT	AI	0.1	0.1	0	0	0	0
TSPA	330.3	Letter report : Evaluation of DOE's Multiple Barrier approach (Review DOE technical documents related to SR; Input to IRSR	H	12/15/2000	JOINT	IM	0.2	0.1	0	0	0	0
TSPA	330.4	Update to Letter report : Evaluation of DOE's Multiple Barrier approach (Review DOE technical documents related to SR; Input to IRSR	M	08/30/2001	JOINT	AI	0.05	0.05	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TSPA 330.5	Letter report:Recommendation for Transparency and Traceability in Documentation and the System Description (Review of TSPA-SR Model Report and TSPA-SR Technical document and AMRs and PMRs)	M	06/15/2001	JOINT	IM	0.2	0.2	0	0	0	0
TSPA 340	Subissue 4: Resolution Activites: Demonstration of Overall Performance Objective (FY2002)		09/30/2002			0	0	0	0	0	0
TSPA 340.1	Activities Related to Resolving Demonstration of the Overall Performance Objective	H	09/27/2002	JOINT	AI	0	0	0	0	0	0
TSPA 340.2	Letter Report: Evaluation of DOE's approach to calculate the overall performance measure (review DOE technical documents related to SR-TSPA -SR Technical Document; input to IRSR)	H	12/20/2000	JOINT	IM	0.1	0.2	0	0	0	0
TSPA 340.3	Update to Letter Report: Evaluation of DOE's approach to calculate the overall performance measure (review DOE technical documents related to SR-TSPA -SR Technical Document; input to IRSR)	H	08/30/2001	JOINT	AI	0.05	0.05	0	0	0	0
TSPA 340.8	Comparison of Select Results (TSPA and TPA)	M	02/15/2001	JOINT	AI	0.1	0.1	0	0	0	0
TSPA 341	Activities Related to Resolving Demonstration of the Overall Performance Objective	H	09/27/2002	JOINT	AI	0	0	0	0	0	0
TSPA 350	Risk Insights Project:	H	09/30/2002	JOINT		0.2	0	0	0	0	0
TSPA 350.1	Risk Insights Project: Project Plan		11/12/2001	JOINT	AI	0	0	0.1	0.1	0	0
TSPA 350.2	Risk Insights Report	H	06/28/2002	JOINT	MM	0	0.3	1	0.6	0	0
TSPA 360	TSPA-LA Review Strategy		09/30/2002	JOINT		0.2	0.2	0	0	0	0
TSPA 360.1	Development of TSPA-LA Review Strategy	H	12/17/2001	JOINT	IM	0	0	0	0	0	0
TSPA 360.2	Project Plan for demonstration of TSPA-LA Review Strategy		01/21/2001	JOINT	AI	0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TSPA 360.3	Demonstration of TSPA-LA Review Strategy	M	07/15/2002	CNWRA	IM	0	0	0	0	0	0
TSPA 370	Performance Confirmation Activities		09/27/2002	JOINT	AI	0	0	0.3	0	0	0
TSPA 380	TSPA Quantitative Review Methods	H	09/27/2002	CNWRA	AI	0	0	0	0	0	0
TSPA 380.1	TSPA Quantitative Review Methods Report	H	12/17/2001	CNWRA	AI	0	0	0.4	0.1	0	0
TSPA 380.2	Demonstration of TSPA Quantitative Review Methods	H	07/15/2002	CNWRA	AI	0	0	0.6	0.5	0	0
C.TPA Code Development											
TSPA 400	TPA Version 4.0 Code	H	04/03/2000	JOINT	IM	0	0	0	0	0	0
TSPA 400.1	TPA 4.0 Beta Version (including Improvement in Colloids; WP Degradation; Burnup & Glass Form)	H	02/17/2000	JOINT	AI	0	0	0	0	0	0
TSPA 400.2	Technical specifications for TPA 4.0 code (SRD for TPA 4.0 code)	H	11/30/1999	JOINT	AI	0	0	0	0	0	0
TSPA 400.3	TPA 4.0 User's Guide	H	09/30/2000	JOINT	IM	0	0	0	0	0	0
TSPA 402	TPA 4.1 Sensitivity Studies	H	01/31/2002	CNWRA	IM	0	0	0.3	0.4	0	0
TSPA 403	TPA 4.1 Code Sensitivity Studies NUREG Preparation	H	05/15/2002	JOINT	AI	0	0	0.2	0.1	0	0
TSPA 408	Journal Articles on Advances in Sensitivity , Uncertainty, and Importance Methods	M	03/15/2002	CNWRA	IM	0	0	0	0.2	0	0
TSPA 409	Auxiliary Analyses (Drift-Scale Model of Design Options; Repository-Scale Dripping Models)	M	06/15/2000	JOINT	AI	0	0	0	0	0	0
TSPA 409.1	Auxiliary Analyses (Drift-Scale Model of Design Options; Repository-Scale Dripping Models)	M	06/30/2001	JOINT	AI	0	0	0	0	0	0
TSPA 409.2	Documentation of Auxiliary Analyses	M	12/31/2001	JOINT	IM	0	0	0	0	0	0
TSPA 410	Presentation of PA Results	M	09/08/2000	JOINT	AI	0	0	0	0	0	0
TSPA 410.1	Presentation of PA Results	L	09/30/2001	JOINT	AI	0.1	0.15	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TSPA 410.2	Presentation of PA Results		09/02/2002	JOINT	AI	0	0	0.2	0.2	0	0
