

PMVogleCOLPEm Resource

From: Joshi, Ravindra
Sent: Wednesday, July 01, 2009 8:19 AM
To: crpierce@sothernco.com; Amy Aughtman; Wes Sparkman
Cc: VogleCOL Resource
Subject: Vogle Electric Generating Plants Units 3 and 4 COL Application-Revised Review Schedule
Attachments: ML0916005770.pdf; Vogle Review Schedule - 062209.xls

To All,

Attached is a letter related to the Vogle revised safety review schedule and a detailed review schedule for your information.

Ravi Joshi
301-415-6191

Hearing Identifier: Vogtle_COL_Public
Email Number: 73

Mail Envelope Properties (CEEA97CC21430049B821E684512F6E5ECA4953C2A7)

Subject: Vogtle Electric Generating Plants Units 3 and 4 COL Application-Revised
Review Schedule
Sent Date: 7/1/2009 8:19:03 AM
Received Date: 7/1/2009 8:19:05 AM
From: Joshi, Ravindra

Created By: Ravindra.Joshi@nrc.gov

Recipients:
"VogtleCOL Resource" <VogtleCOL.Resource@nrc.gov>
Tracking Status: None
"crpierce@sothernco.com" <crpierce@sothernco.com>
Tracking Status: None
"Amy Aughtman" <agaughtm@southernco.com>
Tracking Status: None
"Wes Sparkman" <wasparkm@southernco.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	174	7/1/2009 8:19:05 AM
ML0916005770.pdf	132694	
Vogtle Review Schedule - 062209.xls		108026

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

June 30, 2009

Mr. Joseph A. (Buzz) Miller
Executive Vice President
Southern Nuclear Operating Company
P.O. Box 1295
Birmingham, AL 35201

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT UNITS 3 AND 4 COMBINED
LICENSE APPLICATION – REVISED REVIEW SCHEDULE

Dear Mr. Miller:

By letter dated March 28, 2008 (ML081050133), Southern Nuclear Operating Company (SNC) submitted its application to the Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advanced passive pressurized water reactors pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Part 52. By letter dated June 27, 2008 (ML081780539), the NRC transmitted the Vogtle Electric Generating Plant (VEGP) Units 3 and 4 COL application review schedule. For reasons described in more detail below, the NRC has reassessed the safety review schedule for the VEGP Units 3 and 4 COL application; the revised schedule is included in this letter. The safety review supports the issuance of a final safety evaluation report (FSER) in April 2011. Milestones for the remaining phases of this review are provided in Table 1. By letter dated March 17, 2009 (ML090570651), the NRC informed SNC that the anticipated completion date for the VEGP Units 3 and 4 COL environmental impact statement was being changed to “To Be Determined” pending the Commission’s final decision on SNC’s early site permit application for the VEGP site. This letter does not include any update to the environmental review schedule.

Highlights of the Safety Review Schedule

In a letter dated April 3, 2009 (ML090770458), the NRC issued a revision to the review schedule for the AP1000 Design Certification Amendment (Docket No. 52-006). The VEGP Units 3 and 4 COL application incorporates by reference both Appendix D to 10 CFR 52 and the AP1000 Design Control Document amendment submitted by Westinghouse as Revision 17. Thus a substantial portion of the VEGP Units 3 and 4 COL review schedule is dependent on the review schedule for the AP1000 Design Certification Amendment. The revised schedule reflects this dependency.

In a letter dated April 28, 2009 (ML091210083), the NuStart Energy Development, LLC, consortium informed the NRC that it had changed the referenced combined license (RCOL) designation for the AP1000 Design Center from Bellefonte Nuclear Plant (BLN), Units 3 and 4 to the VEGP Units 3 and 4. The NRC staff is taking steps necessary to implement this change. During this transition, the BLN Units 3 and 4 dockets will continue to be the vehicle of standard content for the Advisory Committee on Reactor Safeguards (ACRS) subcommittee reviews. It is the staff’s understanding that SNC will be responsible for responding and closing standard-content-related open items on VEGP Units 3 and 4 dockets within a 45 day response period. The review schedule assumes that responses to open items related to the standard content will be complete and provide sufficient information to close the open items.

J. A. Miller

-2-

There will not be any SER with Open Items for VEGP Units 3 and 4 and therefore, Phase 3 (ACRS review of Vogtle SER with open items) has been deleted from the review schedule.

In a response to Regulatory Issue Summary 2009-03, dated March 13, 2009 (ML090760818), SNC informed the NRC that it was planning to submit an additional limited work authorization (LWA) as part of its COL application at the end of May 2009. The revised schedule does not include this additional LWA request/review. The schedule also does not currently model the hearing process. For example, the mandatory hearing schedule will be developed by the presiding officer and thus is not included in Table 1 of this letter. Both the final environmental impact statement FEIS and FSER will be used to support this hearing. The Commission will not make a determination on whether or not to issue the COL until this hearing is conducted.

Should you have any questions regarding the safety review schedule, please contact me at (301) 415-6191 or e-mail at Ravindra.Joshi@nrc.gov.

Sincerely,

/RA/

Ravindra G. Joshi, Lead Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-025
52-026

Enclosure: Revised COL Safety Review Schedule

cc: see next page

There will not be any SER with Open Items for VEGP Units 3 and 4 and therefore, Phase 3 (ACRS review of Vogtle SER with open items) has been deleted from the review schedule.

In a response to Regulatory Issue Summary 2009-03, dated March 13, 2009 (ML090760818), SNC informed the NRC that it was planning to submit an additional limited work authorization (LWA) as part of its COL application at the end of May 2009. The revised schedule does not include this additional LWA request/review. The schedule also does not currently model the hearing process. For example, the mandatory hearing schedule will be developed by the presiding officer and thus is not included in Table 1 of this letter. Both the final environmental impact statement FEIS and FSER will be used to support this hearing. The Commission will not make a determination on whether or not to issue the COL until this hearing is conducted.

Should you have any questions regarding the safety review schedule, please contact me at (301) 415-6191 or e-mail at Ravindra.Joshi@nrc.gov.

Sincerely,

/RA/

Ravindra G. Joshi, Lead Project Manager
 AP1000 Projects Branch 1
 Division of New Reactor Licensing
 Office of New Reactors

Docket Nos. 52-025
 52-026

Enclosure: Table 1: Revised COL Safety Review Schedule

cc: see next page

Distribution:

Public	AHodgdon	BHughes	SHaggerty
RidsNroDnrlNwe1	SCoffin	MComar	PMoulding
RidsNroLAKGoldstein	TSimms	AHodgon	RidsNroDnrl
RidsOgcMailCenter	BAnderson	RJoshi	JSebrosky
SGoetz	CAraguas	MNotich	MHood
RidsRgn2MailCenter	RidsAcrcsAcnwMailCenter	CPatel	SBrunell
ADAMS NO.: ML091600577			NRO-002

OFFICE	DNRL/NWE1: LA	DNRL/NWE1: PM	DSER/RAP1:	OGC	NWE1/L-BC
NAME	KGoldsien	RJoshi	GHatchett	AHodgon	SCoffin
DATE	06/11/09	06/17/09	06/18/09	06/23/09	06/30/09

OFFICIAL RECORD COPY

Table 1: Revised COL Safety Review Schedule

Phase of Safety Review	Target Completion Date
Phase 1 Initial Requests for Additional Information (RAIs)	Completed -- January 14, 2009
Phase 2 Supplemental RAIs	July 22, 2009
Phase 3 ACRS review of Safety Evaluation Report (SER) with Open Items (OIs)	NA
Phase 4 Advanced SER with no OIs	October 25, 2010
Phase 5 ACRS review of Advanced SER with no OIs	February 16, 2011
Phase 6 Final SER Issued	April 12, 2011

COL - Vogtle Mailing List

(Revised 04/30/2009)

cc:

Attorney General
Law Department
132 Judicial Building
Atlanta, GA 30334

Mr. Laurence Bergen
Oglethorpe Power Corporation
2100 East Exchange Place
P.O. Box 1349
Tucker, GA 30085-1349

Mr. M. Stanford Blanton
Esquire
Balch and Bingham, LLP
P.O. Box 306
Birmingham, AL 35201

Ms. Michele Boyd
Legislative Director
Energy Program
Public Citizens Critical Mass Energy
and Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

County Commissioner
Office of the County Commissioner
Burke County Commission
Waynesboro, GA 30830

Mr. James Davis
ESP Project Engineer
Southern Nuclear Company
PO Box 1295, BIN B056
Birmingham, AL 35201

Director
Consumer's Utility
Counsel Division
Governor's Office of Consumer Affairs
2 Martin Luther King, Jr. Drive
Plaza Level East, Suite 356
Atlanta, GA 30334-4600

Mr. Arthur H. Domby, Esquire
Troutman Sanders
Nations Bank Plaza
600 Peachtree Street, NE
Suite 200
Atlanta, GA 30308-2216

