## AGENDA March 6, 2006 Meeting with NEI on Construction and COL Issues

Location: O 4B6

1:00 pm Introductions - NEI and NRC

1:15 - 2:00pm CIP Update - M. Ashley, NRC

Updates on IMC 2503 and 2504 - content and issuance

Schedule for inspection procedure updates

Workshop on inspection

CIP SECY papers - organization and overall information

2:00 - 3:00pm CIPIMS Project Wrap-up - R. Bell, NEI

Lessons learned

Nov 21, 2005 letter from NRC (ML053250159)

3:00 - 4:00pm Severe Accident Change Process, R. Bell, NEI

4:00 - 4:30pm COL Issue List, J. Colaccino, NRC and R. Bell, NEI

4:30pm Meeting Adjourn

# ATTENDANCE LIST Meeting on Construction Inspection and COL Issues March 6, 2006

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# ATTENDANCE LIST Meeting on Construction Inspection and COL Issues March 6, 2006

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### <u>Lessons Learned From the Industry – NRC ITAAC Demonstration Project (Phases 1 & 2)</u> DRAFT For Discussion w/NRC on March 6, 2006

Throughout the performance of the phase 1 and phase 2 of the ITAAC Demonstration Project, participants maintained records and lists of relevant lessons learned that could be applied to the overall CIPIMS/ITAAC verification process. These lessons usually took the form of consensus decisions reached during discussions among the NRC and industry participants. The resulting list for both phases is provided here:

- 1. Construction schedule information at a summary level (Level 3) should be <u>readily</u> available to NRC and be current within a day or two. This information will not include fabrication schedule information. <u>Fabrication schedule information can be provided to the NRC for specific items upon request to support inspection planning.</u>
- 2. The industry considers that construction schedule information is business sensitive and proprietary. The vendor/licensee will be responsible for making the schedule available to the NRC and for making the case that the construction schedule information should be withheld pursuant to 10 CFR 2.390, "Public inspections, exemptions, requests for withholding."
  - If NRR, using LIC-204, "Handling Requests to Withhold Proprietary Information from Public Disclosure," determines that the construction schedule information is proprietary, that determination will remain in place for the life of the construction project. [Reference NRC memo, Ashley to Richards, dated 6/3/04.]
- 3. There are a variety of acceptable ways for electronic information transfer between NRC and the COL holder. The specific mechanism will be determined at time of need but will be compatible with CIPIMS.
- 4. The NRC can perform Construction Inspection activities as it wishes. These activities can include: personal inspection of fabrication and construction activities, review of requested vendor and contractor documentation and data, or review of the COL holder's Quality Assurance Records.
- 5. The NRC shall verify that the ITAAC referenced by the licensee have been successfully completed and, based solely thereon, find the prescribed acceptance criteria have been met [DCRs IX.B.1].
- 6. Repackaging or submittal of the licensee's QA Records will not be required to support licensee notification of ITAAC completion. QA Records will be available for audit. (QAR as defined in 10 CFR Part 50, Appendix B/NQA-1, or equivalent.)
- 7. Documentation to support Construction Inspection will be established and controlled in accordance with importance to safety and the COL holder's Quality Assurance Program. This includes: fabrication, procurement, installation, test, acceptance of sub-tier QA Programs, recordkeeping, etc.