TSPA 410.3	Event Tree Presentation	M	03/10/2000	CNWRA	AI	0	0	0	0	0	0
TSPA 411	Tool Development for TSPA Review		08/15/2000	JOINT	AI	0	0	0	0	0	0
TSPA 411.2	Tool Development for TSPA Review	M	08/05/2002	JOINT	AI	0	0	0.1	0.2	0	0
TSPA 411.3	Journal Article Documenting TSPA Tools and review Capabilities	M	03/11/2002	JOINT	AI	0	0	0.1	0.1	0	0
TSPA 440	TPA Version 5.0 Code (FY 03)		09/30/2001	CNWRA	IM	0.2	0.2	0	0	0	0
TSPA 440.1	TPA Version 5.0 Code : Beta	H	09/17/2002	JOINT	IM	0.8	0.95	1.4	1.7	0	0
TSPA 440.2	Technical Specifications for TPA 5.0 Code (SRD for TPA 5.0 Code)	M	12/10/2001	CNWRA	AI	0	0.2	0.2	0.2	0	0
TSPA 441	TPA 5.0 User's Guide (FY 03)		09/30/2002	JOINT		0.2	0.2	0.1	0.1	0	0
TSPA 442	TPA 5.0 Confirmatory Testing Plan	H	09/30/2002	JOINT	IM	0.1	0.2	0.1	0.1	0	0
TSPA 442.1	TPA 5.0 Confirmatory Testing Documentation (FY 03)	M	09/30/2002	JOINT	AI	0	0	0	0	0	0
TSPA 442.2	Response to External Review Group Comments	L	06/15/2001	CNWRA	IM	0.1	0.1	0	0	0	0
TSPA 450	TPA 5.1: Post-LA TPA Code Modifications	H	09/30/2002	JOINT	AI	0	0	0	0	0	0
TSPA 450.1	TPA 5.1 Beta Version	H	07/31/2002	JOINT	AI	0	0	0	0	0	0
TSPA 450.2	Technical Specifications for TPA 5.1 Code	H	05/30/2002	CNWRA	AI	0	0	0	0	0	0
TSPA 470	TPA 4.0 Sensitivity Studies (Supporting Sufficiency Comments)	H	12/15/2000	JOINT	IM	0.3	0.3	0	0	0	0
TSPA 470.1	TPA 4.0 Sensitivity Studies (Input into Sufficiency Comments)	H	03/31/2001	JOINT	AI	0	0	0	0	0	0
TSPA 470.2	TSPA support for sufficiency Comments /TSPA related sufficiency comments	H	03/15/2001	JOINT	IM	0.4	0.2	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TSPA 471	TPA 4.0 Sensitivity Studies: Prioritization of Subissues: Input into Budget	H	03/15/2000	JOINT	AI	0	0	0	0	0	0
TSPA 471.1	TPA 4.0 Sensitivity Studies: Prioritization of Subissues: Input into Budget	H	03/15/2001	JOINT	AI	0	0	0	0	0	0
TSPA 471.2	TPA 4.0 Sensitivity Studies: Prioritization of Subissues: Input into Budget	H	03/15/2002	JOINT	AI	0	0	0	0	0	0
TSPA 472	TPA 4.0 Sensitivity Studies: Input into TSPA-SR/LA Review Strategy	H	06/15/2000	JOINT	AI	0	0	0	0	0	0
TSPA 480	TPA-SR/LA Review Strategy (Including TPA 4.0- Enhancements for Review Capabilities)	H	09/30/2000	JOINT	IM	0	0	0	0	0	0
TSPA 481	Update TSPA-SR/LA Review Strategy	H	02/28/2002	JOINT	IM	0	0	0	0	0	0
TSPA 490	Support and Integrate TPA Code use in other KTIs	M	09/22/1999	CNWRA		0	0	0	0	0	0
TSPA 490.1	Support and Integrate TPA Code use in other KTIs	L	09/30/2001	CNWRA		0	0.1	0	0	0	0
TSPA 490.2	Support and Integrate TPA Code use in other KTIs	M	09/30/2001	CNWRA		0	0	0	0	0	0
TSPA 496	Determine TPA 3.2 upgrade/analyses needs		12/31/1998	PAIS						0	0
D. Yucca Mountain Review Plan											
TSPA 600	Complete draft outline of YMRP, Rev 0		03/15/1999	JOINT	IM	0	0	0	0	0	
TSPA 601	Complete final outline of YMRP, Rev 0		06/30/1999			0	0	0	0	0	0
TSPA 603	ACNW Briefing on Defense in Depth		11/30/1999			0	0	0	0	0	0
TSPA 604	Develop PreClosure Performance Assessment Capability		12/31/2000	PAIS		0	0	0	0	0	0
TSPA 700	Develop Yucca Mountain Review Plan Rev 0	H	03/31/2000	JOINT	IM	0	0	0	0	0	0
TSPA 701	Develop Yucca Mountain Review Plan Rev 1	H	09/30/2000	JOINT	IM	0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TSPA 701.1	CNWRA input to Yucca Mountain Review Plan Rev 1	H	09/30/2000	JOINT	IM	0	0	0	0	0	0
TSPA 701.2	Preclosure Section Development	H	03/31/2001	JOINT	MM	2.3	2.9	0	0	0	0
TSPA 701.3	Postclosure Section Development	H	03/31/2001	JOINT	MM	4.1	5	0	0	0	0
TSPA 701.4	Administrative and Programmatic Section Development	H	03/31/2001	JOINT	MM	0.5	0.9	0	0	0	0
TSPA 701.6	Yucca Mountain Review Plan, Rev 1, Address Public comments	H	05/31/2001	JOINT	IM	0	0	0	0	0	0
TSPA 702	Preparation of Yucca Mountain Review Plan , Rev 2	H	09/30/2001	JOINT	IM	0	0	0	0	0	0
TSPA 702.2	Yucca Mountain Review Plan, Rev 2, Address Public comments		03/31/2002	JOINT	AI	0	0	0	0	0	0
TSPA 703	Yucca Mountain Review Plan , Rev 3	H	03/31/2002	JOINT	MM	0	0	0	0	0	0