Mr. Jeffrey T. Gasser
Executive Vice President
Southern Nuclear Operating Company, Inc.
P.O. Box 1295
Birmingham, AL 35201-1295

O. C. Harper, IV
Vice President - Resources Planning and
Nuclear Development
Georgia Power Company
241 Ralph McGill Boulevard
Atlanta, GA 30308

Mr. Steven M. Jackson
Senior Engineer - Power Supply
Municipal Electric Authority of Georgia
1470 Riveredge Parkway, NW
Atlanta, GA 30328-4684

David H. Jones
Site Vice President
Plant Vogtle - ATTN: Units 3 & 4
7825 River Road
Waynesboro, GA 30830

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
Atlanta, GA 30334

Mr. Thomas O. McCallum
Site Development Project Engineer
Southern Nuclear Operating Co., Inc.
PO Box 1295
Birmingham, AL 35201-1295

COL - Vogtle Mailing List

Mr. James H. Miller
President & Chief Executive Officer
Southern Nuclear Operating Company, Inc.
P.O. Box 1295
Birmingham, AL 35201

Mr. Wesley A. Sparkman
COL Project Engineer
Southern Nuclear Operating Co., Inc.
P.O. Box 1295
Birmingham, AL 35201-1295

Mr. Joseph (Buzz) Miller
Executive Vice President
Nuclear Development
P.O. Box 1295
Birmingham, AL 35201-1295

Gene Stilp
1550 Fishing Creek Valley Road
Harrisburg, PA 17112

Mr. Thomas Moorer
Environmental Project Manager
Southern Nuclear Operating Co., Inc.
PO Box 1295
Birmingham, AL 35201-1295

Mr. Robert E. Sweeney
IBEX ESI
4641 Montgomery Avenue
Suite 350
Bethesda, MD 20814

Mr. Charles R. Pierce
Vogtle Deployment Licensing Manager
Southern Nuclear Operating Co., Inc.
PO Box 1295
Birmingham, AL 35201-1295

Resident Inspector
Vogtle Plant
8805 River Road
Waynesboro, GA 30830

Resident Manager
Oglethorpe Power Corporation
Alvin W. Vogtle Nuclear Plant
7821 River Road
Waynesboro, GA 30830

Mr. Jerry Smith
Commissioner
District 8
Augusta-Richmond County Commission
1332 Brown Road
Hephzibah, GA 30815

COL - Vogtle Mailing List

Email

APH@NEI.org (Adrian Heymer)
awc@nei.org (Anne W. Cottingham)
BrinkmCB@westinghouse.com (Charles Brinkman)
chris.maslak@ge.com (Chris Maslak)
crpierce@southernco.com (C.R. Pierce)
cwaltman@roe.com (C. Waltman)
david.hinds@ge.com (David Hinds)
david.lewis@pillsburylaw.com (David Lewis)
erg-xl@cox.net (Eddie R. Grant)
greshaja@westinghouse.com (James Gresham)
james.beard@gene.ge.com (James Beard)
jgutierrez@morganlewis.com (Jay M. Gutierrez)
jim.riccio@wdc.greenpeace.org (James Riccio)
jim@ncwarn.org (Jim Warren)
JJNesrsta@cpsenergy.com (James J. Nesrsta)
John.O'Neill@pillsburylaw.com (John O'Neill)
Joseph_Hegner@dom.com (Joseph Hegner)
KSutton@morganlewis.com (Kathryn M. Sutton)
kwaugh@impact-net.org (Kenneth O. Waugh)
lchandler@morganlewis.com (Lawrence J. Chandler)
Marc.Brooks@dhs.gov (Marc Brooks)
maria.webb@pillsburylaw.com (Maria Webb)
mark.beaumont@wsms.com (Mark Beaumont)
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)
mcaston@southernco.com (Moanica Caston)
media@nei.org (Scott Peterson)
mike_moran@fpl.com (Mike Moran)
MSF@nei.org (Marvin Fertel)
nirsnet@nirs.org (Michael Mariotte)
patriciaL.campbell@ge.com (Patricia L. Campbell)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
Paul@beyondnuclear.org (Paul Gunter)
pshastings@duke-energy.com (Peter Hastings)
RJB@NEI.org (Russell Bell)
RKTemple@cpsenergy.com (R.K. Temple)
sabinski@suddenlink.net (Steve A. Bennett)
sandra.sloan@areva.com (Sandra Sloan)
sfrantz@morganlewis.com (Stephen P. Frantz)
stephan.moen@ge.com (Stephan Moen)
steven.hucik@ge.com (Steven Hucik)
tomccall@southernco.com (Tom McCallum)
Vanessa.quinn@dhs.gov (Vanessa Quinn)
VictorB@bv.com (Bill Victor)
Wanda.K.Marshall@dom.com (Wanda K. Marshall)

Project Details: AP1000_VOGTLE_SCOL

ID	Task Name	Work	Start	Finish
0	AP1000_VOGTLE_SCOL	53,622.69h	5/5/2008	11/30/2011
1	Acceptance Decision	0h	6/4/2008	6/4/2008
2	Acceptance Decision to Proceed with Safety Review	0h	6/4/2008	6/4/2008
3	Acceptance Decision to Proceed with Environmental Review	0h	6/4/2008	6/4/2008
4	Safety Review	35,945.4h	5/5/2008	4/12/2011
5	Phase 1 - PSER and RAIs	7,821.5h	6/4/2008	1/14/2009
231	Phase 2 - SER with OIs	6,613.5h	5/5/2008	7/22/2009
487	Phase 4 - Advanced SER with No OI	18,154.2h	4/1/2009	10/25/2010
488	Phase 4 Support	400h	4/1/2009	10/25/2010
489	P4 - Section and Chapter Preparation	17,387.9h	4/1/2009	8/9/2010
490	Bellefonte Transition	0h	3/17/2010	3/17/2010
491	Bellefonte ACRS Letter Issued	0h	3/17/2010	3/17/2010
492	P4 - Chap 1.0 Introduction and General Description of Plant	284.1h	8/10/2009	4/14/2010
493	P4 - Chap 1.0 Close Open Items	72h	8/10/2009	3/17/2010
494	P4 - 1.0 Introduction and Interfaces - OI Resolution	20h	8/10/2009	11/17/2009
495	P4 - 1.x Financial Review - OI Resolution	20h	8/10/2009	11/17/2009
496	P4 - Chap 1 DCD Reconciliation	16h	11/18/2009	3/17/2010
497	P4 - Chap 1 FSAR Reconciliation	16h	8/10/2009	11/17/2009
498	P4 - Chap 1.0 PM Support	20h	8/10/2009	4/14/2010
499	P4 - Chap 1.0 Chapter Completion	192.1h	3/17/2010	4/14/2010
500	P4 - Chap 1.0 PM All section inputs received	0h	3/17/2010	3/17/2010
501	P4 - Chap 1.0 PM-LA-TE review and edit	108h	3/18/2010	3/31/2010
502	P4 - Chap 1.0 Branch chiefs concurrence	20.1h	4/1/2010	4/7/2010
503	P4 - Chap 1.0 OGC review and concurrence	64h	4/8/2010	4/14/2010
504	P4 - Chap 1.0 Chapter Complete	0h	4/14/2010	4/14/2010
505	P4 - Chap 2.0 Site Characteristics	1,308.1h	11/3/2009	5/7/2010
506	P4 - Chap 2.0 Close Open Items	1,028h	11/3/2009	4/9/2010
507	P4 - 2.0 Site Char and Param - OI Resolution	20h	11/3/2009	1/8/2010
508	P4 - 2.1.1 Site Location and Desc - OI Resolution	10h	11/3/2009	1/8/2010
509	P4 - 2.1.2 Excl Area Authority and Control - OI Resolution	10h	11/3/2009	1/8/2010
510	P4 - 2.1.3 Population Distrib - OI Resolution	10h	11/3/2009	1/8/2010
511	P4 - 2.2.1 - 2.2.2 Ident of Pot Haz - OI Resolution	10h	11/3/2009	1/8/2010
512	P4 - 2.2.3 Eval of Pot Accid - OI Resolution	10h	11/3/2009	1/8/2010
513	P4 - 2.3.1 Regional Climatology - OI Resolution	8h	11/3/2009	1/8/2010
514	P4 - 2.3.2 Local Meteorology - OI Resolution	8h	11/3/2009	1/8/2010

