



Serial: NPD-NRC-2011-065
August 19, 2011

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

**LEVY NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 52-029 AND 52-030
REVISIONS TO COLA PART 10, PROPOSED LICENSE CONDITIONS (INCLUDING ITAAC),
APPENDIX B, TABLES 3.8-3 AND 3.8-4**

Ladies and Gentlemen:

Progress Energy Florida, Inc. (PEF) hereby submits revisions to COLA Part 10 for the Levy Nuclear Plant Units 1 and 2 (LNP). The revisions consist of clarifications to Appendix B ITAAC Table 3.8-3, Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria, and Table 3.8-4, Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria, as discussed with the NRC. The revisions will be incorporated in a future revision of the LNP application.

If you have any further questions, or need additional information, please contact Bob Kitchen at (919) 546-6992, or me at (727) 820-4481.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 19, 2011.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Elnitsky', written over the typed name and title.

John Elnitsky
Vice President
New Generation Programs & Projects

Enclosure

cc : U.S. NRC Region II, Regional Administrator
Mr. Brian C. Anderson, U.S. NRC Project Manager

D094
NRD

COLA Part 10, Appendix B, Table 3.8-3, will be revised from:

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
The 35 foot thick RCC Bridging mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR 2.5.4.5.4 without loss of structural integrity and the safety related functions.	<p>i) An inspection of the bridging mat will be performed. Deviations from the design due to as-built conditions will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions</p> <p>ii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least 35 feet.</p>

To read:

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
<p>The RCC Bridging Mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR Subsection 2.5.4.5.4 without loss of structural integrity and the safety related functions.</p>	<p>i) An inspection of the bridging mat placement will be performed. Deviations in the RCC Bridging Mat properties due to as-built conditions that fall outside the range considered in the design as described in FSAR Subsection 2.5.4.5.4 will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the RCC mix and bedding mix constituents will be performed in accordance with FSAR Subsection 3.8.5.11.4. Deviations from the design constituents will be evaluated against the range of properties established for these materials during the design phase.</p> <p>iii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations from design and placement process of the RCC during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions.</p> <p>ii) A report exists which reconciles deviations in mix constituents used in construction and concludes that the as-built RCC conforms to the design requirements for these properties.</p> <p>iii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least as thick as the design requirement.</p>

COLA Part 10, Appendix B, Table 3.8-4, will be revised from:

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures	Inspection of the as-built drilled shaft foundation physical arrangement will be performed	A report exists that reconciles the as-built physical arrangement of the drilled shaft foundations for the Turbine, Radwaste, and Annex Buildings with the design drawings.

To read:

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement of the building foundations in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures.	During construction, inspection of the physical properties of the rock socket for each drilled shaft will be performed in accordance with LNP FSAR Chapter 3 Subsection 3.8.5.9. Inspection of the as-built drilled shaft foundation physical arrangement will also be performed.	A report exists that reconciles the during construction physical properties of the rock socket for each drilled shaft and the as-built physical arrangement of the Turbine, Radwaste, and Annex Buildings' drilled shaft foundations with design specifications and drawings. The report concludes that the as-built drilled shaft foundation conforms to the design commitment.

VALIDATION COPY

Serial: NPD-NRC-2011-065
August 9, 2011

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

**LEVY NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 52-029 AND 52-030
REVISIONS TO COLA PART 10, PROPOSED LICENSE CONDITIONS (INCLUDING ITAAC),
APPENDIX B, TABLES 3.8-3 AND 3.8-4**

Ladies and Gentlemen:

Progress Energy Florida, Inc. (PEF) hereby submits revisions to COLA Part 10 for the Levy Nuclear Plant Units 1 and 2 (LNP). The revisions consist of clarifications to Appendix B ITAAC Table 3.8-3, Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria, and Table 3.8-4, Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria, as discussed with the NRC. The revisions will be incorporated in a future revision of the LNP application.

