# STP 3&4 Instrumentation and Control Hardware/Software Development DAC Resolution Schedule

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#### **Desired Outcomes**

- Gain a mutual understanding of DAC Pilot scope and schedule
- Communicate Development Schedule for DAC resolution availability
- Gain alignment on DAC Inspection strategies



### STPNOC Participants

- Mike Murray, STPNOC Acting Design Manager
- Scott Head, STPNOC Reg. Affairs Manager
- Kyle Dittman, STPNOC I&C Lead Engineer
- Jun Ikeda, TANE I&C Vice President
- Craig Swanner, TANE (MPR) Licensing
- David Herrell, TANE (MPR) Engineering
- Thomas Fay, TANE Licensing
- George Stramback, WEC Licensing



## Hardware/Software Development Design Acceptance Criteria (DAC)

- I&C-related DAC are provided in FSAR Tier 1 Table 3.4 ITAAC Items 7-15
- NRC Pilot Inspection focused on Hardware/Software Development DAC Items 7-11
  - Item 7 Software Quality Assurance (QA) Program
  - Item 8 Software Management Plan Elements
  - Item 9 Configuration Management Plan Elements
  - Item 10 Verification and Validation Plan Elements
  - Item 11 Software Development Confirmation



## Hardware/Software Development DAC Acceptance Criteria

- DAC 7-10 specify programmatic requirements:
  - Software and Hardware Quality Assurance Programs
  - Software Management Plan
  - Configuration Management Plan
  - Verification & Validation Plan
- Unlike programmatic Items 7-10, DAC 11 confirms implementation of plans



## Hardware/Software Development DAC Acceptance Criteria (cont'd)

- DAC 11 Acceptance Criteria require confirmation that
  - Software development complete in accordance with:
    - Software Management Plan
    - Configuration Management Plan
    - Verification & Validation Plan
  - Non-conformances documented and resolved with appropriate corrective actions



## Hardware/Software Development Programmatic DAC Schedule



## Hardware/Software Development Programmatic DAC Schedule



#### Hardware/Software Development Confirmation DAC 11 Schedule - FPGA



#### Hardware/Software Development Confirmation DAC 11 Schedule – Common Q

### Questions?



#### UNITED STATES OF AMERICA

#### NUCLEAR REGULATORY COMMISSION

In the Matter of	)		
STP Nuclear Operating Company	)	Docket Nos.	
South Texas Project Units 3 & 4	)	æ	52-013
AF	FIDAVIT		

- I, Scott M. Head, being duly sworn, hereby depose and say that I am Manager, Regulatory Affairs, of the South Texas Project Units 3 & 4 (STP 3&4); that I am duly authorized to sign and file with the Nuclear Regulatory Commission (NRC) this affidavit on behalf of the STP Nuclear Operating Company (STPNOC); and state:
- 1. The accompanying information contains schedule activities regarding I&C design document availability as produced through the DAC process for STP 3&4; that I am familiar with the content thereof; that the matters set forth therein are true and correct to the best of my knowledge and belief; and that STPNOC is providing this information to assist the NRC in allocating inspection resources for STP 3 & 4 activities.
- 2. The accompanying information includes information specifically considered to be proprietary to STPNOC and its owners that should be held in confidence by the NRC and withheld from public disclosure pursuant to 10 CFR 2.390(a)(4), because:
  - i. This information is and has been withheld in confidence by STPNOC.
  - ii. This information is of a type that is customarily held in confidence by STPNOC and there is a rational basis for doing so because the information contains sensitive schedule information.
  - iii. This information is being submitted to the NRC voluntarily and in confidence.
  - iv. This information is not available in public sources and could not be gathered readily from other publicly available information.
  - v. Public disclosure of this information would create substantial harm to the competitive position of STPNOC by disclosing its internal schedule information.
- 4. The basis for this claim of competitive harm is that the schedule information provided reveals details that could be used by a competitor to gain unfair commercial advantage in the acquiring of resources and other commercial assets, and could be used to unfairly influence the availability of finite resources and other commercial assets, necessary to the development of a similar product.
- 5. Information proprietary to STPNOC and its owners included in the attachment to this letter is marked with "[]"and with "Proprietary Information Withhold from public disclosure under 10 CFR 2.390(a)(4)" at the top of the page in accordance with the NRC's guidance on categories of proprietary information defined in 10 CFR 2.390 and clarified by RIS 2004-11.

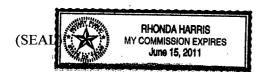
6.	Accordingly, STPNOC requests that the portions of the document accompanied by this affidavit and
	identified as described above be withheld from public disclosure pursuant to 10 CFR 2.390.

Scott M. Head

Manager, Regulatory Affairs South Texas Project Units 3 & 4

STATE OF TEXAS	)
	)
COUNTY OF MATAGORDA	. )

The signature above was subscribed and sworn before and to me, a Notary Public, in and for the State of Texas, this 9 day of February, 2010.



Rhonda Harris Notary Public in and for the State of Texas