515	P4 - 2.3.3 Onsite Met Measurements Prog - OI Resolution	8h	11/3/2009	1/8/2010
516	P4 - 2.3.4 Short Term Dispersion for Accid Rel - OI Resolution	8h	11/3/2009	1/8/2010
517	P4 - 2.3.5 Long-Term Dispersion for Routine Rel - OI Resolution	8h	11/3/2009	1/8/2010
518	P4 - 2.4 Surface Water - OI Resolution	250h	11/3/2009	12/11/2009
519	P4 - 2.4 Groundwater - OI Resolution	120h	11/3/2009	12/11/2009
520	P4 - 2.5.1 Geologic and Seismic Information - OI Resolution	40h	2/19/2010	4/9/2010
521	P4 - 2.5.2 Vibratory Ground Motion - OI Resolution	40h	2/19/2010	4/9/2010
522	P4 - 2.5.3 Surface Faulting - OI Resolution	40h	2/19/2010	4/9/2010
523	P4 - 2.5.4 Stability of Subsurf Matls and Foundations - OI Resolution	205h	2/19/2010	4/9/2010
524	P4 - 2.5.5 Stability of Slopes - OI Resolution	95h	2/19/2010	4/9/2010
525	P4 - Chap 2 DCD Reconciliation	64h	11/3/2009	4/9/2010
526	P4 - Chap 2 FSAR Reconciliation	64h	11/3/2009	4/9/2010
527	P4 - Chap 2.0 PM Support	30h	11/3/2009	5/7/2010
528	P4 - Chap 2.0 Chapter Completion	250.1h	4/9/2010	5/7/2010
529	P4 - Chap 2.0 PM All section inputs received	0h	4/9/2010	4/9/2010
530	P4 - Chap 2.0 PM-LA-TE review and edit	146h	4/12/2010	4/23/2010
531	P4 - Chap 2.0 Branch chiefs concurrence	20.1h	4/26/2010	4/30/2010
532	P4 - Chap 2.0 OGC review and concurrence	84h	5/3/2010	5/7/2010
533	P4 - Chap 2.0 Chapter Complete	0h	5/7/2010	5/7/2010
534	P4 - Chap 3.0 Design of Structures, Components, Equipment, and System	2,098.1h	2/19/2010	7/19/2010
535	P4 - Chap 3.0 Close Open Items	1,876h	2/19/2010	6/18/2010
536	P4 - 3.2.1 Seismic Class - OI Resolution	100h	2/19/2010	5/27/2010
537	P4 - 3.2.2 System Quality Group Class - OI Resolution	100h	2/19/2010	5/27/2010
538	P4 - 3.3.1 Wind Loads - OI Resolution	8h	2/19/2010	5/20/2010
539	P4 - 3.3.2 Tornado Loads - OI Resolution	8h	2/19/2010	5/20/2010
540	P4 - 3.4.1 Flood Protection for Onsite Eqmt Failure - OI Resolution	8h	2/19/2010	5/13/2010
541	P4 - 3.4.2 Analysis Procedures - OI Resolution	8h	2/19/2010	5/20/2010
542	P4 - 3.5.1.1 Internally Gen Missiles (Outside Containment) - OI Resolution	8h	2/19/2010	5/13/2010
543	P4 - 3.5.1.2 Internally Gen Missiles (Inside Containment) - OI Resolution	8h	2/19/2010	5/13/2010
544	P4 - 3.5.1.3 Turbine Missiles - OI Resolution	54h	2/19/2010	5/20/2010
545	P4 - 3.5.1.4 Missiles Gen by Tornadoes/Winds - OI Resolution	8h	2/19/2010	5/13/2010
546	P4 - 3.5.1.5 Site Proximity Missiles (Except Aircraft) - OI Resolution	8h	2/19/2010	4/22/2010
547	P4 - 3.5.1.6 Aircraft Hazards - OI Resolution	1h	2/19/2010	4/22/2010
548	P4 - 3.5.2 SSCs To Be Protected From... Missiles - OI Resolution	8h	2/19/2010	5/13/2010
549	P4 - 3.5.3 Barrier Design Procedures - OI Resolution	12h	2/19/2010	5/20/2010
550	P4 - 3.6.1 Plant Design for Piping Failures - OI Resolution	20h	2/19/2010	5/13/2010
551	P4 - 3.6.2 Determ of Rupture Locations (Piping) - OI Resolution	140h	2/19/2010	5/27/2010
552	P4 - 3.6.3 LBB Eval Proced - OI Resolution	20h	2/19/2010	5/20/2010
553	P4 - 3.7.1 Seismic Design Param - OI Resolution	106h	2/19/2010	6/18/2010
554	P4 - 3.7.2 Seismic System Analysis - OI Resolution	86h	2/19/2010	6/18/2010

555	P4 - 3.7.3 Seismic Subsystem Analysis - OI Resolution	86h	2/19/2010	6/18/2010
556	P4 - 3.7.4 Seismic Instrumentation - OI Resolution	20h	2/19/2010	4/9/2010
557	P4 - 3.8.1 Concrete Containment - OI Resolution	16h	2/19/2010	6/18/2010
558	P4 - 3.8.2 Steel Containment - OI Resolution	8h	2/19/2010	6/18/2010
559	P4 - 3.8.3 Concrete/Steel Int Struct of Containmt - OI Resolution	8h	2/19/2010	6/18/2010
560	P4 - 3.8.4 Other Seismic Category I Structures - OI Resolution	8h	2/19/2010	6/18/2010
561	P4 - 3.8.5 Foundations - OI Resolution	28h	2/19/2010	6/18/2010
562	P4 - 3.9.1 Special Topics for Mech Components - OI Resolution	80h	2/19/2010	5/27/2010
563	P4 - 3.9.2 Dynamic Testing and Analysis of... - OI Resolution	100h	2/19/2010	5/27/2010
564	P4 - 3.9.3 ASME Code Class 1, 2, and 3 Components, ... - OI Resolution	100h	2/19/2010	5/27/2010
565	P4 - 3.9.4 Control Rod Drive Systems - OI Resolution	50h	2/19/2010	5/27/2010
566	P4 - 3.9.5 Reactor Pressure Vessel Internals - OI Resolution	40h	2/19/2010	5/27/2010
567	P4 - 3.9.6.1 - OI Resolution	40h	2/19/2010	5/20/2010
568	P4 - 3.9.6.2 - OI Resolution	40h	2/19/2010	5/20/2010
569	P4 - 3.10 Seismic/Dyn Qual of Mech/Elec Eqmt - OI Resolution	40h	2/19/2010	5/27/2010
570	P4 - 3.11 Envir Qual of Mech/Elec Eqmt - OI Resolution	41h	2/19/2010	5/20/2010
571	P4 - 3.12 ASME Code Class 1, 2, and 3 Piping Systems... - OI Resolution	40h	2/19/2010	5/27/2010
572	P4 - 3.13 Threaded Fasteners - OI Resolution	20h	2/19/2010	5/20/2010
573	P4 - Chap 3 DCD Reconciliation	200h	2/19/2010	6/18/2010
574	P4 - Chap 3 FSAR Reconciliation	200h	2/19/2010	6/18/2010
575	P4 - Chap 3.0 PM Support	30h	2/19/2010	7/19/2010
576	P4 - Chap 3.0 Chapter Completion	192.1h	6/18/2010	7/19/2010
577	P4 - Chap 3.0 PM All section inputs received	0h	6/18/2010	6/18/2010
578	P4 - Chap 3.0 PM-LA-TE review and edit	108h	6/21/2010	7/2/2010
579	P4 - Chap 3.0 Branch chiefs concurrence	20.1h	7/6/2010	7/12/2010
580	P4 - Chap 3.0 OGC review and concurrence	64h	7/13/2010	7/19/2010
581	P4 - Chap 3.0 Chapter Complete	0h	7/19/2010	7/19/2010
582	P4 - Chap 4.0 Reactor	284.1h	8/10/2009	4/14/2010
583	P4 - Chap 4.0 Close Open Items	192h	8/10/2009	3/17/2010
584	P4 - 4.2 Fuel System Design - OI Resolution	16h	11/16/2009	2/12/2010
585	P4 - 4.3 Nuclear Design - OI Resolution	16h	11/16/2009	2/12/2010
586	P4 - 4.4 Thermal and Hydraulic Design - OI Resolution	32h	11/16/2009	2/12/2010
587	P4 - 4.5.1 Control Rod Drive Structural Materials - OI Resolution	20h	8/10/2009	9/21/2009
588	P4 - 4.5.2 Rx Internal and Core Support Materials - OI Resolution	20h	8/10/2009	9/21/2009
589	P4 - 4.6 Functional Design of CRD System - OI Resolution	8h	11/16/2009	2/12/2010
590	P4 - Chap 4 DCD Reconciliation	40h	8/10/2009	3/17/2010
591	P4 - Chap 4 FSAR Reconciliation	40h	8/10/2009	2/12/2010
592	P4 - Chap 4.0 PM Support	30h	8/10/2009	4/14/2010
593	P4 - Chap 4.0 Chapter Completion	62.1h	3/17/2010	4/14/2010
594	P4 - Chap 4.0 PM All section inputs received	0h	3/17/2010	3/17/2010