F. Review DOE Submittals

TSPA 801	Review of Integrated Site Model	M	11/30/1999	JOINT	AI	0	0	0	0	0	0
TSPA 802	Review Final VA and Prepare Comments for Commission Paper	H	02/22/1999	GEOS		0	0	0	0	0	0
TSPA 810	Review Process Model Report	H	07/31/2000	JOINT	IM	0	0	0	0	0	0
TSPA 810.1	Review Process Model Report	H	07/31/2001	JOINT	IM	0	0	0	0	0	0
TSPA 810.2	Review Process Model Report	M	07/31/2002	JOINT	IM	0	0	0	0	0	0
TSPA 820	TSPA-SR, Rev 00 Review	H	12/31/2000	JOINT	IM	0	0	0	0	0	0
TSPA 840	Review Sufficiency Documents and Prepare Comments for Commission Paper	H	05/30/2001	JOINT	AI	0	0	0	0	0	0
TSPA 850	Environmental Impact Statement - review draft	H	02/09/2000	JOINT	AI	0	0	0	0	0	0
TSPA 860	Review TSPA-SR/LA Documentation	H	06/30/2001	JOINT	IM	0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
TSPA 880	Review of DOE Products (Unspecified)	M	09/30/2001	JOINT	AI	0	0	0	0	0	0
TSPA 880.1	Review of DOE Products (Unspecified)	M	09/30/2002	JOINT	AI	0	0	0	0	0	0
G. License Application/SER Development											
TSPA 900	Review License Application and Prepare SER	H	09/30/2004	JOINT	AI	0	0	0	0	0	0
H. Hearing Support											
TSPA 1000.1	Hearing Support	H	09/30/2004	PAIS		0	0	0	0	0	0
I. QA Program Support											
TSPA 1000	QA Observation Audits	L	09/30/2000	JOINT	AI	0	0	0	0	0	0
TSPA 1001	QA Observation Audits	M	09/30/2001	JOINT		0.1	0	0	0	0	0
TSPA 1002	QA Observation Audits	L	09/27/2002	PAS		0	0	0.2	0	0	0
K. Public Outreach											
TSPA 701.5	Yucca Mountain Review Plan Rev 1, Public Meeting	M	10/30/2000	JOINT	AI	0	0	0	0	0	0
TSPA 1300.2	Public Meeting on Defense in Depth		11/30/1999	JOINT	IM	0	0	0	0	0	0
TSPA 1302.1	Yucca Mountain Review Plan, Rev 2, Public Meeting	M	01/30/2001	JOINT	AI	0	0	0	0	0	0
Totals						12.1	14.3	8.5	7	0	0

Activities Related to Development of NRC HLW Regulations FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (1) and CNWRA (0.5)

Total Allocated FTE FY02: NRC (0.3) and CNWRA (0.2)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
B. Regulatory Framework											
EPA	111	Staff Comments issued on DOE's proposed draft revisions to Pt963	02/28/2000	PAHL		0	0	0	0	0	0
EPA	200	NRC Staff Commission Paper- Comments on EPA Proposed Standard	09/17/1999	PAHL		0	0	0	0	0	0
EPA	201	NRC Staff Commission Paper- Analysis of EPA Final Standard	09/30/2000	PAHL		0	0	0	0	0	0
EPA	202.5	Conduct Implementing Rulemaking : Brief ACNW on public comments on Draft Rule	11/17/1999	PAHL		0	0	0	0	0	0
EPA	204.1	Conduct Implementing Rulemaking : Prepare Final - CNWRA input	06/30/1999	CNWRA	AI	0	0	0	0	0	0
EPA	205	Develop responses to public comments	10/30/1999	JOINT	AI	0	0	0	0	0	0
EPA	205.1	Analyses supporting responses to public comments	10/30/1999	JOINT	IM	0	0	0	0	0	0
EPA	206	Improvement to approach for modeling dose	03/31/2000	JOINT	IM	0	0	0	0	0	0
EPA	207	Improvement to approach for calculating dilution at well head.	10/31/1998	CNWRA	AI	0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
EPA 208	Improvement to parameters for defining dose to the critical group	H	12/31/1998	JOINT	AI	0	0	0	0	0	0
EPA 210	Conduct Implementing Rulemaking : Implementation of the EPA Standard	H	06/30/2001	JOINT	AI	1	0	0	0	0	0
EPA 210.1	In preparation for EPA standard , look at compliance methodology for ground water protection	H	04/30/2001	JOINT	AI	0	0.3	0	0	0	0
EPA 210.2	Provide assistance in conforming Part 63 to Part 197	H	04/30/2001	JOINT	AI	0	0.2	0	0	0	0
EPA 210.3	Commission Paper with Staff Comments on DOE's proposed draft revisions to Pt963 to Commission		01/14/2000	PAHL		0	0	0	0	0	0
EPA 210.4	NRC Staff Commission Paper- Comments on EPA Proposed Standard		11/30/1999	PAHL		0	0	0	0	0	0
EPA 213	Staff review and analysis of public comments to DOE on Pt963		05/30/2000	PAHL		0	0	0	0	0	0
EPA 214	Commission Paper on Staff Concurrence recommendaion on final revision to Pt963 to Commission		06/30/2000	PAHL		0	0	0	0	0	0
EPA 215	Commission Concurrence on final revision to Pt963 to DOE		11/01/2000	PAHL		0	0	0	0	0	0
EPA 220.3	Compliance methodology for ground water Prtection	H	09/27/2002	PAHL		0	0	0.1	0.1	0	0
EPA 220.4	Amendment to 10 CFR Part 63 for unlikely events	H	09/27/2002	PAHL		0	0	0.2	0.1	0	0