①
480679

If you have any further questions, or need additional information, please contact Bob Kitchen at (919) 546-6992, or me at (727) 820-4481.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 9, 2011.

Sincerely,

John Elnitsky
Vice President
New Generation Programs & Projects

Enclosure

cc : U.S. NRC Region II, Regional Administrator
Mr. Brian C. Anderson, U.S. NRC Project Manager
Ms. Denise McGovern, U.S. NRC Project Manager

bc: John Elnitsky, VP- New Generation Programs & Projects
Robert Kitchen, Manager-Nuclear Plant Licensing
Tillie Wilkins, NGPP-Licensing
Kenneth Allison (Shaw Power Group)
John O'Neill, Jr. (Pillsbury Winthrop Shaw Pittman, LLP)
A. K. Singh (Sargent & Lundy, LLC)
Cynthia Malecki (Sargent & Lundy, LLC)
Lorin Young (CH2M HILL)
John Archer (WorleyParsons)
NGPP Document Control Inbox (Records: Correspondence)
File: NGPP (Dana Rose)

COLA Part 10, Appendix B, Table 3.8-3, will be revised from:

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
<p>The 35 foot thick RCC Bridging mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR 2.5.4.5.4 without loss of structural integrity and the safety related functions.</p>	<p>i) An inspection of the bridging mat will be performed. Deviations from the design due to as-built conditions will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions</p> <p>ii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least 35 feet.</p>

To read:

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
<p>The RCC Bridging Mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR Subsection 2.5.4.5.4 without loss of structural integrity and the safety related functions.</p>	<p>i) An inspection of the bridging mat placement will be performed. Deviations in the RCC Bridging Mat properties due to as-built conditions that fall outside the range considered in the design as described in FSAR Subsection 2.5.4.5.4 will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the RCC mix and bedding mix constituents will be performed in accordance with FSAR Subsection 3.8.5.11.4. Deviations from the design constituents will be evaluated against the range of properties established for these materials during the design phase.</p> <p>iii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations from design and placement process of the RCC during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions.</p> <p>ii) A report exists which reconciles deviations in mix constituents used in construction and concludes that the as-built RCC conforms to the design requirements for these properties.</p> <p>iii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least as thick as the design requirement.</p>

COLA Part 10, Appendix B, Table 3.8-4, will be revised from:

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures	Inspection of the as-built drilled shaft foundation physical arrangement will be performed	A report exists that reconciles the as-built physical arrangement of the drilled shaft foundations for the Turbine, Radwaste, and Annex Buildings with the design drawings.

To read:

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement of the building foundations in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures.	During construction, inspection of the physical properties of the rock socket for each drilled shaft will be performed in accordance with LNP FSAR Chapter 3 Subsection 3.8.5.9. Inspection of the as-built drilled shaft foundation physical arrangement will also be performed.	A report exists that reconciles the during construction physical properties of the rock socket for each drilled shaft and the as-built physical arrangement of the Turbine, Radwaste, and Annex Buildings' drilled shaft foundations with design specifications and drawings. The report concludes that the as-built drilled shaft foundation conforms to the design commitment.

Waters, David

From: Waters, David
Sent: Wednesday, August 03, 2011 12:17 PM
To: Anderson, Brian
Subject: Revised ITAAC Tables 3.8-3 and 3.8-4
Attachments: Enclosure to NPD-NRC-2011-065.docx

Brian

As discussed, attached are the subject revised ITAAC tables. If there are no further comments, Progress Energy will formally document the changes via a voluntary submittal in the near future.

Thank you
Dave Waters
Progress Energy New Generation Projects and Programs
Lead Licensing Engineer
410 S. Wilmington St, PEB 09
Raleigh, NC 27601
919-546-7171
david.waters@pgnmail.com

Per telecon message from Brian Anderson on 8/9/2011,
the NRC staff is satisfied that the ITAAC wording is
in agreement with discussions and agreements reached on
the 08/02/2011 telecon between NRC and Progress Energy

DB Waters

8/9/2011-P.M.