- 8. ITAAC Determination Bases are those documents on which is based the licensee's determination that one or more ITAAC are satisfied.
- 9. ITAAC determinations will be submitted to support each individual ITAAC segment for which there is a specific acceptance criterion. ITAAC determinations will be submitted to NRC in ITAAC completion letters. ITAAC completion letters may cover multiple ITAAC determinations.
- 10. NRC acceptance of the licensee's ITAAC determination will occur for each individual ITAAC segment for which there is a specific acceptance criterion. Section 52.99 notices will be issued periodically by NRC and may cover multiple ITAAC.
- 11. ITAAC completion letters should be submitted to NRC under oath and affirmation, but may include information that is provided for information only. In particular, ITAAC completion letters should identify for information only ITAAC Determination Bases (IDB) documents and where they may be examined to help focus and expedite NRC ITAAC verification.
- 12. NRC Headquarters staff are expected to be tasked with processing the licensee determination letters and issuing the Federal Register Notices required by 10 CFR 52.99. It is expected that the NRC will inspect the process used by the licensee to generate the closeout letter and that the level of review of the licensee letters, ITAAC Determination Bases (IDB) and any supporting information would be determined, at least in part, by the NRC's level of confidence with the process. The level of review will also be governed by the NRC's inspection history related to the specific ITAAC (and similar ITAAC), the nature of the ITAAC, and related factors.
- 13. In public meetings, the industry has discussed several examples of IDB with the NRC staff (see attached). In a November 21, 2005, letter to NEI (also attached), the NRC provided its perspective on what should be included in the IDB documentation list. The industry has not fully completed its review of the letter and has not formally commented back to the NRC. Our initial reaction is that in a few cases the requested IDB documentation list may be somewhat beyond that which the industry envisions. For example, the NRC letter correctly states the principle that "IDB should directly correspond to the acceptance criteria;" however, the letter identifies receipt inspection records as an example of potential IDB documentation. We would consider receipt inspection records as part of underlying QAP information, not as IDB. Both the industry and the NRC are sensitive to the distinction between the ITAAC determination basis (IDB) information versus underlying Quality Assurance records, and we look forward to further discussing expectations regarding the nature of IDB.
- 14. IDB documents will generally not be submitted to the NRC. The NRC may choose to examine licensee IDB documents on site, as well as additional licensee records, as part of the ITAAC verification process. Consistent with current practice, licensee construction, installation and testing documentation (drawings, calculations, test procedures, etc.) will not be submitted to the NRC. IDB documents related to a particular ITAAC may be required to be submitted in connection with a hearing granted under Section 52.103(c).

- 15. ITAAC are a key subset of the normal construction, inspection and test activities performed by the licensee under its Quality Assurance Program (QAP). While related, there are important distinctions between ITAAC and the QAP that should be recognized and preserved in COL implementation and NRC inspection guidance:
  - QAP Continuous licensee process for assuring that 1) design, construction and testing
    activities, including ITAAC inspections, tests and analyses, are performed in accordance
    with the license, NRC regulations and applicable codes and standards, and 2) that SSCs
    will perform their intended functions
  - ITAAC ITAAC address the acceptability of the "end point" of specific design and construction sequences, while the QAP provides more broadly for the day-to-day evaluation of design and construction processes.
  - ITAAC verification NRC process for confirming that the licensee has completed specified ITAAC inspections, tests and analyses and that associated acceptance criteria have been met
- 16. Issues identified during the inspection process that call into question the ability of the licensee to meet the ITAAC acceptance criteria would be called an "ITAAC open item." ITAAC Open Items and the specific ITAAC to which they pertain should be clearly documented in NRC inspection reports. Inspection reports may also document other issues of lesser significance or unrelated to ITAAC that would not prevent the staff from finding that the ITAAC had been met. ITAAC open items would need to be closed by the NRC in an inspection report before the NRC would find that an ITAAC had been successfully met. ITAAC Open Items and other inspection findings will be resolved via the licensee's corrective action program.

It is expected that licensees will review ITAAC Open Items prior to sending in ITAAC determination letters. Licensees should be able to determine that ITAAC Open Items pertaining to the ITAAC have been closed or provide basis for concluding that the ITAAC is met despite the continued existence of one or more ITAAC Open Items. Remaining ITAAC Open Items (i.e., those found not to preclude a conclusion that acceptance criteria are met) would continue to be resolved via the licensee's corrective action program.

It is expected that ITAAC Open Items (inspection findings potentially material to a conclusion that an acceptance criteria has been met) will be rare compared to routine NRC inspection findings on overall construction processes and QAP implementation. NRC procedures will establish criteria for consistent identification of ITAAC Open Items, and require management review and approval before inclusion in an NRC inspection report.