D. Yucca Mountain Review Plan

EPA 700	Develop YM Standard Review Plan Rev 0	H	09/30/1999	PAHL		0	0	0	0	0	0
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F. Review DOE Submittals

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
EPA	801 Review Final VA and Prepare Comments for Commission Paper	H	02/22/1999	JOINT	IM	0	0	0	0	0	0
EPA	802 Environmental Impact Statement - KTI input to review of draft	H	10/28/1999	JOINT	AI	0	0	0	0	0	0
K. Public Outreach											
EPA	1301 Conduct Implementing Rulemaking : Hold public meetings on Draft Rule		03/31/1999	PAHL		0	0	0	0	0	0
EPA	1302 Conduct Implementing Rulemaking : Hold public additional meetings on Draft Rule		06/30/1999	PAHL		0	0	0	0	0	0
EPA	1310 Public Meeting on Licensing Process		05/04/2000	PAIS		0	0	0	0	0	0
EPA	1320 Public Meeting on Final Rule		09/30/2000	PAIS		0	0	0	0	0	0
EPA	1330 Public Outreach		09/30/2000	JOINT		0	0	0	0	0	0
Totals						1	0.5	0.3	0.2	0	0

Unsat/Sat Flow Under Isothermal Conditions (USFIC)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (1.8) and CNWRA (4.3)

Total Allocated FTE FY02: NRC (3.5) and CNWRA (3.5)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
A. Issue Resolution/IRSRs											
USFIC	300	IRSR on Unsaturated/Saturated Flow under Isothermal Conditions Rev 0	09/30/1997	GEOS		0	0	0	0	0	0
USFIC	301	IRSR on Unsaturated/Saturated Flow under Isothermal Conditions Rev 1	10/09/1998	GEOS		0	0	0	0	0	0
USFIC	302	IRSR on Unsaturated/Saturated Flow under Isothermal Conditions Rev 2	H	07/16/1999	GEOS		0	0	0	0	0
USFIC	302.1	CNWRA input to Unsaturated/Saturated Flow under Isothermal Conditions Rev 2	H	06/18/1999	GEOS	MM	0	0	0	0	0
USFIC	303	IRSR on Unsaturated/Saturated Flow under Isothermal Conditions Rev 3		01/01/2001	SITE		0	0	0	0	0
USFIC	303.1	CNWRA input to Unsaturated/Saturated Flow under Isothermal Conditions Rev 3		06/16/2000	CNWRA	MM	0	0	0	0	0
USFIC	304	IRSR on Unsaturated/Saturated Flow under Isothermal Conditions Rev 4 (Joint KTI Report)		07/28/2001	SITE		0.6	0	0	0	0
USFIC	304.1	CNWRA input to Unsaturated/Saturated Flow under Isothermal Conditions Rev 4		06/16/2001	CNWRA	MM	0	0.9	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
USFIC 305	Integrated IRSR on Unsaturated/Saturated Flow under Isothermal Conditions (SZ1, SZ2, UZ1,UZ2,UZ3,) ENG 3, DOSE 1, DOSE3)		07/28/2002	SITE		0	0	0.2	0	0	0
USFIC 305.1	CNWRA input to Unsaturated/Saturated Flow under Isothermal Conditions, Integrated IRSR , Rev.1		06/16/2002	CNWRA	MM	0	0	0	0	0	0
USFIC 310	Subissue 1 and 2 Resolution Activities: Climate change and hydro . Effects of climate change(Resolved 1998)					0	0	0	0	0	0
USFIC 310.1	Review Climate sections of DOE submittals		09/27/2002	JOINT		0.1	0.1	0.1	0.2	0	0
USFIC 320	Subissue3 Resolution Activities: Present-day Shallow Infiltration (Resolved FY1999)										
USFIC 320.1	Review Infiltration sections of DOE submittals		09/27/2002	JOINT		0.1	0.1	0.1	0.3	0	0
USFIC 330	Subissue 4 Resolution Activities: Present-day and future deep percolation (FY2000)	H	02/16/2002	JOINT		0.2	1	1	0	0	0
USFIC 330.2	Letter Report - Flow Paths in the UZ: independent analyses and review of DOE Field studies		04/22/2002	CNWRA	IM	0	0	0	0.2	0	0
USFIC 330.3	Independent analysis of UZ flow below the repository, including analysis of Busted Butte data		09/27/2002	CNWRA		0	0	0	0.3	0	0
USFIC 330.4	Review DOE documents		09/27/2002	JOINT	IM	0	0	0	0.25	0	0