COLA Part 10, Appendix B, Table 3.8-3, will be revised from:

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
<p>The 35 foot thick RCC Bridging mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR 2.5.4.5.4 without loss of structural integrity and the safety related functions.</p>	<p>i) An inspection of the bridging mat will be performed. Deviations from the design due to as-built conditions will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions</p> <p>ii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least 35 feet.</p>

To read:

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
<p>The RCC Bridging Mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR Subsection 2.5.4.5.4 without loss of structural integrity and the safety related functions.</p>	<p>i) An inspection of the bridging mat placement will be performed. Deviations in the RCC Bridging Mat properties due to as-built conditions that fall outside the range considered in the design as described in FSAR Subsection 2.5.4.5.4 will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the RCC mix and bedding mix constituents will be performed in accordance with FSAR Subsection 3.8.5.11.4. Deviations from the design constituents will be evaluated against the range of properties established for these materials during the design phase.</p> <p>iii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations from design and placement process of the RCC during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions.</p> <p>ii) A report exists which reconciles deviations in mix constituents used in construction and concludes that the as-built RCC conforms to the design requirements for these properties.</p> <p>iii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least as thick as the design requirement.</p>

COLA Part 10, Appendix B, Table 3.8-4, will be revised from:

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures	Inspection of the as-built drilled shaft foundation physical arrangement will be performed	A report exists that reconciles the as-built physical arrangement of the drilled shaft foundations for the Turbine, Radwaste, and Annex Buildings with the design drawings.

To read:

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement of the building foundations in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures.	During construction, inspection of the physical properties of the rock socket for each drilled shaft will be performed in accordance with LNP FSAR Chapter 3 Subsection 3.8.5.9. Inspection of the as-built drilled shaft foundation physical arrangement will also be performed.	A report exists that reconciles the during construction physical properties of the rock socket for each drilled shaft and the as-built physical arrangement of the Turbine, Radwaste, and Annex Buildings' drilled shaft foundations with design specifications and drawings. The report concludes that the as-built drilled shaft foundation conforms to the design commitment.

Waters, David

From: ANAND.K.SINGH@sargentlundy.com
Int: Wednesday, August 03, 2011 9:19 AM
To: Waters, David
Cc: Keenan, Christopher; Franklin, Mike; Kitchen, Robert; Stephenson, Vann
Subject: RE: Updated RCC and Drilled Shaft ITAAC documents

no comments

A. K. Singh
JV Project Manager
312 269 7517 (O)
312 206 3774 (C)
anand.k.singh@sargentlundy.com

From: "Waters, David" <David.Waters@pgnmail.com>
To: "Keenan, Christopher" <Christopher.Keenan@pgnmail.com>
Cc: "ANAND.K.SINGH@sargentlundy.com" <ANAND.K.SINGH@sargentlundy.com>, "Franklin, Mike" <mike.franklin@pgnmail.com>, "Stephenson, Vann" <vann.stephenson@pgnmail.com>, "Kitchen, Robert" <robert.kitchen@pgnmail.com>
Date: 08/03/2011 07:18 AM
Subject: RE: Updated RCC and Drilled Shaft ITAAC documents

I agree that the wording changes reflect the discussions we had with NRC yesterday. If there are any comments, please let Chris and I know before noon today; I would like to get the "final resolution" to Brian Anderson today, if possible. I intend to just send the final resolution for each ITAAC. I will begin working on the transmittal letter, with the goal of getting John Elnitsky signoff early next week, at the latest.