- 17. The licensee's QA, configuration control, and corrective action programs will be relied upon to maintain the condition of the SSC consistent with specified acceptance criteria following completion and NRC acceptance of the ITAAC.
  - After an ITAAC is completed, SSCs may be taken out of service for normal or corrective maintenance, or to implement design changes in accordance with established licensee procedures and processes. It is the responsibility of the licensee to maintain the validity of the ITAAC using controlled and approved processes and procedures. The licensee is

- responsible for evaluating any work performed after an ITAAC determination has been made to ensure that the acceptance criteria will continue to be met. This evaluation may be based on post-work testing, engineering analysis, or a combination of both testing and analysis.
- If, following maintenance or modification work, an SSC previously verified as part of an ITAAC cannot be restored in a manner that satisfies the ITAAC, the licensee must notify the NRC and seek exemption from the ITAAC in accordance with Section 52.97(b)(2)(i).
- Licensees will maintain records of work affecting SSCs previously verified as part of an ITAAC in accordance with approved maintenance and configuration management processes. NRC inspectors may refer to the corrective actions log and similar licensee records to determine the status of SSCs following the completion of ITAAC.
- 18. A completed ITAAC would be withdrawn and re-verified only if the IDB in which the licensee's determination was based is determined to be incorrect or invalid. Properly implemented maintenance, corrective action and/or design changes following completion and verification of ITAAC do not alter the completed status of the ITAAC and do not affect the basis for the Commission Section 52.103(g) finding.
- 19. Some design certification ITAAC are identified as applicable to the "First-Plant-Only" or "First-Three-Plants-Only." Each COL applicant must address all ITAAC in a referenced design certification; however, for ITAAC applicable to only the first, or first three, plants of a given design, subsequent applicants may reference the ITAAC closure from a previous project and request those ITAAC to be considered resolved in for purposes of additional COL proceedings.
- 20. Some ITAAC acceptance criteria include tolerances. In the event of an out-of-tolerance situation that cannot be otherwise resolved, the licensee would need to request and be granted an exemption from the specified acceptance criterion.
- 21. COL applicants wishing to minimize time-to-market may initiate fabrication of long lead components and modules before the COL is issued and perhaps even prior to submitting the COL application. This is acceptable to the NRC staff. The staff has emphasized the importance that COL applicants communicate as early as possible plans and schedules for early fabrication activities so that NRC inspectors have the opportunity to perform associated inspections.
- 22. Some ITAAC acceptance criteria take the form of "A report exists and concludes that ..." In some cases, this refers to a well-known report such as an ASME Code report. In other cases, the "report" may consist of a document or set of documents that demonstrate that the acceptance criterion has been met. [We would like to expand upon this lesson based on further discussion with the NRC staff.]

| "我们是一个大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大                         | RESERVED TO THE PROPERTY OF THE PARTY OF THE | r RVH1=1ITAAC 2:1-3-2.  | 2(o) - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3   |
|--|--|---|--|
| Requirement  | Inspection, Test or Analysis   | Acceptance Criteria   | ITAAC Determination Basis  |
| 2.c) The reactor vessel arrangement is as shown in Figure 2.1.3-3. | be performed.  | The as-built RXS will accommodate the reactor vessel arrangement shown in Figure 2.1.3-3. | As-built documents indicate the arrangement of the reactor vessel is as shown in Figure 2.1.3-3. |

| The IIIAAC for RVH2 = AP10001IIIAAC 22133 / Extra 24 / Extra 25 / Extra 25 / Extra 26 / |   |                                       |  |  |
|---|---|---------------------------------------|--|--|
| Requirement   | Inspection, Test or Analysis            | Acceptance Criteria                   | ITAAC Determination Basis                              |  |
| 3. The components identified in   | Inspection will be conducted of the as- | The ASME Code Section III design      | ASME III Code Data Package for the as-built components |  |
| Table 2.1.3-1 as ASME Code Section  | built components as documented in       | reports exist for the as-built        | identified in Table 2.1.3-1.                           |  |
| III are designed and constructed in   | the ASME design reports.                | components identified in Table 2.1.3- |  |  |
| accordance with ASME Code Section   |   | 1 as ASME Code Section III.           |  |  |
| III requirements.   |   |                                       |  |  |

| THE LIMA CITOERVH3: →ABYVRIII AAG 21 1.7 * *** *** *** *** *** *** *** *** *** |   |   |  |  |
|--|---|---|--|--|
| Requirement  | Inspection, Test or Analysis  | Acceptance Criteria                                       | ITAAC Determination Basis  |  |
|  | conducted on the prototype RPV  | and concludes that the prototype RPV                      | Vibration type test report concluding that the prototype RPV internals have no damage or loose parts as a result of the vibration type test. |  |
| i  | A flow test and post-test inspections will be conducted on the as-built RPV internals | The as-built RPV internals have no damage or loose parts. | Inspection report documenting that the as-built RPV internals experienced no damage of loose parts after the flow test.                      |  |