595	P4 - Chap 4.0 PM-LA-TE review and edit	46h	3/18/2010	3/31/2010
596	P4 - Chap 4.0 Branch chiefs concurrence	3.1h	4/1/2010	4/7/2010
597	P4 - Chap 4.0 OGC review and concurrence	13h	4/8/2010	4/14/2010
598	P4 - Chap 4.0 Chapter Complete	0h	4/14/2010	4/14/2010
599	P4 - Chap 5.0 Reactor Coolant System and Connected Systems	731.1h	8/10/2009	4/14/2010
600	P4 - Chap 5.0 Close Open Items	662h	8/10/2009	3/17/2010
601	P4 - 5.2.1.1 Compliance with 10 CFR 50.55a - OI Resolution	100h	8/10/2009	10/27/2009
602	P4 - 5.2.1.2 Applicable Code Cases - OI Resolution	30h	8/10/2009	10/27/2009
603	P4 - 5.2.2 Overpressure Protection - OI Resolution	16h	11/16/2009	2/12/2010
604	P4 - 5.2.3 Rx Coolant Pressure Bound Mats - OI Resolution	40h	8/10/2009	9/21/2009
605	P4 - 5.2.4 Rx Coolant Press Bound ISI and Testing - OI Resolution	20h	8/10/2009	9/21/2009
606	P4 - 5.2.5 Rx Coolant Press Bound Leak Detect - OI Resolution	8h	8/10/2009	9/11/2009
607	P4 - 5.3.1 Reactor Vessel Materials - OI Resolution	20h	8/10/2009	9/21/2009
608	P4 - 5.3.2 P-T Limits ... and Press Therm Shock - OI Resolution	40h	8/10/2009	9/21/2009
609	P4 - 5.3.3 Reactor Vessel Integrity - OI Resolution	40h	8/10/2009	9/21/2009
610	P4 - 5.4 Components and Subsystem Design - OI Resolution	40h	11/16/2009	2/12/2010
611	P4 - 5.4.1 Reactor Coolant Pump Assembly - OI Resolution	8h	11/16/2009	2/12/2010
612	P4 - 5.4.1.1 Pump Flywheel Integrity (PWR) - OI Resolution	20h	8/10/2009	9/21/2009
613	P4 - 5.4.2.1 Steam Generator Materials - OI Resolution	20h	8/10/2009	9/21/2009
614	P4 - 5.4.2.2 Steam Generator Program - OI Resolution	20h	8/10/2009	9/21/2009
615	P4 - 5.4.5 Pressurizer - OI Resolution	8h	11/16/2009	2/12/2010
616	P4 - 5.4.7 RHR - OI Resolution	8h	11/16/2009	2/12/2010
617	P4 - 5.4.11 Pressurizer Relief Tank - OI Resolution	8h	11/16/2009	2/12/2010
618	P4 - 5.4.12 Reactor Cool Sys High Point Vents - OI Resolution	8h	11/16/2009	2/12/2010
619	P4 - Chap 5 DCD Reconciliation	104h	8/10/2009	3/17/2010
620	P4 - Chap 5 FSAR Reconciliation	104h	8/10/2009	2/17/2010
621	P4 - Chap 5.0 PM Support	30h	8/10/2009	4/14/2010
622	P4 - Chap 5.0 Chapter Completion	39.1h	3/17/2010	4/14/2010
623	P4 - Chap 5.0 PM All section inputs received	0h	3/17/2010	3/17/2010
624	P4 - Chap 5.0 PM-LA-TE review and edit	22h	3/18/2010	3/31/2010
625	P4 - Chap 5.0 Branch chiefs concurrence	4.1h	4/1/2010	4/7/2010
626	P4 - Chap 5.0 OGC review and concurrence	13h	4/8/2010	4/14/2010
627	P4 - Chap 5.0 Chapter Complete	0h	4/14/2010	4/14/2010
628	P4 - Chap 6.0 Engineered Safety Features	1,029.1h	12/28/2009	7/19/2010
629	P4 - Chap 6.0 Close Open Items	745h	12/28/2009	6/18/2010
630	P4 - 6.1.1 ESF Materials - OI Resolution	20h	12/28/2009	2/9/2010
631	P4 - 6.1.2 Protective Coating - OI Resolution	20h	12/28/2009	2/9/2010
632	P4 - 6.2.1 Containment Funct Design - OI Resolution	155h	12/28/2009	6/18/2010
633	P4 - 6.2.2 Containment Heat Removal - OI Resolution	45h	12/28/2009	6/18/2010
634	P4 - 6.2.3 Sec. Containment Funct Design - OI Resolution	15h	12/28/2009	6/18/2010

635	P4 - 6.2.4 Containment Isolation - OI Resolution	30h	12/28/2009	6/18/2010
636	P4 - 6.2.5 Combustible Gas Control - OI Resolution	30h	12/28/2009	6/18/2010
637	P4 - 6.2.6 Containment Leakage Testing - OI Resolution	30h	12/28/2009	6/18/2010
638	P4 - 6.2.7 Fracture Prevent of Containment Press Bound - OI Resolution	20h	12/28/2009	2/9/2010
639	P4 - 6.3 ECCS - OI Resolution	40h	1/15/2010	4/15/2010
640	P4 - 6.4 Control Room Habitability - OI Resolution	68h	12/28/2009	6/18/2010
641	P4 - 6.5.1 ESF Atmosphere Cleanup - OI Resolution	45h	12/28/2009	6/18/2010
642	P4 - 6.5.2 Containment Spray as FP Cleanup - OI Resolution	26h	12/28/2009	6/18/2010
643	P4 - 6.5.3 FP Control Systems / Structures - OI Resolution	5h	12/28/2009	6/18/2010
644	P4 - 6.6 ISI of Class 2 and 3 Components - OI Resolution	20h	12/28/2009	2/9/2010
645	P4 - Chap 6 DCD Reconciliation	88h	12/28/2009	6/18/2010
646	P4 - Chap 6 FSAR Reconciliation	88h	12/28/2009	6/18/2010
647	P4 - Chap 6.0 PM Support	30h	12/28/2009	7/19/2010
648	P4 - Chap 6.0 Chapter Completion	254.1h	6/18/2010	7/19/2010
649	P4 - Chap 6.0 PM All section inputs received	0h	6/18/2010	6/18/2010
650	P4 - Chap 6.0 PM-LA-TE review and edit	170h	6/21/2010	7/2/2010
651	P4 - Chap 6.0 Branch chiefs concurrence	20.1h	7/6/2010	7/12/2010
652	P4 - Chap 6.0 OGC review and concurrence	64h	7/13/2010	7/19/2010
653	P4 - Chap 6.0 Chapter Complete	0h	7/19/2010	7/19/2010
654	P4 - Chap 7.0 I&C Systems	122.1h	10/21/2009	4/14/2010
655	P4 - Chap 7.0 Close Open Items	51h	10/21/2009	3/17/2010
656	P4 - 7.0 I&C - Overview - OI Resolution	5h	10/21/2009	12/3/2009
657	P4 - 7.1 I&C - Introduction - OI Resolution	1h	10/21/2009	12/3/2009
658	P4 - 7.2 Reactor Trip System - OI Resolution	1h	10/21/2009	12/3/2009
659	P4 - 7.3 ESF - OI Resolution	1h	10/21/2009	12/3/2009
660	P4 - 7.4 Safe Shutdown - OI Resolution	1h	10/21/2009	12/3/2009
661	P4 - 7.5 Info Sys Important to Safety - OI Resolution	1h	10/21/2009	12/3/2009
662	P4 - 7.6 Interlock Sys Important to Safety - OI Resolution	6h	10/21/2009	12/3/2009
663	P4 - 7.7 Control Systems - OI Resolution	1h	10/21/2009	12/3/2009
664	P4 - 7.8 Diverse I&C - OI Resolution	1h	10/21/2009	12/3/2009
665	P4 - 7.9 Data Communication - OI Resolution	1h	10/21/2009	12/3/2009
666	P4 - Chap 7 DCD Reconciliation	16h	10/21/2009	3/17/2010
667	P4 - Chap 7 FSAR Reconciliation	16h	10/21/2009	12/3/2009
668	P4 - Chap 7.0 PM Support	30h	10/21/2009	4/14/2010
669	P4 - Chap 7.0 Chapter Completion	41.1h	3/17/2010	4/14/2010
670	P4 - Chap 7.0 PM All section inputs received	0h	3/17/2010	3/17/2010
671	P4 - Chap 7.0 PM-LA-TE review and edit	24h	3/18/2010	3/31/2010
672	P4 - Chap 7.0 Branch chiefs concurrence	4.1h	4/1/2010	4/7/2010
673	P4 - Chap 7.0 OGC review and concurrence	13h	4/8/2010	4/14/2010
674	P4 - Chap 7.0 Chapter Complete	0h	4/14/2010	4/14/2010