Dave Waters
Progress Energy New Generation Projects and Programs
Lead Licensing Engineer
410 S. Wilmington St, PEB 09
Raleigh, NC 27601
919-546-7171
david.waters@pgnmail.com

From: Keenan, Christopher
Sent: Tuesday, August 02, 2011 5:25 PM
To: Waters, David
Cc: ANAND.K.SINGH@sargentlundy.com; Franklin, Mike; Stephenson, Vann
Subject: Updated RCC and Drilled Shaft ITAAC documents

Dave,

I have updated the 2 referenced ITAAC as discussed during today's telecon with the NRC staff. I have continued to track the changes to the documents in the same manner – meaning the Drilled Shaft document now has a letter E, while the RCC document is up to Letter D I believe.

Please let me know if there are any comments.

Chris Keenan
Lead Civil Engineer – Nuclear Plant Engineering
New Generation Programs and Projects
Progress Energy

Waters, David

From: Keenan, Christopher
ent: Tuesday, August 02, 2011 5:25 PM
o: Waters, David
Cc: ANAND.K.SINGH@sargentlundy.com; Franklin, Mike; Stephenson, Vann
Subject: Updated RCC and Drilled Shaft ITAAC documents
Attachments: Drilled Shaft ITAAC Proposed Revisions 8-2-11 (2).docx; Revised RCC ITAAC Proposal 8-2-11.docx

Categories: Red Category

Dave,

I have updated the 2 referenced ITAAC as discussed during today's telecon with the NRC staff. I have continued to track the changes to the documents in the same manner – meaning the Drilled Shaft document now has a letter E, while the RCC document is up to Letter D I believe.

Please let me know if there are any comments.

Chris Keenan
Lead Civil Engineer – Nuclear Plant Engineering
New Generation Programs and Projects
Progress Energy
(919) 546-4793 (office)

A). Existing ITAAC in LNP FSAR Rev. 2

Table 3.8-4

Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures	Inspection of the as-built drilled shaft foundation physical arrangement will be performed	A report exists that reconciles the as-built physical arrangement of the drilled shaft foundations for the Turbine, Radwaste, and Annex Buildings with the design drawings.

B). Revised ITAAC Proposed by NRC Staff on 7/21/2011

Table 3.8-4

Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will be used to minimize movements in the soft foundation soils in excess of the separation provided between these buildings and the nuclear island structures	Inspection of the as-built drilled shaft foundation will be performed to ensure that the foundation can provide adequate bearing capacity to safely sustain the vertical design load of the drilled shaft. The socket of the drilled shaft is to be at least 10' deep and have a minimum RQD of 25 over the full depth of the rock socket plus at least two socket diameters. A pilot hole will be drilled at the location of each shaft, with core obtained over the depth of the expected socket plus at least two socket diameters. The	A report exists that reconciles the as-built physical properties of the rock socket for each drilled shaft with the foundation design drawings.

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	<p>RQD will be determined from the rock core recovered from the pilot hole. If the pilot hole indicates that the RQD does not meet design requirements, the rock socket can be extended to a new design depth based on the core obtained from the pilot holes.</p> <p>The bottom of the socket must be inspected by an experienced engineer/geologist and shown to be free of all deleterious material, loose cuttings and muck. The socket shall be reasonably dry and ready to receive concrete. Pumping can be used to achieve a reasonably dry socket bottom. If the rate of water inflow is excessive in the judgment of the inspecting engineer/geologist, grouting of the socket may be used to ensure concrete is tremied effectively in the dry. Alternatively, wet construction methods for concrete placement will be followed as specified in ACI 336.1-01 and ACI 336.</p>	
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C). Revised ITAAC Proposed by PGN/JVT on 7/25/11

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures.	During construction, inspection of the physical properties of the rock socket for each drilled shaft will be performed. Upon completion of construction, inspection of the as-built drilled shaft foundation physical arrangement will be performed.	A report exists that reconciles the during construction physical properties of the rock socket for each drilled shaft and the as-built physical arrangement of the Turbine, Radwaste, and Annex Buildings' drilled shaft foundations with design specifications and drawings.