USFIC 330.5	Evaluate DOE approach; use IRSR/YMRP acceptance criteria		09/30/2002	JOINT		0	0	0	0.3	0	0
USFIC 330.6	Provide updated input parameters for TPA code		09/30/2002	JOINT		0	0	0	0.05	0	0
USFIC 330.7	Conduct sensitivity analyses using TPA code		09/30/2002	JOINT		0	0	0	0	0	0
USFIC 340	Subissue 5 Resolution Activities: Saturated Zone (FY2001) Review DOE submittals		09/27/2002	JOINT		0.7	1.6	1.2	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
USFIC	340.1 Letter Report - Review of Valey Fill Hydrology (hydrostratigraphy, hydraulic tests, hesda, tracer tests, hydrochemistry, field observations)		03/25/2002	CNWRA	IM	0	0	0	0.2	0	0
USFIC	340.2 Constraining SZ flow paths for final output to TPA code and analysis of Nye Co. data		05/24/2002	JOINT		0	0	0	0.2	0	0
USFIC	340.3 Evaluate DOE approach; use IRSR acceptance criteria		09/27/2002	JOINT		0	0	0	0.3	0	0
USFIC	340.4 Conduct independent analyses of saturated zone topics (reviews, calculations, laboratory or field studies, review of geologic framework model)		09/27/2002	JOINT		0	0	0	0.15	0	0
USFIC	340.5 Conduct sensitivity analyses using TPA code		06/16/2002	JOINT		0	0	0	0	0	0
USFIC	340.6 Concepts in saturated zone modeling		02/15/2002	JOINT		0	0	0	0.2	0	0
USFIC	341.12 Concepts in saturated zone modeling		11/19/2001	JOINT		0	0	0	0	0	0
USFIC	342.2 Update of topical report on porosity and permeability		09/30/2002	JOINT		0	0	0	0	0	0
USFIC	350 Subissue 6 Resolution Activities: Matrix Diffusion (FY2001)		09/30/2002	JOINT		0.1	0.2	0	0	0	0
USFIC	350.1 Review matrix diffusion section of DOE submittals		09/27/2002	JOINT		0	0	0.1	0.1	0	0
USFIC	350.2 Conduct independent analyses of matrix diffusion topics (reviews, calculations, laboratory or field studies)		09/30/2002	JOINT		0	0	0	0	0	0
USFIC	350.3 Provide updated input parameters for TPA code		09/30/2002	JOINT		0	0	0	0	0	0
USFIC	350.4 Conduct sensitivity analyses using TPA code		09/30/2002	JOINT		0	0	0	0	0	0
USFIC	351 Conduct sensitivity analyses using TPA code		09/30/2002	JOINT		0	0	0	0	0	0
USFIC	351.1 Conduct sensitivity analyses using TPA code		09/30/2001	JOINT		0	0	0	0	0	0
USFIC	400 ISI Integration		06/16/2000	JOINT		0	0	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
USFIC 401	Sensitivity of dose to USFIC hydrologic parameters and structural controls		06/16/2002	JOINT		0	0	0	0.15	0	0
C. TPA Code Development											
USFIC 600	Support TPA version 5.0	H	09/30/2002	JOINT		0	0.2	0.1	0.15	0	0
USFIC 601	Computer code validation	H	09/30/2002	JOINT		0	0.2	0	0.1	0	0
D. Yucca Mountain Review Plan											
USFIC 700	Develop YM Standard Review Plan Rev 1		02/28/2002	JOINT		0	0	0	0	0	0
F. Review DOE Submittals											
USFIC 801	Review DOE submittals		09/27/2002	JOINT		0	0	0.3	0.2	0	0
USFIC 802	License Application - review working draft		09/30/2000	JOINT		0	0	0	0	0	0
USFIC 803	Review Final VA and Prepare Comments for Commission Paper	H	02/22/1999	GEOS		0	0	0	0	0	0
G. License Application/SER Development											
USFIC 900	License Application - Review and prepare SER	H	09/30/2004	JOINT		0	0	0	0	0	0
H. Hearing Support											
USFIC 1000	Hearing support		09/30/2004	GEOS		0	0	0	0	0	0
I. QA Program Support											
USFIC 1100	Conduct observation quality assurance audits	L	09/30/2002	JOINT		0	0	0.3	0.15	0	0
J. Issue Resolution during Performance Confirmation											
USFIC 1200	Issue Resolution during Performance Confirmation		09/30/2002	JOINT		0	0	0	0	0	0
K. Public Outreach											