675	P4 - Chap 8.0 Electric Power	440.1h	10/21/2009	7/19/2010
676	P4 - Chap 8.0 Close Open Items	218h	10/21/2009	6/18/2010
677	P4 - 8.1 Elec Power - Intro - OI Resolution	22h	10/21/2009	2/2/2010
678	P4 - 8.2 Offsite Power - OI Resolution	120h	10/21/2009	2/2/2010
679	P4 - 8.3.1 AC Power (Onsite) - OI Resolution	21h	10/21/2009	2/2/2010
680	P4 - 8.3.2 DC Power (Onsite) - OI Resolution	21h	10/21/2009	2/2/2010
681	P4 - 8.4 Station Blackout - OI Resolution	18h	10/21/2009	2/2/2010
682	P4 - Chap 8 DCD Reconciliation	8h	10/21/2009	6/18/2010
683	P4 - Chap 8 FSAR Reconciliation	8h	10/21/2009	2/2/2010
684	P4 - Chap 8.0 PM Support	30h	10/21/2009	7/19/2010
685	P4 - Chap 8.0 Chapter Completion	192.1h	6/18/2010	7/19/2010
686	P4 - Chap 8.0 PM All section inputs received	0h	6/18/2010	6/18/2010
687	P4 - Chap 8.0 PM-LA-TE review and edit	108h	6/21/2010	7/2/2010
688	P4 - Chap 8.0 Branch chiefs concurrence	20.1h	7/6/2010	7/12/2010
689	P4 - Chap 8.0 OGC review and concurrence	64h	7/13/2010	7/19/2010
690	P4 - Chap 8.0 Chapter Complete	0h	7/19/2010	7/19/2010
691	P4 - Chap 9.0 Auxiliary Systems	1,310.1h	12/14/2009	7/19/2010
692	P4 - Chap 9.0 Close Open Items	1,020h	12/14/2009	6/18/2010
693	P4 - 9.1.1 Criticality Safety of Fuel - OI Resolution	40h	12/14/2009	1/15/2010
694	P4 - 9.1.2 New and Spent Fuel Storage - OI Resolution	48h	12/14/2009	1/15/2010
695	P4 - 9.1.3 SFP Cooling and Cleanup - OI Resolution	28h	12/14/2009	1/15/2010
696	P4 - 9.1.4 Light Load Handling - OI Resolution	20h	12/14/2009	1/15/2010
697	P4 - 9.1.5 Overhead Heavy Load Handling - OI Resolution	30h	12/14/2009	1/15/2010
698	P4 - 9.2.1 Service Water - OI Resolution	24h	12/14/2009	1/15/2010
699	P4 - 9.2.2 Rx Aux Cooling Water - OI Resolution	16h	12/14/2009	1/15/2010
700	P4 - 9.2.4 Pot and Sanit Water - OI Resolution	8h	12/14/2009	1/15/2010
701	P4 - 9.2.6 Condensate Storage Facilities - OI Resolution	8h	12/14/2009	1/15/2010
702	P4 - 9.3.1 Compressed Air - OI Resolution	8h	12/14/2009	1/15/2010
703	P4 - 9.3.2 Process and Post Accid Sampling - OI Resolution	32h	12/14/2009	1/27/2010
704	P4 - 9.3.3 Eqmt and Floor Drainage - OI Resolution	8h	12/14/2009	1/15/2010
705	P4 - 9.3.4 CVCS (PWR) - OI Resolution	36h	12/14/2009	1/27/2010
706	P4 - 9.4.1 Nuclear Island Nonradioactive Ventilation System- OI Resolution	35h	12/14/2009	6/18/2010
707	P4 - 9.4.2 SFP Area Ventilation - OI Resolution	20h	12/14/2009	6/18/2010
708	P4 - 9.4.3 Aux and Radwaste Area Vent - OI Resolution	20h	12/14/2009	6/18/2010
709	P4 - 9.4.4 Turbine Area Vent - OI Resolution	5h	12/14/2009	6/18/2010
710	P4 - 9.4.5 ESF Ventilation - OI Resolution	5h	12/14/2009	6/18/2010
711	P4 - 9.4.6 Containment Recirculation Cooling System - OI Resolution	15h	12/14/2009	6/18/2010
712	P4 - 9.4.7 Containment Air Filtration System - OI Resolution	165h	12/14/2009	6/18/2010
713	P4 - 9.4.8 Radwaste Building HVAC System - OI Resolution	25h	12/14/2009	6/18/2010
714	P4 - 9.4.9 Turbine Building Ventilation System - OI Resolution	25h	12/14/2009	6/18/2010

715	P4 - 9.4.10 Diesel Generator Building Heating & Ventilation System - OI Re	20h	12/14/2009	6/18/2010
716	P4 - 9.4.11 Health Physics & Hot Machine Shop HVAC System - OI Resolu	20h	12/14/2009	6/18/2010
717	P4 - 9.5.1 Fire Protection - OI Resolution	50h	12/14/2009	1/27/2010
718	P4 - 9.5.2 Communications - OI Resolution	20h	12/14/2009	1/27/2010
719	P4 - 9.5.3 Lighting - OI Resolution	17h	12/14/2009	1/22/2010
720	P4 - 9.5.4 EDG Fuel Oil Storage and Transfer - OI Resolution	32h	12/14/2009	1/15/2010
721	P4 - 9.5.5 EDG Cooling Water - OI Resolution	8h	12/14/2009	1/15/2010
722	P4 - 9.5.6 EDG Starting - OI Resolution	8h	12/14/2009	1/15/2010
723	P4 - 9.5.7 EDG Lubrication - OI Resolution	8h	12/14/2009	1/15/2010
724	P4 - 9.5.8 EDG Combust Air Intake and Exhaust - OI Resolution	8h	12/14/2009	1/15/2010
725	P4 - Chap 9 DCD Reconciliation	104h	12/14/2009	6/18/2010
726	P4 - Chap 9 FSAR Reconciliation	104h	12/14/2009	6/18/2010
727	P4 - Chap 9.0 PM Support	30h	12/14/2009	7/19/2010
728	P4 - Chap 9.0 Chapter Completion	260.1h	6/18/2010	7/19/2010
729	P4 - Chap 9.0 PM All section inputs received	0h	6/18/2010	6/18/2010
730	P4 - Chap 9.0 PM-LA-TE review and edit	156h	6/21/2010	7/2/2010
731	P4 - Chap 9.0 Branch chiefs concurrence	20.1h	7/6/2010	7/12/2010
732	P4 - Chap 9.0 OGC review and concurrence	84h	7/13/2010	7/19/2010
733	P4 - Chap 9.0 Chapter Complete	0h	7/19/2010	7/19/2010
734	P4 - Chap 10.0 Steam and Power Conversion System	542.1h	8/10/2009	4/14/2010
735	P4 - Chap 10.0 Close Open Items	320h	8/10/2009	3/17/2010
736	P4 - 10.2 Turbine Generator - OI Resolution	16h	9/8/2009	10/9/2009
737	P4 - 10.2.3 Turbine Rotor Integrity - OI Resolution	20h	8/10/2009	9/21/2009
738	P4 - 10.3 Main Steam Supply - OI Resolution	16h	9/8/2009	10/9/2009
739	P4 - 10.3.6 Steam and FW System Matls - OI Resolution	20h	8/10/2009	9/21/2009
740	P4 - 10.4.1 Main Condensers - OI Resolution	8h	9/8/2009	10/9/2009
741	P4 - 10.4.2 Main Condenser Evac - OI Resolution	8h	9/8/2009	10/9/2009
742	P4 - 10.4.3 Turbine Gland Sealing - OI Resolution	8h	9/8/2009	10/9/2009
743	P4 - 10.4.4 Turbine Bypass - OI Resolution	8h	9/8/2009	10/9/2009
744	P4 - 10.4.5 Circulating Water - OI Resolution	64h	9/8/2009	10/9/2009
745	P4 - 10.4.6 Condensate Cleanup - OI Resolution	20h	8/10/2009	9/21/2009
746	P4 - 10.4.7 Condensate and Feedwater - OI Resolution	8h	9/8/2009	10/9/2009
747	P4 - 10.4.8 S/G Blowdown (PWR) - OI Resolution	20h	8/10/2009	9/21/2009
748	P4 - 10.4.9 AFW (PWR) - OI Resolution	8h	9/8/2009	10/9/2009
749	P4 - Chap 10 DCD Reconciliation	48h	8/10/2009	3/17/2010
750	P4 - Chap 10 FSAR Reconciliation	48h	8/10/2009	9/21/2009
751	P4 - Chap 10.0 PM Support	30h	8/10/2009	4/14/2010
752	P4 - Chap 10.0 Chapter Completion	192.1h	3/17/2010	4/14/2010
753	P4 - Chap 10.0 PM All section inputs received	0h	3/17/2010	3/17/2010
754	P4 - Chap 10.0 PM-LA-TE review and edit	108h	3/18/2010	3/31/2010