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D). Revised ITAAC Proposed by PGN/JVT on 7/27/11
Based on results of the call with the NRC on 7/27/11

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement of the building foundations in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures.	During construction, inspection of the physical properties of the rock socket for each drilled shaft will be performed in accordance with LNP FSAR Chapter 3 Subsection 3.8.5.9. Upon completion of construction, inspection of the as-built drilled shaft foundation physical arrangement will be performed.	A report exists that reconciles the during construction physical properties of the rock socket for each drilled shaft and the as-built physical arrangement of the Turbine, Radwaste, and Annex Buildings' drilled shaft foundations with design specifications and drawings.

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E). Revised ITAAC Proposed by PGN/JVT on 7/27/11
Based on results of the call with the NRC on 8/02/11

Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement of the building foundations in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures.	During construction, inspection of the physical properties of the rock socket for each drilled shaft will be performed in accordance with LNP FSAR Chapter 3 Subsection 3.8.5.9. Inspection of the as-built drilled shaft foundation physical arrangement will also be performed.	A report exists that reconciles the during construction physical properties of the rock socket for each drilled shaft and the as-built physical arrangement of the Turbine, Radwaste, and Annex Buildings' drilled shaft foundations with design specifications and drawings. The report concludes that the as-built drilled shaft foundation conforms to the design commitment.

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A) RCC ITAAC as it existed in FSAR Rev. 2

Table 3.8-3

Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
The 35 foot thick RCC Bridging mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR 2.5.4.5.4 without loss of structural integrity and the safety related functions.	<p>i) An inspection of the bridging mat will be performed. Deviations from the design due to as-built conditions will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions</p> <p>ii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least 35 feet.</p>

B) RCC ITAAC planned for FSAR Rev. 3 - as revised per meeting in Tucson and documented in response to RAI 03.08.05-4 (L-0862) submitted via NPD-NRC-2011-044 dated May 27, 2011

**Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)**

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
The RCC Bridging mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR 2.5.4.5.4 without loss of structural integrity and the safety related functions.	<p>i) An inspection of the bridging mat placement will be performed. Deviations due to as-built conditions that fall outside the range considered in the design will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the RCC mix and bedding mix constituents will be performed. Deviations from the design constituents will be evaluated against the range of properties established for these materials during the design phase.</p> <p>iii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations from design and placement process of the RCC during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions.</p> <p>ii) A report exists which reconciles deviations in mix constituents used in construction and concludes that the as-built RCC conforms to the design requirements for these properties.</p> <p>iii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least as thick as the design requirement.</p>

C) RCC ITAAC **per** NPD-NRC-2011-044 dated May 27, 2011 **and revised per telecom of 7/27/2011**

Deleted: as revised per meeting in Tucson and documented in response to RAI 03.08.05-4 (L-0862) submitted via

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
The RCC Bridging mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR 2.5.4.5.4 without loss of structural integrity and the safety related functions.	<p>i) An inspection of the bridging mat placement will be performed. Deviations due to as-built conditions that fall outside the range considered in the design as described in FSAR Subsection 2.5.4.5.4 will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the RCC mix and bedding mix constituents will be performed in accordance with FSAR Subsection 3.8.5.11.4. Deviations from the design constituents will be evaluated against the range of properties established for these materials during the design phase.</p> <p>iii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations from design and placement process of the RCC during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions.</p> <p>ii) A report exists which reconciles deviations in mix constituents used in construction and concludes that the as-built RCC conforms to the design requirements for these properties.</p> <p>iii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least as thick as the design requirement.</p>

D) RCC ITAAC per NPD-NRC-2011-044 dated May 27, 2011 and revised per telecom of 7/27/2011 and 08/02/2011