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
USFIC 1300	Provide support in the process of public outreach		09/30/2002	CNWRA	IM	0	0	0.1	0	0	0
<i>Totals</i>						1.8	4.3	3.5	3.5	0	0

Radionuclide Transport (RT)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (1.2) and CNWRA (2)

Total Allocated FTE FY02: NRC (1.7) and CNWRA (2.3)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
A. Issue Resolution/IRSRs											
RT	302	IRSR on Radionuclide Transport, Rev 2	H	08/30/2000	GEOS						
RT	302.1	CNWRA input to IRSR, Rev 2	H	01/25/2000	CNWRA	MM	0	0	0	0	0
RT	303.1	CNWRA input to IRSR, Rev 3	H	01/30/2001	CNWRA	MM	0	0.2	0	0	0
RT	304	Integrated IRSR	H	06/30/2002	GEOS		0	0	0.2	0	0
RT	304.1	Computer Code Validation	H	09/27/2002	CNWRA	MM	0	0	0	0.15	0
RT	304.2	Integrated IRSR Rev 1	H	08/30/2001	GEOS		0.1	0	0	0	0
RT	308	Interactions with DOE efforts to model RT processes in performance assessment - App7	M	09/30/2002	JOINT		0.1	0.1	0.1	0.1	0
RT	309	Assist TSPAI KTI in their interactions, review of post-VA documents, sensitivity studies, and work on TPA 4.0	H	09/30/2001	JOINT		0.1	0.1	0.1	0.15	0
RT	310	Subissue 1 Resolution Activities: RT through Porous Rock (FY2002)	M	09/30/2000	JOINT		0.1	0.2	0	0	0
RT	310.1	Evaluate DOE approach: use IRSR/YMRP acceptance criteria		09/27/2002	GEOS		0	0	0.1	0.2	0
RT	310.2	Conduct independent analyses of RT through matrix (reviews, calculations, laboratory, or field studies)		09/27/2002	GEOS		0	0	0.15	0.2	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
RT	310.3 Provide updated input parameters for TPA code		09/30/2000	GEOS		0	0	0	0.05	0	0
RT	310.4 Conduct sensitivity analyses using TPA code		09/30/2000	GEOS	AI	0	0	0	0.05	0	0
RT	311.6 FEP analysis		09/30/2001	GEOS		0	0	0	0	0	0
RT	312 Evaluate DOE approach: use IRSR/YMRP acceptance criteria		09/30/2002	GEOS		0	0	0	0	0	0
RT	312.1 Conduct independent analyses of RT through matrix (reviews, calculations, laboratory, or field studies)		09/27/2002	GEOS		0	0	0	0	0	0
RT	320 Subissue 2 Resolution Activities: RT through alluvium (FY2002)	M	09/30/2002	JOINT		0.4	0.7	0	0	0	0
RT	320.1 Evaluate DOE approach: use IRSR acceptance criteria (using Nye County well info FY00)		09/27/2002	GEOS		0	0	0.15	0.15	0	0
RT	320.2 Conduct independent analyses of RT through alluvium (reviews, calculations, laboratory, or field studies)		09/27/2002	GEOS		0	0	0.1	0.2	0	0
RT	320.3 Provide updated input parameters for TPA code		09/30/2000	GEOS		0	0	0.05	0.05	0	0
RT	320.4 Conduct sensitivity analyses using TPA code		09/27/2002	GEOS		0	0	0.1	0.1	0	0
RT	320.6 Preliminary report on laboratory studies of Np-sorption on calcite - Letter Report	M	07/31/2000	CNWRA	IM	0	0	0	0.1	0	0
RT	320.7 Molecular Dynamics Study of aqueous Uranyl Interactions with Quartz(D10-Journal Paper)		01/18/2002	JOINT		0	0	0	0.05	0	0
RT	321.2 Conduct independent analyses of RT through alluvium (reviews, calculations, laboratory, or field studies)		09/30/2001	JOINT	IM	0	0	0	0	0	0
RT	321.4 Conduct sensitivity analyses using TPA code		09/30/2001	JOINT		0	0	0	0	0	0
RT	321.5 Analysis of tracer transport tests		09/30/2001	JOINT		0	0	0.1	0.05	0	0
RT	321.8 Review SZ flow and transport PMR and supporting transport AMRs		09/30/2001	JOINT		0	0	0	0	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
RT	321.9 FEP analysis		09/30/2001	JOINT		0	0	0	0	0	0
RT	322.1 Evaluate DOE approach: use IRSR/YMRP acceptance criteria (Using Nye County well info FY02)		09/30/2002	JOINT		0	0	0	0	0	0
RT	322.2 Conduct independent analyses of RT through alluvium (reviews, calculations, laboratory, or field studies)		09/30/2002	JOINT		0	0	0	0	0	0
RT	322.3 Provide updated input parameters for TPA code		09/30/2002	JOINT		0	0	0	0	0	0
RT	322.4 Conduct sensitivity analysis		09/30/2002	JOINT		0	0	0	0	0	0
RT	322.5 Analysis of tracer transport tests		09/30/2002	JOINT		0	0	0	0	0	0
RT	322.6 Np Calcite Laboratory Study	M	09/30/2002	CNWRA	IM	0	0	0	0	0	0
RT	330 Subissue 3 Resolution Activities: RT through Fractured Rock (FY2002)	M	09/30/2002	JOINT		0.4	0.6	0	0	0	0
RT	330.1 Evaluate DOE approach: use IRSR/YMRP acceptance criteria		09/30/2000	JOINT		0	0	0.1	0.1	0	0
RT	330.2 Conduct independent analyses of RT through fractures (reviews, calculations, laboratory, or field studies)		09/27/2002	JOINT		0	0	0.1	0.15	0	
RT	330.3 Provide updated input parameters for TPA code		09/30/2000	JOINT		0	0	0	0.05	0	0
RT	330.4 Conduct sensitivity analyses using TPA code		09/27/2002	JOINT		0	0	0.1	0.05	0	0
RT	330.5 Stochastic analysis of Np transport in the vicinity of Yucca Mountain - Journal Paper		09/30/2000	CNWRA		0	0	0	0	0	0
RT	330.6 Role of Radionuclide Sorption in HLW PA journal Paper	H	09/30/1999	GEOS		0	0	0	0	0	0
RT	331.1 Evaluate DOE approach: use IRSR/YMRP acceptance criteria		09/30/2001	JOINT		0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE		
						N	C	N	C	N	C	
RT	331.2	Conduct independent analyses of RT through fractures (reviews, calculations, laboratory, or field studies)	09/30/2001	JOINT		0	0	0	0	0	0	
RT	331.3	Provide updated input parameters for TPA code	09/30/2001	JOINT		0	0	0	0	0	0	
RT	331.4	Conduct sensitivity analyses using TPA code (Matrix diffusion and sorption)	09/30/2001	JOINT		0	0	0	0	0	0	
RT	331.5	Analysis of Busted Butte transport tests	09/30/2001	JOINT		0	0	0	0	0	0	
RT	331.6	Analysis of tracer transport tests (e.g.; C- Wells)	09/30/2001	JOINT		0	0	0	0	0	0	
RT	331.7	FEP analysis	09/30/2001	JOINT		0	0	0	0	0	0	
RT	332.1	Evaluate DOE approach: use IRSR/YMRP acceptance criteria	09/30/2002	JOINT		0	0	0	0	0	0	
RT	332.2	Conduct independent analyses of RT through fractures (reviews, calculations, laboratory, or field studies)	09/30/2002	JOINT		0	0	0	0	0	0	
RT	332.3	Provide updated input parameters for TPA code	09/30/2002	JOINT		0	0	0	0	0	0	
RT	332.4	Conduct sensitivity analyses using TPA code	09/30/2002	JOINT		0	0	0	0	0	0	
RT	332.5	Colloid Facilitated Transport Modeling	H	09/30/2002	CNWRA	IM	0	0	0	0.1	0	0
RT	340	Subissue 4 Resolution Activities: Nuclear criticality in Farfield (FY2001/1999)	L	09/30/2001	JOINT		0	0	0	0	0	0
RT	340.1	Review DOE's Disposal Criticality Analysis Methodology (FY2001)		09/27/2002	CNWRA		0	0.05	0	0.05	0	0
RT	340.2	FEP Analysis		09/30/2001	CNWRA		0	0.05	0	0	0	0
D. Yucca Mountain Review Plan												
RT	700	Develop YM Standard Review Plan Rev 0	H	09/30/1999	JOINT	AI	0	0	0	0	0	0
RT	701	Review PMR on Unsaturated Zone Flow and Transport	H	09/30/2001	JOINT		0	0	0	0	0	0

