

Common Qualified Platform Topical Report (WCAP-16097-P-A) Planned Revisions NRC Meeting April 2020

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OUR VISION & VALUES

Westinghouse will remain the first choice for safe, clean and efficient energy solutions.

We enhance our delivery of that vision by living our values:

- ▶ Safety & Quality First
- ▶ Valuing Ethics, Integrity & Diversity
- ▶ Passion for Serving Our Customers Globally
- ▶ Dedication to Each Other Through Servant Leadership
- ▶ Creating Value for Shareholders, Customers & Employees
- ▶ Consistently Delivering Our Commitments

Agenda

Open Portion

- Purpose of this Revision
 - Acquisition of ABB Intellectual Property
 - Purpose
 - Background
 - Licensing Considerations
 - Transitioning the AC160 Platform from ABB to Westinghouse

----- Closed Portion Begins -----

- Other Technical Changes
- Markups
- Schedule
- Common Q Change Process
- Simplified SE NRC Review
- Questions/Final Remarks



Acquisition of ABB Intellectual Property Purpose



Purpose

- Westinghouse has signed an agreement for the acquisition of the AC160 Platform Intellectual Property (IP) from ABB. The Common Q Topical Report (WCAP-16097) refers to ABB as a vendor for the AC160.
- The purpose of this NRC pre-submittal presentation is to provide an overview of the IP acquisition and associated licensing actions for the long term maintenance of the Common Q Platform.



Background



Background: Common Q Platform

- The Common Qualified (Q) Platform Topical Report is documented in WCAP-16097 Rev. 4
- The NRC completed the Safety Evaluation Report (SER) of the latest revision (Rev. 4) of the Common Qualified (Q) Topical Report in January 2020
- The AC160 Platform, which is a component within the Common Q Platform, is a stable platform that has been used in Nuclear Applications since 2000
- The AC160 is installed in 30 NPPs, with 12 more in process worldwide

The AC160 Platform design is not changing as a result of the IP Acquisition. Any updates to licensing documentation reflect the change in IP and long term maintenance ownership



Background: AC160 Platform Acquisition

- Westinghouse signed an agreement to obtain and validate the necessary IP from ABB to produce and maintain the AC160 Platform as-is.
- The scope of the AC160 Platform IP being acquired includes the following
 - Hardware design source files/documents
 - Software design source files/documents
 - Test and Tool source files and documents
 - User Documentation
 - Development tools and licenses
 - Quality and process documentation specific to the execution of platform development and maintenance



As part of the IP Acquisition, Westinghouse is validating that it can control and produce the same AC160 product that is currently being delivered to Westinghouse by ABB

Licensing Considerations



Licensing Considerations: Common Q

- The IP acquisition will not affect the design and functionality of the AC160 Platform previously reviewed and approved under the current Safety Evaluation
- In response to the acquisition of the AC160 IP, Westinghouse will update WCAP-16097 Rev. 4, “Common Qualified Platform Topical Report”
- Westinghouse will **NOT** have to update WCAP-16096 Rev. 5, “Software Program Manual for Common Q Systems”
 - Revision 5 was updated to be platform ownership neutral
 - The current SER still has a few instances of “ABB”



Transitioning the AC160 Platform from ABB to Westinghouse



Strategy for Maintaining the AC160 Platform

Westinghouse will leverage the Common Q SPM, Common Q Topical Report, and level 2/3 procedures from its Quality Management System (QMS) to control and maintain the approved AC160 Platform



AC160 Platform IP ownership and maintenance will migrate from a commercial dedication process to a 10 CFR50 Appendix B Program



Strategy for Maintaining the AC160 Platform Software

- Software modifications will be performed in accordance with the NRC-approved Common Q SPM, WCAP-16096-P-A, Revision 5.
- Like today, all changes will be screened/evaluated using the Common Q Change process.



Strategy for Maintaining the AC160 Platform Hardware

- Hardware modifications will be performed in accordance with:
 - Common Q Topical Report, WCAP-16097-P-A
 - Westinghouse NRC-approved QMS
 - Level 2/3 procedures
- Like today, all changes will be screened/evaluated using the Common Q Change process.



**Westinghouse QMS Revision 7.1 was accepted
by the U.S. NRC on September 19, 2019
(ML19246A008)**

Progression of Topical Report Approval and Platform Maintenance

- Post signing, pre-closing
 - Manufacturing and modification process as per current processes.
 - Public knowledge acceptable.
 - Can officially submit Topical Report to NRC.
- Post closing of agreement, but TR not yet approved
 - No hardware or software changes permitted.
 - Ability to manufacture using commercial grade dedication.
 - Goal is to minimize/eliminate this time period.
- TR approved
 - Hardware and software changes will be performed under Westinghouse 10CFR Part 50 Appendix B processes.



Westinghouse Activities Post Closing

- The AC160 components will transition from ABB to Westinghouse part numbers/revisions
- Westinghouse would like Table 1 of the SER to be updated to include the new part numbers/revisions



Process Overview

	Current Process	New Process
AC160 Design	ABB – Commercial Dedication Process	Westinghouse – 10 CFR 50 Appendix B Process
AC160 Manufacturing	Contract Manufacturer (e.g., ENICS) – Commercial Dedication Process	Contract Manufacturer (e.g., ENICS) – Commercial Dedication Process



Closed Portion of the Meeting



Other Technical Changes



Summary of Technical Changes

a,c



Markups – See Handout



Simplified SE NRC Review



Simplified SE NRC Review

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Schedule



Schedule Summary

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Common Q Change Process



Common Q Change Process

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Questions/Final Remarks