Table 3.8-3
Roller Compacted Concrete Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
The RCC Bridging Mat is seismic Category I and is designed and constructed to bridge over the design basis karst feature when subjected to design basis loads as specified in the Design Description in FSAR Subsection 2.5.4.5.4 without loss of structural integrity and the safety related functions.	<p>i) An inspection of the bridging mat placement will be performed. Deviations in the RCC Bridging Mat properties due to as-built conditions that fall outside the range considered in the design as described in FSAR Subsection 2.5.4.5.4 will be analyzed for the design basis karst feature when subjected to design basis loads.</p> <p>ii) An inspection of the RCC mix and bedding mix constituents will be performed in accordance with FSAR Subsection 3.8.5.11.4. Deviations from the design constituents will be evaluated against the range of properties established for these materials during the design phase.</p> <p>iii) An inspection of the as-built RCC thickness will be performed.</p>	<p>i) A report exists which reconciles deviations from design and placement process of the RCC during construction and concludes that the as-built RCC bridging mat conforms to the approved design and will bridge over a design basis karst feature when subjected to design basis loads specified in the Design Description without loss of structural integrity and the safety related functions.</p> <p>ii) A report exists which reconciles deviations in mix constituents used in construction and concludes that the as-built RCC conforms to the design requirements for these properties.</p> <p>iii) A document exists that verifies that the as-built thickness of the RCC bridging mat is at least as thick as the design requirement.</p>

Deleted: m

ACTION REQUEST 00480679

Type : NPIT Orig Date: 08/05/11 10:07 Discovery Date:
Subject : LNP VOL PART 10 ITAAC

Description

PLEASE CAPTURE THE REQUIREMENT TO UPDATE PART 10 TO
INCORPORATE CHANGES
NPD-NRC-2011-065

Priority : Report To : Status: APPROVED 08/05/11
Due Date : 10/30/11 Event Date :

Originator : Originator Group: NPDSUPPORT
Facility : NCP Department : Organization:

Owed To : Owed To Group : NPDLIC
Owed To Fac: NCP Department : Discipline :

AR Status History

Updated Date	Updated By	AR Status	AR Due Date
08/05/11	LOONED	INPROG	
08/05/11	LOONED		10/30/11
08/05/11	LOONED	APPROVED	

ACTION REQUEST 00480679

Request Attribute	Value	Reqd	Date
AR SOURCES	COLA	N	08/05/11
Name : DANA	ROSE		

Request Attribute	Value	Reqd	Date
DOCUMENT LOCATION		N	
Name :			

Request Attribute	Value	Reqd	Date
DOCUMENT NUMBER	NPD-NRC-2011-065	N	08/05/11
Name : DANA	ROSE		

Request Attribute	Value	Reqd	Date
ITAAC FAMILY		N	
Name :			

Request Attribute	Value	Reqd	Date
ITAAC ID		N	
Name :			

Request Attribute	Value	Reqd	Date
ITAAC TARGETED		N	
Name :			

Request Attribute	Value	Reqd	Date
MILESTONES	ANNUALUPDATE	N	08/05/11
Name : DANA	ROSE		

Request Attribute	Value	Reqd	Date
OTHER SOURCE		N	
Name :			

Request Attribute	Value	Reqd	Date
PLANT	LNP	N	08/05/11
Name : DANA	ROSE		

Request Attribute	Value	Reqd	Date
REVISION NUMBER		N	
Name :			

ACTION REQUEST 00480679

ASSIGNMENT NUMBER 01 SUB

Type : COLA Due Date : 09/30/11
Status : NTFY/ASG Reschedule : Pri Resp Group:
Assigned To : D WATERS Sec Resp Group:
Subject : LNP VOL PART 10 ITAAC

Aff Facility: NCP Unit : System :
UCR : Schedule Ref :
Organization: Department : FH3 Discipline :
Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/05/11	LOONED	INPROG	09/30/11
08/05/11	LOONED	NTFY/ASG	

PLEASE UPDATE THE COLA TO CAPTURE THE REQUIREMENT TO UPDATE
PART 10 TO INCORPORATE CHANGES.
NPD-NRC-2011-065

Assignment Attribute Value	Reqd Date
ACTION ASSIGNED TO	N
Name :	