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
RT	702 Review PMR on Saturated Zone Flow and Transport	H	09/30/2001	JOINT		0	0	0	0	0	0
RT	703 FEP Analysis	H	09/30/2000	JOINT		0	0	0	0	0	0
RT	704 ISI UZ3 Radionuclide Transport in the UZ	H	09/30/2000	JOINT		0	0	0	0	0	0
RT	705 ISI SZ3 Radionuclide Transport in the SZ	H	09/30/2000	JOINT		0	0	0	0	0	0
F. Review DOE Submittals											
RT	800 Review DOE Submittals		09/27/2002	JOINT		0	0	0.15	0.15	0	0
RT	801 Review draft Environmental Impact Statement and prepare comments for Commission Paper	M	11/30/1999	JOINT		0	0	0	0	0	0
RT	802 Review Final EIS		08/31/2000	JOINT		0	0	0	0	0	0
RT	803 Review working draft of License Application and prepare comments for Commission Paper	H	09/30/2000	JOINT	AI	0	0	0	0	0	0
RT	804 Review Sufficiency documents and prepare comments for Commission Paper	H	03/31/2001	JOINT		0	0	0	0	0	0
RT	805 Review Final VA and Prepare Comments for Commission Paper	H	02/22/1999	GEOS		0	0	0	0	0	0
G. License Application/SER Development											
RT	900 License Application - Review and prepare SER	H	09/30/2004	JOINT		0	0	0	0	0	0
H. Hearing Support											
RT	1000 Hearing Support	H	09/30/2004	GEOS		0	0	0	0	0	0
I. QA Program Support											
RT	1100 QA Program/support observation audits & inspections		09/30/2002	GEOS		0	0	0	0	0	0
J. Issue Resolution during Performance Confirmation											

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE N</i>	<i>FY01 FTE C</i>	<i>FY02 FTE N</i>	<i>FY02 FTE C</i>	<i>FY03 FTE N</i>	<i>FY03 FTE C</i>
RT 1200	Issue Resolution during Performance Confirmation		09/30/2002	GEOS		0	0	0	0	0	0
K. Public Outreach											
RT 1300	CNWRA support on Public Outreach Program		09/30/2002			0	0	0.1	0.05	0	0
Totals						1.2	2	1.7	2.3	0	0

Sufficiency Review

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (2.2) and CNWRA (0.75)

Total Allocated FTE FY02: NRC (0.3) and CNWRA (0.5)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
SC	100 Staff Strategy for SR Review - Brief ACNW		03/31/2000	HLWB		0	0	0	0	0	0
SC	101 Staff Strategy and Draft Guidance for SR Review to Commission		07/07/2000	HLWB		0	0	0	0	0	0
SC	200 Final Staff Guidance for SR Review		09/30/2000	HLWB		0	0	0	0	0	0
SC	300 Annotated Outline of Commission Paper		12/01/2000	HLWB		0	0	0	0	0	0
SC	400 KTI review Final SR and prepare Comments for Commission		04/09/2001	HLWB		1	0.5	0	0	0	0
SC	500 Staff provides sufficiency Comments to Commission	H	11/30/2001	HLWB		1.2	0.25	0.25	0.5	0	0
Totals						2.2	0.75	0.25	0.5	0	0

Environmental Impact Statement (EIS)

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (0) and CNWRA (0)

Total Allocated FTE FY02: NRC (0.2) and CNWRA (0.1)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE	
						N	C	N	C	N	C
EIS 100	Environmental Impact Statement - Brief ACNW		06/30/1999	HLWB		0	0	0	0	0	0
EIS 120	Complete Assessment of DOE Final Environmental Impact statement	H	09/27/2002	JOINT		0	0	0.2	0.1	0	0
EIS 200	Environmental Impact Statement - Staff Develop EIS Review Plan to Commission		07/30/1999	HLWB		0	0	0	0	0	0
EIS 300	Environmental Impact Statement - Hold Public Meetings		11/09/1999	HLWB		0	0	0	0	0	0
EIS 400	Environmental Impact Statement - Brief ACNW		11/17/1999	HLWB		0	0	0	0	0	0
EIS 600	Environmental Impact Statement - Commission Briefing		01/25/2000	HLWB		0	0	0	0	0	0
EIS 700	Environmental Impact Statement - Commission Comments to DOE		02/28/2000	HLWB		0	0	0	0	0	0
Totals						0	0	0.2	0.1	0	0

Activities Related to Public Outreach FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (0) and CNWRA (0)

Total Allocated FTE FY02: NRC (1) and CNWRA (0.5)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
K. Public Outreach											
PO	1300 Public Outreach		09/27/2002	JOINT		0	0	0.4	0	0	0
PO	1301 Analyses and Preparation for support of Public outreach Meetings on Final 10 CFR part 63	H	09/27/2002	JOINT	IM	0	0	0.2	0.2	0	0
PO	1302 Analyses and Preparation for support of Public Outreach Meetings on YMRP	H	09/27/2002	JOINT	IM	0	0	0.2	0.15	0	0
PO	1303 Analyses and Preparation for support of Public Outreach Follow up meetings with Native Americans	H	09/27/2002	JOINT	IM	0	0	0.2	0.15	0	0
Totals						0	0	1	0.5	0	0