755	P4 - Chap 10.0 Branch chiefs concurrence	20.1h	4/1/2010	4/7/2010
756	P4 - Chap 10.0 OGC review and concurrence	64h	4/8/2010	4/14/2010
757	P4 - Chap 10.0 Chapter Complete	0h	4/14/2010	4/14/2010
758	P4 - Chap 11.0 Radioactive Waste Management	440.1h	8/10/2009	4/14/2010
759	P4 - Chap 11.0 Close Open Items	210h	8/10/2009	3/17/2010
760	P4 - 11.1 Source Terms - OI Resolution	34h	8/10/2009	9/21/2009
761	P4 - 11.2 Liq Waste Mgmt - OI Resolution	40h	8/10/2009	9/21/2009
762	P4 - 11.3 Gas Waste Mgmt - OI Resolution	40h	8/10/2009	9/21/2009
763	P4 - 11.4 Solid Waste Mgmt - OI Resolution	40h	8/10/2009	9/21/2009
764	P4 - 11.5 Rad Monit Inst & Sampling - OI Resolution	8h	8/10/2009	9/21/2009
765	P4 - Chap 11 DCD Reconciliation	24h	8/10/2009	3/17/2010
766	P4 - Chap 11 FSAR Reconciliation	24h	8/10/2009	9/21/2009
767	P4 - Chap 11.0 PM Support	30h	8/10/2009	4/14/2010
768	P4 - Chap 11.0 Chapter Completion	200.1h	3/17/2010	4/14/2010
769	P4 - Chap 11.0 PM All section inputs received	0h	3/17/2010	3/17/2010
770	P4 - Chap 11.0 PM-LA-TE review and edit	108h	3/18/2010	3/31/2010
771	P4 - Chap 11.0 Branch chiefs concurrence	28.1h	4/1/2010	4/7/2010
772	P4 - Chap 11.0 OGC review and concurrence	64h	4/8/2010	4/14/2010
773	P4 - Chap 11.0 Chapter Complete	0h	4/14/2010	4/14/2010
774	P4 - Chap 12.0 Radiation Protection	304.1h	8/10/2009	4/14/2010
775	P4 - Chap 12.0 Close Open Items	82h	8/10/2009	3/17/2010
776	P4 - 12.1 Occupational ALARA - OI Resolution	10h	8/10/2009	9/21/2009
777	P4 - 12.2 Rad Sources - OI Resolution	20h	8/10/2009	9/21/2009
778	P4 - 12.3 - 12.4 RP Design Features - OI Resolution	10h	8/10/2009	9/21/2009
779	P4 - 12.5 Operational RP Program - OI Resolution	10h	8/10/2009	9/21/2009
780	P4 - Chap 12 DCD Reconciliation	16h	8/10/2009	3/17/2010
781	P4 - Chap 12 FSAR Reconciliation	16h	8/10/2009	9/21/2009
782	P4 - Chap 12.0 PM Support	30h	8/10/2009	4/14/2010
783	P4 - Chap 12.0 Chapter Completion	192.1h	3/17/2010	4/14/2010
784	P4 - Chap 12.0 PM All section inputs received	0h	3/17/2010	3/17/2010
785	P4 - Chap 12.0 PM-LA-TE review and edit	108h	3/18/2010	3/31/2010
786	P4 - Chap 12.0 Branch chiefs concurrence	20.1h	4/1/2010	4/7/2010
787	P4 - Chap 12.0 OGC review and concurrence	64h	4/8/2010	4/14/2010
788	P4 - Chap 12.0 Chapter Complete	0h	4/14/2010	4/14/2010
789	P4 - Chap 13.0 Conduct of Operations	2,917.1h	4/1/2009	8/9/2010
790	P4 - Chap 13.0 Close Open Items	2,525h	4/1/2009	5/14/2010
791	P4 - 13.1.1 Mgmt and Tech Support Org - OI Resolution	29h	10/21/2009	12/3/2009
792	P4 - 13.1.2 - 13.1.3 Operating Org - OI Resolution	29h	10/21/2009	12/3/2009
793	P4 - 13.2.1 Rx Operator Requal / Training - OI Resolution	21h	10/21/2009	12/3/2009
794	P4 - 13.2.2 Non-Licensed Plant Staff Training - OI Resolution	21h	10/21/2009	12/3/2009

795	P4 - 13.3 EP - Await Input	0h	6/17/2009	7/30/2009
796	P4 - 13.3 EP - Applicant Input to FEMA	18h	7/31/2009	8/4/2009
797	P4 - 13.3 EP Offsite FEMA - OI Resolution	10h	8/5/2009	9/16/2009
798	P4 - 13.3 EP Onsite - OI Resolution	120h	7/31/2009	9/16/2009
799	P4 - 13.3 EP ETE - OI Resolution	1h	7/31/2009	8/13/2009
800	P4 - 13.3 SER Support (TSC Rad Consequences Evaluation) to EP	20h	6/30/2009	9/30/2009
801	P4 - 13.3 EP - Integrate Inputs	60h	10/1/2009	10/15/2009
802	P4 - 13.3 EP - Finalize SER w/o OIs	20h	10/16/2009	10/22/2009
803	P4 - 13.3 EP - Branch Chief Concurrence	30h	10/23/2009	11/5/2009
804	P4 - 13.4 Operational Programs - OI Resolution	10h	10/21/2009	10/27/2009
805	P4 - 13.5.1.1 Admin Proced - Gen - OI Resolution	11h	10/21/2009	12/3/2009
806	P4 - 13.5.2.1 Operating and Emerg Ops Proced - OI Resolution	41h	10/21/2009	12/3/2009
807	P4 - 13.6 Physical Security - Review and Initial RAIs Prepared	300h	4/1/2009	7/24/2009
808	P4 - 13.6 Physical Security - Initial RAIs Processing and Issuance	40h	7/27/2009	8/21/2009
809	P4 - 13.6 Physical Security - Applicant RAI Response Period	0h	8/24/2009	9/21/2009
810	P4 - 13.6 Physical Security - Review Response and Prepare Supplemental	133h	9/22/2009	11/3/2009
811	P4 - 13.6 Physical Security - Supplemental RAI Processing and Issuance	40h	11/4/2009	12/3/2009
812	P4 - 13.6 Physical Security - Applicant Supplemental RAI Response Period	0h	12/4/2009	1/4/2010
813	P4 - 13.6 Physical Security - Review Response and Complete Advance SE	267h	1/5/2010	2/17/2010
814	P4 - 13.7 Fitness for Duty - Review and Initial RAIs Prepared	40h	5/29/2009	8/7/2009
815	P4 - 13.7 Fitness for Duty - Initial RAIs Processing and Issuance	120h	8/10/2009	9/4/2009
816	P4 - 13.7 Fitness for Duty - Applicant RAI Response Period	0h	9/8/2009	10/5/2009
817	P4 - 13.7 Fitness for Duty - Review Response and Prepare Supplemental F	30h	10/6/2009	11/18/2009
818	P4 - 13.7 Fitness for Duty - Supplemental RAI Processing and Issuance	120h	11/19/2009	12/17/2009
819	P4 - 13.7 Fitness for Duty - Applicant Supplemental RAI Response Period	0h	12/18/2009	1/19/2010
820	P4 - 13.7 Fitness for Duty - Review Response and Complete Advance SER	30h	1/20/2010	3/3/2010
821	P4 - 13.x Cyber Security - Review and Initial RAIs Prepared	380h	6/30/2009	10/22/2009
822	P4 - 13.x Cyber Security - Initial RAIs Processing and Issuance	40h	10/23/2009	11/20/2009
823	P4 - 13.x Cyber Security - Applicant RAI Response Period	0h	11/23/2009	12/21/2009
824	P4 - 13.x Cyber Security - Review Response and Prepare Supplemental R	210h	12/22/2009	2/4/2010
825	P4 - 13.x Cyber Security - Supplemental RAI Processing and Issuance	40h	2/5/2010	3/5/2010
826	P4 - 13.x Cyber Security - Applicant Supplemental RAI Response Period	0h	3/8/2010	4/2/2010
827	P4 - 13.x Cyber Security - Review Response and Complete Advance SER	230h	4/5/2010	5/14/2010
828	P4 - Chap 13 DCD Reconciliation	32h	10/21/2009	3/17/2010
829	P4 - Chap 13 FSAR Reconciliation	32h	10/21/2009	12/3/2009
830	P4 - Chap 13.0 PM Support	100h	4/1/2009	8/9/2010
831	P4 - Chap 13.0 Chapter Completion	292.1h	5/14/2010	6/14/2010
832	P4 - Chap 13.0 PM All section inputs received	0h	5/14/2010	5/14/2010
833	P4 - Chap 13.0 PM-LA-TE review and edit	156h	5/17/2010	5/28/2010
834	P4 - Chap 13.0 Branch chiefs concurrence	52.1h	6/1/2010	6/7/2010