ATTACHMENT 6

|                                    | The ITAAC fo                 | r CVSI ≒ITAAC 2:3:2-4:2 | (a) =   |
|------------------------------------|------------------------------|-------------------------|---|
| Requirement                        | Inspection, Test or Analysis | Acceptance Criteria     | ITAAC Determination Basis   |
| Table 2.3.2-1 as ASME Code Section | the ASME design reports.     | 1                       | As-built ASME Code Section III design reports exist for the as-built components identified in Table 2.3.2 1 as ASME Code Section III. |

| AND PURE TO A SECOND PROPERTY AND PROPERTY A |                               |                                    |   |  |
|--|-------------------------------|------------------------------------|---|--|
| Requirement  | Inspection, Test or Analysis  | Acceptance Criteria                | ITAAC Determination Basis   |  |
| piping identified in Table 2.3.2-2 as<br>ASME Code Section III meet ASME   | accordance with the ASME Code | ASME Code Section III requirements | A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds. |  |

| Requirement   | Inspection, Test or Analysis   | Acceptance Criteria                    | ITAAC Determination Basis   |
|---|--|--|---|
| withstand seismic design basis loads without loss of safety function. | verify that the seismic Category I   | identified in Table 2.3.2 1 is located | Inspection reports confirming that the seismic Category I equipment identified in Table 2.3.2 1 is located on the Nuclear Island. |
|   | combination of type tests and analyses of seismic Category I                     | the seismic Category I equipment can   | The portions of the as-built ASME Code Design Report that apply to the seismic capability of the items in Table 2.3.2-1.          |
|   | the existence of a report verifying that<br>the as-installed equipment including |  | The portions of the as-built ASME Code Design Report that apply to anchorage of the items in Table 2.3.2-1.                       |

| Requirement                                    | Inspection, Test or Analysis  | Acceptance Criteria  | ITAAC Determination Basis   |
|--|---|--|---|
| 8.a) The CVS provides makeup water to the RCS. |   | a flow rate of greater than or equal to 100 gpm.   | Test data or reports confirming that each CVS makeup pump provides a flow rate of greater than or equal to 100 gpm for each CVS makeup pump when the pump is aligned to the RCS, which is at a pressure greater than or equal to 2000 psia. |
|  | ii) Inspection of the boric acid tank volume will be performed.   | ii) The volume in the boric acid tank is at least 70,000 gallons between the tank outlet connection and the tank overflow. | CVS preoperational acceptance test report section applicable to boric acid tank volume.   |
|  | iii) Testing will be performed to measure the delivery rate from the DWS to the RCS. Both CVS makeup pumps will be operating and the RCS pressure will be below 6 psig. | iii) The total CVS makeup flow to<br>the RCS is less than or equal to<br>200 gpm.  | CVS preoperational acceptance test report section applicable to total system makeup flow.   |

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|   | The ITAAC for CVS5 = AP1000 ITAAC 23:2-4:11:a)  |  |   |  |  |
|---|---|--|---|--|--|
| Requirement   | Inspection, Test or Analysis  | Acceptance Criteria  | ITAAC Determination Basis   |  |  |
| 11.a) The motor-operated and check valves identified in Table 2.3.2-1 perform an active safety-related function to change position as indicated in the table. |   | ·  | System startup test results concluding that each motor-<br>operated valve changes position as indicated in Table 2.3.2-<br>1 under design conditions.               |  |  |
|   |   | the as-installed motor-operated valves                               | System design calculations concluding that the as-installed motor-operated valves are bounded by the tests or type tests.   |  |  |
|   | iii) Tests of the as-installed motor-<br>operated valves will be performed<br>under pre-operational flow,<br>differential pressure, and temperature<br>conditions.                              | 2.3.2-1 under pre-operational test                                   | System startup test results documenting that the motor-<br>operated valves change position as indicated in Table 2.3.2-<br>1 under pre-operational test conditions. |  |  |
|   | iv) Exercise testing of the check valves with active safety functions identified in Table 2.3.2-1 will be performed under pre-operational test pressure, temperature and fluid flow conditions. | iv) Each check valve changes position as indicated in Table 2.3.2-1. | System startup test results documenting that the check valves change position as indicated in Table 2.3.2-1.  |  |  |

|  |  |                              |   | la savijekt i trajska vrijega domaj osavelagija ofite.<br>Ditos osav si doša i kastonija |  |  |
|--|--|------------------------------|---|--|--|--|
|  | The ITAAC for TGS1-ITAAC 2010.9.12   |                              |   |  |  |  |
|  | Requirement  | Inspection, Test or Analysis | Acceptance Criteria   | ITAAC Determination Basis  |  |  |
|  | 1. The basic configuration of the TGS System is as shown on Figure 2.10.9. |                              | 1. The as-built TGS System conforms with the basic configuration shown on Figure 2.10.9 |  |  |  |