YMRP
FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (6.9) and CNWRA (8.8)

Total Allocated FTE FY02: NRC (1.8) and CNWRA (1.8)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
D. Yucca Mountain Review Plan											
TSPA 700	Develop Yucca Mountain Review Plan Rev 0	H	03/31/2000	JOINT	IM	0	0	0	0	0	0
TSPA 701	Develop Yucca Mountain Review Plan Rev 1	H	09/27/2002	JOINT	IM	0	0	0	0	0	0
TSPA 701.1	Update to Conform YMRP- Rev 1 to 10CFR 63 , Pre Closure Section	H	11/21/2001	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 701.2	Update to Conform YMRP- Rev 1 to 10 CFR 63 Post Closure Section	H	11/21/2001	JOINT	IM	2.3	2.9	0.2	0.1	0	0
TSPA 701.3	Update to Conform YMRP- Rev 1 to 10 CFR 63 Adminstrative and other sections	H	11/21/2001	JOINT	IM	4.1	5	0.1	0.1	0	0
TSPA 701.4	Risk Informing the content of the YMRP- Letter Report	H	12/14/2001	JOINT	IM	0.5	0.9	0	0.1	0	0
TSPA 701.5	Support to Public meetings on YMRP- Rev.1 Preclosure section	H	04/26/2002	JOINT	IM	0	0	0.1	0.2	0	0
TSPA 701.6	Support to Public meetings on YMRP- Rev.1 Post Closure section	H	04/26/2002	JOINT	IM	0	0	0.2	0	0	0
TSPA 701.7	Support to Public meetings on YMRP- Rev.1 Adminstrative and other sections	H	04/26/2002			0	0	0.1	0	0	0
TSPA 701.8	Response to Public Comments on YMRP- Rev.1 Preclosure section	H	05/31/2002			0	0	0.1	0.1	0	0

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE N</i>	<i>FY01 FTE C</i>	<i>FY02 FTE N</i>	<i>FY02 FTE C</i>	<i>FY03 FTE N</i>	<i>FY03 FTE C</i>
TSPA 701.9	Response to Public Comments on YMRP-Rev.1 Post Closure section	H	05/31/2002	PAIS		0	0	0.2	0.4	0	0
TSPA 702	Response to Public Comments on YMRP-Rev.1 Administrative and other sections	H	05/31/2002	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 720	Develop YMRP, Rev 2	H	06/28/2002	JOINT	IM	0	0	0	0	0	0
TSPA 720.1	Preparation of Yucca Mountain Review Plan , Rev 2 Pre Closure section	H	06/28/2002	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 720.2	Preparation of Yucca Mountain Review Plan , Rev 2 Post closure section	H	06/28/2002	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 720.3	Preparation of Yucca Mountain Review Plan , Rev 2 Administrative sections	H	06/28/2002	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 720.4	Preparation of Yucca Mountain Review Plan , Rev 2 Pre Closure section- Final	H	09/27/2002	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 720.5	Preparation of Yucca Mountain Review Plan , Rev 2 Pre Closure section- Final	H	09/27/2002	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 720.6	Preparation of Yucca Mountain Review Plan , Rev 2 Pre Closure section- Final	H	09/27/2002	JOINT	IM	0	0	0.1	0.1	0	0
TSPA 7207	Yucca Mountain Review Plan, Rev 2, Address Public comments	H	03/31/2002	JOINT	IM	0	0	0	0	0	0
Totals						6.9	8.8	1.8	1.8	0	0

Integrated Issue Resolution Status Report

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (0) and CNWRA (0)

Total Allocated FTE FY02: NRC (0.4) and CNWRA (1.5)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

Milestone Number	Major Activities	Priority	Projected Completions	Responsible Section	CNWRA Type	FY01 FTE		FY02 FTE		FY03 FTE		
						N	C	N	C	N	C	
R. Issue Resolution/IRSRs												
IRSR	100	Complete Integrated Issue Resolution Status Report, Rev.0	H	02/15/2002	JOINT	MM	0	0	0.2	1.1	0	0
IRSR	110	Revise Integrated Issue Resolution Status report to Rev 1		09/27/2002	JOINT		0	0	0.2	0.4	0	0
Totals							0	0	0.4	1.5	0	0

Performance Confirmation FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (0) and CNWRA (0)

Total Allocated FTE FY02: NRC (0.6) and CNWRA (0.8)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
P. Performance Confirmation											
PC	1400 Development of Performance Confirmation Action Plan	H	02/28/2002	CNWRA	IM	0	0	0.2	0.3	0	0
PC	1401 Development of Performance Confirmation Procedures	H	09/27/2002	CNWRA	IM	0	0	0.2	0.3	0	0
PC	1402 Input to the Integrated IRSR Revision 1	H	09/27/2002	CNWRA	IM	0	0	0.2	0.2	0	0
<i>Totals</i>						0	0	0.6	0.8	0	0

Inspection Program

FY01-03 KTI Operations Plan

Total Allocated FTE FY01: NRC (0) and CNWRA (0)

Total Allocated FTE FY02: NRC (0.5) and CNWRA (0)

Total Allocated FTE FY03: NRC (0) and CNWRA (0)

<i>Milestone Number</i>	<i>Major Activities</i>	<i>Priority</i>	<i>Projected Completions</i>	<i>Responsible Section</i>	<i>CNWRA Type</i>	<i>FY01 FTE</i>		<i>FY02 FTE</i>		<i>FY03 FTE</i>	
						<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>	<i>N</i>	<i>C</i>
IP. Inspection Program											
IP	1500 Support Yucca Mountain Inspection Program		09/27/2002	NRC		0	0	0.5	0	0	0
Totals						0	0	0.5	0	0	0