Assignment Attribute Value	Reqd Date
CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
CLOSURE DOCUMENT	N
Name :	

Assignment Attribute Value	Reqd Date
CLOSURE MECHANISM	N
Name :	

Assignment Attribute Value	Reqd Date
COLA INFO ITEM	N
Name :	

Assignment Attribute Value	Reqd Date
DCD DEPARTURE?	N
Name :	

ACTION REQUEST 00480679

Assignment Attribute Value	Reqd Date
DCD EXEMPTION?	N
Name :	

Assignment Attribute Value	Reqd Date
FINAL ISSUE	N
Name :	

Assignment Attribute Value	Reqd Date
FSAR SECTION	N
Name :	

Assignment Attribute Value	Reqd Date
MILESTONES	N
Name :	

Assignment Attribute Value	Reqd Date
NOTES?	N
Name :	

Assignment Attribute Value	Reqd Date
OTHER ACTION SOURCE	N
Name :	

Assignment Attribute Value	Reqd Date
PLANT	N
Name :	

Assignment Attribute Value	Reqd Date
PROGRAM SECTION	N
Name :	

Assignment Attribute Value	Reqd Date
PROGRAMS AND REPORTS	N
Name :	

Assignment Attribute Value	Reqd Date
WBS	N
Name :	

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Route List Initiator:

Alert	Group/Type	Last Name
PASSPORT Fac		
KITCHR		A KITCHEN

Send	Send	Action	Action
Date	Time	Taken	Date/Time

ACTION REQUEST 00480679

NCP NPDSUPPORT A KITCHEN

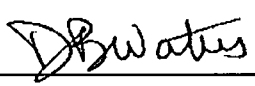
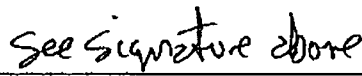
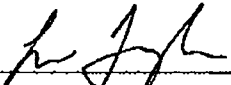
ATTACHMENT 1
Sheet 1 of 1
**Outgoing Regulatory Correspondence
Review & Approval Cover Sheet**

Subject: LNP – REVISIONS TO COLA PART 10, PROPOSED LICENSE CONDITIONS (INCLUDING ITAAC), APPENDIX B, TABLES 3.8-3 AND 3.8-4	Agency Due Date: original = target = 8/09/2011 <input checked="" type="checkbox"/> Internal <input type="checkbox"/> Committed Correspondence #: NPD-NRC-2011-065
<input checked="" type="checkbox"/> NRC <input type="checkbox"/> INPO/WANO <input type="checkbox"/> State of NC/SC/FL <input type="checkbox"/> Insurance <input type="checkbox"/> Other: _____ <div style="text-align: center;">(Circle one) (specify)</div>	

Reviewers and Approvers

Each Reviewer and Approver by their signature attests that, to the best of his or her knowledge, the input provided is accurate, complete, and free from Material False Statement.

Reviewers – Print/Sign	Date	Comments
Dave Waters	NA	

Review/Approvers			Applicable Commitment(s)/Planned Action(s) From (Attachment 2)
Name	Signature	Date	
Responsible Individual: Dave Waters		8/9/2011	480679
Responsible Manager: Bob Kitchen	Kitchen, Robert 2011.08.09 17:31:53 -04'00'		
Licensing Lead: Dave Waters			
Peer Reviewer (Optional): Larry Taylor		8/9/2011	
Supervisor - Licensing/Regulatory Programs or Manager - Nuclear Regulatory Affairs: Bob Kitchen			

(U)FSAR Change Determination

In accordance with 10 CFR 50.71(e)(1), this correspondence (check one):

- ☐ Requires a (U)FSAR change and (check one):
 (Submit a Licensing Document Change Request (LDCR) per REG-NGGC-0101)
- ☒ Does NOT require a (U)FSAR change

Return To: Dave Waters / 7171

Licensing Lead
Extension

REG-NGGC-0016	Rev. 1	
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