This ITAAC is not consistent with ITAAC written in and after AP600 i.e. the term "basic configuration" is obsolete.

| The ITAAC for TGS2:—ABWR ITAAC 2-10:9:2 |  |   |  |  |  |  |
|---|--|---|--|--|--|--|
| Inspection, Test or Analysis            | Acceptance Criteria  | ITAAC Determination Basis   |  |  |  |  |
| the main control room displays for the  | in the main control room as defined in   | Pre-operational test results documenting that the TGS system displays are retrievable in the main control room.                                 |  |  |  |  |
|   | Inspection, Test or Analysis  2. Inspections will be performed on the main control room displays for the | Inspection, Test or Analysis  2. Inspections will be performed on the main control room displays for the in the main control room as defined in |  |  |  |  |

|                                       | The ITAAC for S                          | TR1 = ABWRITAAC 2:1                   | 5.10.1                    |
|---------------------------------------|--|---------------------------------------|---------------------------|
| Requirement                           | Inspection, Test or Analysis             | Acceptance Criteria                   | ITAAC Determination Basis |
| 1. The basic configuration of the R/B | 1. Inspections of the as-built structure | 1. The as-built R/B conforms with the |                           |
| is shown on Figures 2.15.10a through  | will be conducted.                       | basic configuration shown in Figures  |                           |
| 2.1.5.10o.                            |  | 2.15.10a through 2.1.5.10o.           |                           |

This ITAAC is not consistent with ITAAC written in and after AP600 i.e. the term "basic configuration" is obsolete.

|   | TheITAACif  | or STR2=ITAAC 3:3:6:2.   | a) Figure 1997 Annual 1997   |
|---|---|--|--|
| Requirement   | Inspection, Test or Analysis  | Acceptance Criteria  | ITAAC Determination Basis  |
| including the critical sections listed in<br>Table 3.3-7, are seismic Category I<br>and are designed and constructed to | Deviations from the design due to asbuilt conditions will be analyzed for the design basis loads. | deviations during construction and concludes that the as-built nuclear island structures, including the critical sections, conform to the approved | A report, which reconciles deviations during construction and concludes that the as-built nuclear island structures, including the critical sections, conform to the approved design and will withstand the design basis loads specified in the Design Description without loss of structural integrity or the safety-related functions. |
|   | concrete thickness will be performed.   | •  | A report that concludes that the as-built concrete thicknesses conform with the building sections defined on Table 3.3-1.  |

|   | The ITAAC for S   | TR3 = ABWR;ITAAC 2:1   | 5:10:37:42-7:48-7:48-7:48-7:50-37   |
|---|---|--|---|
| Requirement   | Inspection, Test or Analysis  | Acceptance Criteria  | ITAAC Determination Basis   |
| 3. Inter-divisional walls, floors, doors and penetrations, and penetrations in the external R/B walls to connecting tunnels, have a three-hour fire rating. | divisional boundaries and external wall penetrations to connecting tunnels will be conducted. | and penetrations that form the inter-<br>divisional boundaries and external<br>wall penetrations to connecting | The construction work planning and inspection records will document that the R/B as-installed walls, floors, doors and penetrations that form the inter-divisional boundaries and external wall penetrations to connecting tunnels have a three-hour fire rating. |