835	P4 - Chap 13.0 OGC review and concurrence	84h	6/8/2010	6/14/2010
836	P4 - Chap 13.0 Chapter Complete	0h	6/14/2010	6/14/2010
837	P4 - Chap 14.0 Initial Test Program	2,357.1h	4/1/2009	7/19/2010
838	P4 - Chap 14.0 Close Open Items	1,964h	4/1/2009	6/18/2010
839	P4 - 14.2 Initial Plant Test Pgm - OI Resolution	76h	8/10/2009	9/21/2009
840	P4 - 14.3 ITAAC - OI Resolution	72h	8/10/2009	9/21/2009
841	P4 - 14.3.2 Struct and Sys Eng ITAAC - OI Resolution	4h	8/10/2009	9/21/2009
842	P4 - 14.3.3 Piping ITAAC - OI Resolution	40h	8/10/2009	10/27/2009
843	P4 - 14.3.4 Rx Systems ITAAC - OI Resolution	40h	11/16/2009	2/12/2010
844	P4 - 14.3.5 I&C ITAAC - OI Resolution	1h	8/10/2009	9/21/2009
845	P4 - 14.3.6 Elect ITAAC - OI Resolution	36h	8/10/2009	9/21/2009
846	P4 - 14.3.7 Plant Sys ITAAC - OI Resolution	53h	12/14/2009	1/15/2010
847	P4 - 14.3.8 RP ITAAC - OI Resolution	40h	8/10/2009	9/21/2009
848	P4 - 14.3.9 Human Factors ITAAC - OI Resolution	30h	8/10/2009	9/24/2009
849	P4 - 14.3.10 EP ITAAC - OI Resolution	10h	8/10/2009	9/21/2009
850	P4 - 14.3.11 Containment ITAAC - OI Resolution	40h	12/28/2009	6/18/2010
851	P4 - 14.3.12 Physical Sec Hardware ITAAC - Review and Initial RAIs Prep	60h	4/1/2009	7/24/2009
852	P4 - 14.3.12 Physical Sec Hardware ITAAC - Initial RAIs Processing and Iss	40h	7/27/2009	8/21/2009
853	P4 - 14.3.12 Physical Sec Hardware ITAAC - Applicant RAI Response Peri	0h	8/24/2009	9/21/2009
854	P4 - 14.3.12 Physical Sec Hardware ITAAC - Review Response and Prepa	30h	9/22/2009	11/3/2009
855	P4 - 14.3.12 Physical Sec Hardware ITAAC - Supplemental RAI Processin	40h	11/4/2009	12/3/2009
856	P4 - 14.3.12 Physical Sec Hardware ITAAC - Applicant Supplemental RAI f	0h	12/4/2009	1/4/2010
857	P4 - 14.3.12 Physical Sec Hardware ITAAC - Review Response and Comp	30h	1/5/2010	2/17/2010
858	P4 - 14.3.x Cyber Security ITAAC - Review and Initial RAIs Prepared	530h	6/30/2009	10/22/2009
859	P4 - 14.3.x Cyber Security ITAAC - Initial RAIs Processing and Issuance	40h	10/23/2009	11/20/2009
860	P4 - 14.3.x Cyber Security ITAAC - Applicant RAI Response Period	0h	11/23/2009	12/21/2009
861	P4 - 14.3.x Cyber Security ITAAC - Review Response and Prepare Supple	180h	12/22/2009	2/4/2010
862	P4 - 14.3.x Cyber Security ITAAC - Supplemental RAI Processing and Issu	40h	2/5/2010	3/5/2010
863	P4 - 14.3.x Cyber Security ITAAC - Applicant Supplemental RAI Response	0h	3/8/2010	4/2/2010
864	P4 - 14.3.x Cyber Security ITAAC - Review Response and Complete Advan	100h	4/5/2010	5/14/2010
865	P4 - Chap 14 DCD Reconciliation	216h	8/10/2009	3/17/2010
866	P4 - Chap 14 FSAR Reconciliation	216h	8/10/2009	6/18/2010
867	P4 - Chap 14.0 PM Support	200h	8/10/2009	7/19/2010
868	P4 - Chap 14.0 Chapter Completion	193.1h	6/18/2010	7/19/2010
869	P4 - Chap 14.0 PM All section inputs received	0h	6/18/2010	6/18/2010
870	P4 - Chap 14.0 PM-LA-TE review and edit	108h	6/21/2010	7/2/2010
871	P4 - Chap 14.0 Branch chiefs concurrence	21.1h	7/6/2010	7/12/2010
872	P4 - Chap 14.0 OGC review and concurrence	64h	7/13/2010	7/19/2010
873	P4 - Chap 14.0 Chapter Complete	0h	7/19/2010	7/19/2010
874	P4 - Chap 15.0 Safety Analysis	660.1h	12/14/2009	7/15/2010

875	P4 - Chap 15.0 Close Open Items	438h	12/14/2009	6/16/2010
876	P4 - 15.0 Accident Analysis - OI Resolution	16h	1/15/2010	4/15/2010
877	P4 - 15.0.3 DBA Rad Conseq Analyses (Adv LWRs) - OI Resolution	20h	12/14/2009	1/27/2010
878	P4 - 15.1 Increase in Heat Removal by the Secondary System (15.1.1 - 15.1.2)	16h	1/15/2010	4/15/2010
879	P4 - 15.2 Decrease in Heat Removal by the Secondary System (15.2.1 - 15.2.2)	24h	1/15/2010	4/15/2010
880	P4 - 15.3 Decrease in Reactor Coolant System Flow Rate (15.3.1 - 15.3.4)	16h	1/15/2010	4/15/2010
881	P4 - 15.4 Reactivity and Power Distribution Anomalies (15.4.1 - 15.4.8) - OI	128h	1/15/2010	4/15/2010
882	P4 - 15.5 Increase in Reactor Coolant Inventory (15.5.1 - 15.5.2) - OI Reso	16h	1/15/2010	4/15/2010
883	P4 - 15.6 Decrease in Reactor Coolant Inventory (15.6.1 - 15.6.5) - OI Res	120h	1/15/2010	4/15/2010
884	P4 - 15.7 Radioactive Releases from a Subsystem or Component - OI Res	10h	12/14/2009	1/27/2010
885	P4 - 15.8 ATWS - OI Resolution	8h	1/15/2010	4/15/2010
886	P4 - Chap 15 DCD Reconciliation	32h	12/14/2009	6/16/2010
887	P4 - Chap 15 FSAR Reconciliation	32h	12/14/2009	4/15/2010
888	P4 - Chap 15.0 PM Support	30h	12/14/2009	1/27/2010
889	P4 - Chap 15.0 Chapter Completion	192.1h	6/16/2010	7/15/2010
890	P4 - Chap 15.0 PM All section inputs received	0h	6/16/2010	6/16/2010
891	P4 - Chap 15.0 PM-LA-TE review and edit	108h	6/17/2010	6/30/2010
892	P4 - Chap 15.0 Branch chiefs concurrence	20.1h	7/1/2010	7/8/2010
893	P4 - Chap 15.0 OGC review and concurrence	64h	7/9/2010	7/15/2010
894	P4 - Chap 15.0 Chapter Complete	0h	7/15/2010	7/15/2010
895	P4 - Chap 16.0 Technical Specifications	413.2h	8/10/2009	7/19/2010
896	P4 - Chap 16.0 Close Open Items	378h	8/10/2009	6/18/2010
897	P4 - 16.1 TS - General, Plant Sys, Refueling, & Adm Ctrls - OI Resolution	56h	8/10/2009	9/30/2009
898	P4 - 16.2 TS - SLs, Reactivity, Core Op Limits, & Special Ops - OI Resoluti	40h	8/10/2009	9/30/2009
899	P4 - 16.3 TS - Instrumentation - OI Resolution	66h	8/10/2009	9/30/2009
900	P4 - 16.4 TS - RCS & ECCS - OI Resolution	40h	8/10/2009	9/30/2009
901	P4 - 16.5 TS - Containment Sys - OI Resolution	40h	8/10/2009	9/30/2009
902	P4 - 16.6 TS - Electrical Power Sys - OI Resolution	40h	8/10/2009	9/30/2009
903	P4 - Chap 16 DCD Reconciliation	48h	8/10/2009	6/18/2010
904	P4 - Chap 16 FSAR Reconciliation	48h	8/10/2009	9/30/2009
905	P4 - Chap 16.0 PM Support	0.1h	8/10/2009	7/19/2010
906	P4 - Chap 16.0 Chapter Completion	35.1h	6/18/2010	7/19/2010
907	P4 - Chap 16.0 PM All section inputs received	0h	6/18/2010	6/18/2010
908	P4 - Chap 16.0 PM-LA-TE review and edit	22h	6/21/2010	7/2/2010
909	P4 - Chap 16.0 Branch chiefs concurrence	0.1h	7/6/2010	7/12/2010
910	P4 - Chap 16.0 OGC review and concurrence	13h	7/13/2010	7/19/2010
911	P4 - Chap 16.0 Chapter Complete	0h	7/19/2010	7/19/2010
912	P4 - Chap 17.0 Quality Assurance	546.1h	5/21/2009	4/14/2010
913	P4 - Chap 17.0 Close Open Items	324h	5/21/2009	3/17/2010
914	P4 - 17.4 Reliab Assur Prog - OI Resolution	24h	8/10/2009	9/21/2009

915	P4 - 17.5 QA Program - OI Resolution	40h	8/10/2009	9/21/2009
916	P4 - QA Implementation Inspection	220h	5/21/2009	8/14/2009
917	P4 - 17.6 Maint Rule - OI Resolution	8h	8/10/2009	9/21/2009
918	P4 - Chap 17 DCD Reconciliation	16h	8/10/2009	3/17/2010
919	P4 - Chap 17 FSAR Reconciliation	16h	8/10/2009	9/21/2009
920	P4 - Chap 17.0 PM Support	30h	5/21/2009	1/26/2010
921	P4 - Chap 17.0 Chapter Completion	192.1h	3/17/2010	4/14/2010
922	P4 - Chap 17.0 PM All section inputs received	0h	3/17/2010	3/17/2010
923	P4 - Chap 17.0 PM-LA-TE review and edit	108h	3/18/2010	3/31/2010
924	P4 - Chap 17.0 Branch chiefs concurrence	20.1h	4/1/2010	4/7/2010
925	P4 - Chap 17.0 OGC review and concurrence	64h	4/8/2010	4/14/2010
926	P4 - Chap 17.0 Chapter Complete	0h	4/14/2010	4/14/2010
927	P4 - Chap 18.0 Human Factors	481h	10/21/2009	4/14/2010
928	P4 - Chap 18.0 Close Open Items	243h	10/21/2009	3/17/2010
929	P4 - 18.1 HFE Program Management - OI Resolution	15h	10/21/2009	12/3/2009
930	P4 - 18.2 Operating Experience Review - OI Resolution	15h	10/21/2009	12/3/2009
931	P4 - 18.3 Functional Requirements Analysis and Function Allocation - OI R	15h	10/21/2009	12/3/2009
932	P4 - 18.4 Task Analysis - OI Resolution	15h	10/21/2009	12/3/2009
933	P4 - 18.5 Staffing and Qualifications - OI Resolution	15h	10/21/2009	12/3/2009
934	P4 - 18.6 Human Reliability Analysis - OI Resolution	15h	10/21/2009	12/3/2009
935	P4 - 18.7 Human-System Interface Design - OI Resolution	15h	10/21/2009	12/3/2009
936	P4 - 18.8 Procedure Development - OI Resolution	15h	10/21/2009	12/3/2009
937	P4 - 18.9 Training Program Development - OI Resolution	15h	10/21/2009	12/3/2009
938	P4 - 18.10 Human Factors Verification and Validation - OI Resolution	15h	10/21/2009	12/3/2009
939	P4 - 18.11 Design Implementation - OI Resolution	15h	10/21/2009	12/3/2009
940	P4 - 18.12 Human Performance Monitoring - OI Resolution	15h	10/21/2009	12/3/2009
941	P4 - 18.13 Minimum Inventory - OI Resolution	15h	10/21/2009	12/3/2009
942	P4 - Chap 18 DCD Reconciliation	24h	10/21/2009	3/17/2010
943	P4 - Chap 18 FSAR Reconciliation	24h	10/21/2009	12/3/2009
944	P4 - Chap 18.0 PM Support	30h	10/21/2009	4/14/2010
945	P4 - Chap 18.0 Chapter Completion	208h	3/17/2010	4/14/2010
946	P4 - Chap 18.0 PM All section inputs received	0h	3/17/2010	3/17/2010
947	P4 - Chap 18.0 PM-LA-TE review and edit	108h	3/18/2010	3/31/2010
948	P4 - Chap 18.0 Branch chiefs concurrence	36h	4/1/2010	4/7/2010
949	P4 - Chap 18.0 OGC review and concurrence	64h	4/8/2010	4/14/2010
950	P4 - Chap 18.0 Chapter Complete	0h	4/14/2010	4/14/2010
951	P4 - Chap 19.0 Severe Accidents/Probabilistic Risk Assessment (PRA)	1,020.1h	6/1/2009	4/26/2010
952	P4 - Chap 19.0 Close Open Items	929h	6/1/2009	3/29/2010
953	P4 - 19.0 and 19.1 Probabilistic Risk Assessment - OI Resolution	145h	8/10/2009	11/3/2009
954	P4 - 19.2 Severe Accidents - OI Resolution	16h	8/10/2009	11/3/2009

955	P4 - 19.3 Action Items - OI Resolution	32h	8/10/2009	11/3/2009
956	P4 - 19.x Large Area Fires - Initial Review and Initial RAIs Prepared	170h	6/1/2009	7/30/2009
957	P4 - 19.x Large Area Fires - Evaluation and Supplemental RAIs Completed	290h	9/29/2009	12/1/2009
958	P4 - 19.x Large Area Fires - OI Resolution and FSER Input	180h	2/1/2010	3/29/2010
959	P4 - Chap 19 DCD Reconciliation	48h	8/10/2009	3/17/2010
960	P4 - Chap 19 FSAR Reconciliation	48h	8/10/2009	11/3/2009
961	P4 - Chap 19.0 PM Support	30h	6/1/2009	4/26/2010
962	P4 - Chap 19.0 Chapter Completion	61.1h	3/29/2010	4/26/2010
963	P4 - Chap 19.0 PM All section inputs received	0h	3/29/2010	3/29/2010
964	P4 - Chap 19.0 PM-LA-TE review and edit	46h	3/30/2010	4/12/2010
965	P4 - Chap 19.0 Branch chiefs concurrence	2.1h	4/13/2010	4/19/2010
966	P4 - Chap 19.0 OGC review and concurrence	13h	4/20/2010	4/26/2010
967	P4 - Chap 19.0 Chapter Complete	0h	4/26/2010	4/26/2010
968	Appendices	100h	6/21/2010	6/29/2010
969	P4 - Preparation of Appendices	100h	6/21/2010	6/29/2010
970	P4 - Appendix - Chronology	20h	6/21/2010	6/29/2010
971	P4 - Appendix - Reference List	20h	6/21/2010	6/29/2010
972	P4 - Appendix - RAIs	20h	6/21/2010	6/29/2010
973	P4 - Appendix - COL Action Items	20h	6/21/2010	6/29/2010
974	P4 - Appendix - Acronyms, Contributors, Other	20h	6/21/2010	6/29/2010
975	P4 - Appendices complete	0h	6/29/2010	6/29/2010
976	P4 - Advanced SER with No OI Document Completion	366.2h	7/19/2010	8/19/2010
977	Phase 4 - Advanced SER with No OIs Chapter Input Complete	0h	7/19/2010	7/19/2010
978	P4 - Advanced FSER PM and LA review and edit	64h	7/20/2010	7/23/2010
979	P4 - NRO division and external concurrence	130.1h	7/26/2010	7/29/2010
980	P4 - OGC review and comment	64h	7/30/2010	8/4/2010
981	P4 - PM resolves OGC comments	60h	8/5/2010	8/10/2010
982	P4 - OGC concurrence	24h	8/11/2010	8/12/2010
983	Phase 4 - OGC Review and Concurrence of Advanced SER Complete	0h	8/12/2010	8/12/2010
984	P4 - NRO Office Director concurrence	0.1h	8/13/2010	8/18/2010
985	P4 - Issue Advanced SER	24h	8/19/2010	8/19/2010
986	Phase 4 Complete - Advanced SER Issued	0h	8/19/2010	8/19/2010
987	SER Phase 4 Managed Reserve	0.1h	8/20/2010	10/25/2010
988	Phase 4 Complete – Advanced SER Issued (with Mgmt Reserve)	0h	10/25/2010	10/25/2010
989	Phase 5 - ACRS Review of Advanced SER with No OI	1,697.4h	8/19/2010	2/16/2011
1007	Phase 6 - FSER with No OI	1,658.8h	11/1/2010	4/12/2011
1196	Safety Review Complete	0h	4/12/2011	4/12/2011
1197	Environmental Review	10,592.79h	6/4/2008	3/17/2011
1276	Hearings	5,371.9h	6/4/2008	11/25/2011
1320	Commission Decision on Issuance of COL	0.6h	11/12/2011	11/30/2011