|  | The ITAAC for STR4  | =AP10001TAAC33.6.5  | a);b);&c);  |
|--|---|---|---|
| Requirement  | Inspection, Test or Analysis  | Acceptance Criteria   | ITAAC Determination Basis   |
| 5.a) Exterior walls and the basemat of the nuclear island have a water barrier up to site grade.   |   | island exterior walls up to site grade.   | The construction work planning and inspection records for<br>the exterior walls and basemat up to elevation 100' will<br>document that the barrier was installed before the concrete<br>pours were made.  |
| 5.b) The boundaries between rooms identified in Table 3.3-2 of the auxiliary building are designed to prevent flooding of rooms that contain safety-related equipment.   |   | have provisions to prevent flooding<br>between rooms up to the maximum  | The construction work planning and inspection records will document that the floors and walls as identified on Table 3.3-2 have provisions to prevent flooding between rooms up to the maximum flood levels for each room defined in Table 3.3-2.   |
| 5.c) The boundaries between the following rooms, which contain safety related equipment – PXS valve/accumulator room A (11205), PXS valve/accumulator room B (11207), and CVS room (11209) – are designed to prevent flooding between these rooms. | contain safety-related equipment –<br>PXS Valve/ Accumulator Room A<br>(11205), PXS Valve/Accumulator<br>Room B (11207), and CVS Room | A report exists that confirms that flooding of the PXS Valve/ Accumulator Room A (11205), and the PXS/Accumulator Room B (11207) is prevented to a maximum flood level of 110 feet, and of the CVS room (11209) to a maximum flood level of 109'-10". | A flooding calculation along with construction work planning and inspection records will document that flooding of the PXS Valve/ Accumulator Room A (11205), and the PXS/Accumulator Room B (11207) is prevented to a maximum flood level of 110 feet, and of the CVS room (11209) to a maximum flood level of 109'-10". |

## AP1000 ITAAC 2:24-2:2:b)

| Requirement                        | Inspection, Test or Analysis            | Acceptance Criteria                   | ITAAC Determination Basis                              |
|------------------------------------|---|---------------------------------------|--|
| 2.b) The piping identified in      | Inspection will be conducted of the as- | The ASME Code Section III design      | ASME III Code Data Package for the as-built components |
| Table 2.2.4-2 as ASME Code Section | built piping as documented in the       | reports exist for the as-built piping | identified in Table 2.2.4-2.                           |
| III is designed and constructed in | ASME design reports.                    | identified in Table 2.2.4-2 as ASME   |  |
| accordance with ASME Code Section  |   | Code Section III.                     |  |
| III requirements.                  |   |                                       |  |

### COL Issues - December 2004

|         | COL Issue  | Priority /<br>Time<br>Frame          | Discussion/<br>Resolution<br>Vehicle | Interim Milestone(s)  |
|---------|--|--------------------------------------|--------------------------------------|---|
| COL-1   | Develop nominal NRC<br>review/hearing timeline(s) and<br>identify opportunities to optimize<br>the COL licensing process   | 2005                                 | NEI/NRC<br>exchange of<br>letters    | 11/03 – Preliminary NRC<br>timetable developed  |
| COL-2   | Develop COL application format<br>and content guidance, including<br>detailed outline and generic<br>material (NEI 04-01)  | Phase1-<br>12/04<br>Phase2-<br>12/05 | NEI 04-01                            | <ul> <li>11/20/03 initial meeting w/NRC</li> <li>1/12/04 letter to NRC</li> <li>3Q04 - Detailed COLA outline</li> <li>11/09/04 meeting w/NRC</li> <li>12/21/04 - NEI 04-01, Rev. D</li> </ul> |
| COL-2.a | Determine the treatment of operational programs in a COL application, including resolution of programmatic ITAAC issue; scope of operational programs to be included in the COLA; and example program descriptions | 1Q05                                 | NEI-04-01                            | <ul> <li>8/25/03 NRC Workshop</li> <li>9/15/03 industry comments</li> <li>5/14/04 SRM</li> </ul>  |
| COL-2.b | Development of COLA guidance on ESP – COL interface issues and identify and assess issues peculiar to the no-ESP scenario and the adequacy of existing guidance to support that scenario.                          | 2004/05                              | NEI 04-01                            | NEI 9/27/04 letter     11/10/04 public meeting     w/NRC  |
| COL-2.c | Development of COLA guidance<br>on the form and content for the<br>emergency planning ITAAC<br>required by Part 52   | 4Q04                                 | •SECY-04-xxx<br>• NEI-04-01          | • 1/29/04 NRC proposal<br>• 4/27/04 NRC workshop<br>• NEI 9/15/04 letter  |

|         | COL Issue   | Priority /<br>Time<br>Frame | Discussion/<br>Resolution<br>Vehicle | Interim Milestone(s) |
|---------|---|-----------------------------|--------------------------------------|----------------------|
| COL-2.d | Development of COLA guidance<br>for providing required plant-<br>specific design information and<br>associated ITAAC  | 2004/05                     | NEI 04-01                            |                      |
| COL-2.e | Define and address seismic-<br>related issues that need to be<br>resolved to support COL<br>applications and reviews Includes<br>development of alternative ASCE<br>methodology | 2004/05                     | NEI 04-01                            |                      |
| COL-2.f | Development of COLA guidance<br>on Chapter 19 of the FSAR and<br>the plant-specific PRA   | 2004/05                     | NEI-04-01                            |                      |
| COL-2.g | Development of guidance for<br>Chapter 18 of the FSAR (Human<br>Factors Engineering) and process<br>for early completion (at COL) of<br>ITAAC (design acceptance<br>criteria)   | 2004/05                     | NEI-04-01                            |                      |
| COL-2.h | Development of COL form and content, including NRC findings, license conditions, etc.   | 2005                        | NEI 04-01                            |                      |
| COL-2.i | Development of guidance on plant-specific technical specifications, use of lessons learned since the issuance of the ALWR design certifications.                                | 2004/05                     | NEI 04-01                            |                      |

|         | COL Issue  |          | Discussion/<br>Resolution<br>Vehicle  | Interim Milestone(s)   |
|---------|--|----------|---|--|
| COL-2j  | Fuel cycle and transportation environmental impacts  | 2005     | NEI 04-01   |  |
| COL 2.k | Development of a reliability assurance program to address both design RAP and Operational RAP  | 2004/05  | NEI 04-01   |  |
| COL-3   | Establish a common<br>understanding with NRC<br>regarding the Engineering Design<br>Verification process   | 2004/05  | <ul> <li>NRC Insp. Guidance</li> <li>Phase 2 of CIPIMS project</li> </ul>                         | <ul> <li>8/27/03 NRC Workshop</li> <li>10/30/03 industry comments</li> <li>NEI 11/01 white paper</li> <li>4/04 NUREG 1789</li> </ul> |
| COL-4   | Establish a common<br>understanding with NRC<br>regarding the ITAAC Verification<br>process  | 2004/05  | <ul> <li>NRC Insp.         Guidance</li> <li>Phase 2 of         CIPIMS         project</li> </ul> | <ul> <li>8/27/03 NRC Workshop</li> <li>10/30/03 industry comments</li> <li>NEI 11/01 w.paper</li> <li>April 04 NUREG 1789</li> </ul> |
| COL-5   | Establish a common<br>understanding with NRC<br>regarding the 10 CFR 52.103<br>ITAAC hearing process   | Complete | NEI/NRC<br>exchange of<br>letters   | <ul> <li>11/20/03 NRC feedback on<br/>NEI 11/01 white paper</li> <li>3/12/04 NEI response</li> </ul>                                 |
| COL-6   | Establish a common understanding with NRC regarding the process for assuring operational readiness and transition to operation under Part 52; include commissioning and testing post fuel load | 2005     | NRC Insp.<br>Guidance   | <ul> <li>NEI 11/01 white paper</li> <li>8/27/03 NRC Workshop</li> <li>10/30/03 industry comments</li> <li>NUREG 1789</li> </ul>      |

Enclosure 2 to NEI Letter dated 21 Dec. 2004

|       | COL Issue  | Priority /<br>Time<br>Frame | Discussion/<br>Resolution<br>Vehicle         | Interim Milestone(s)  |
|-------|--|-----------------------------|--|---|
| COL-7 | Maximize the clarity and effectiveness of Part 52 requirements   | 2005/06                     | Supplemental<br>NOPR<br>(proposed<br>mid-05) | 9/16/03 & 9/30/03 industry<br>comments on July 03 Part 52<br>NOPR |
| COL-8 | Establish in NRC regulations updated antitrust requirements and appropriate financial measures and options for merchant nuclear power plants to provide reasonable assurance that: (a) adequate funds would be available to fund decommissioning activities when they occur, and (b) sufficient financial capability exists to fund plant operations | TBD                         | TBD  |   |
| COL-9 | Modular plant licensing issues   | TBD                         | TBD  | NEI 6/17/02 white paper   |