

# WECC

## CIP v5 Lessons Learned Update

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# Agenda

- Where To Find NERC Guidance
- Topics Not Pursued As LL or FAQ
- Next Steps
- 2015 CIP Self Certification

# NERC v5 Transition Web Page

The screenshot shows a web browser window displaying the NERC website. The address bar shows the URL: [www.nerc.com/pa/CI/Pages/Transition-Program-V5-Implementation-Study.aspx](http://www.nerc.com/pa/CI/Pages/Transition-Program-V5-Implementation-Study.aspx). The NERC logo is visible at the top left, and navigation links for 'About NERC', 'Governance', 'Committees', 'Program Areas & Departments', 'Initiatives', 'Filings & Orders', 'Newsroom', and 'Resources' are at the top. A search bar and 'Login' link are on the right.

The main content area is titled 'Implementation Study, Lessons Learned, and FAQs'. It includes the following text:

**Implementation Study, Lessons Learned, and FAQs**  
 From October 1, 2013 to June 30, 2014, six volunteer responsible entities worked with NERC and the Regional Entities to implement the CIP Version 5 standards in an accelerated time frame. These Implementation Study participants were selected based on their history of successful Version 3 compliance, effective management practices, and willingness to commit the required resources to support their transition.

During the Implementation Study, study participants focused on the technical solutions and processes needed to meet the standards. Study participants faced key issues, challenges, and potential resolutions relating to:

- Differences between the CIP Version 3 and CIP Version 5 standards;
- Technical security practices needed to meet the CIP Version 5 requirements; and
- Practices to demonstrate compliance with the CIP Version 5 requirements, including effective management practices to address any noncompliance

Going forward, NERC will continue to work with study participants to address compliance and enforcement matters.

Based on the Implementation Study, NERC and the Regional Entities developed a report that identifies key conclusions, lessons learned, and recommendations for transition to Version 5. Click here for the Implementation Study Final Report.

NERC and the Regional Entities are developing Lessons Learned and FAQ documents focused on specific topics identified during the Implementation Study. Draft and final Lessons Learned and FAQs will be posted on this page. For information on how Lessons Learned and FAQs will be developed, review the CIP V5 Transition Lessons Learned and FAQ Coordination document.

The sidebar on the left contains the following menu items:

- CIP V5 Transition Program**
  - Implementation Study, Lessons Learned, and FAQs
- CIP Outreach**
  - CIP Training
  - GridEx
  - GridSecCon
  - Physical Security Standard Implementation
  - Security Reliability Program
- CIP Compliance**
  - CIP Standards
  - CIP OMS
  - CIP O&S
- ES-ISAC**
  - NERC Alerts
  - Report an Incident
- Committees**
  - Critical Infrastructure Protection Committee (CIPC)
  - Electricity Sub-sector Coordinating Council (ESCC)
- CIP News**
- Resources**

The main content area also features three tables of links:

Implementation Study Final Report and Planned Guidance	
Type	Title
	Implementation Study Final Report
	Planned Lessons Learned and FAQs
	Lessons Learned and FAQ Coordination Process

Final Lessons Learned and FAQs	
Type	Title
	Generation Segmentation Lesson Learned
	Far-End Relay Lesson Learned

Topics Not Pursued As Lessons Learned or FAQs	
Type	Title
	Follow-Up to Implementation Study Report
	Impact Rating Criteria 2.3 and 2.6
	Impact Rating for Generation Interconnection Facilities
	Network and Externally Accessible Devices
	Programmable Electronic Device
	Control Centers and Functional Obligations

Draft Lessons Learned and FAQs	
Type	Title
	Feedback on Lessons Learned and FAQs Previously Posted for Comment (5)
	Lessons Learned and FAQs Posted for Industry Comment (2)
	Other Draft Lessons Learned (4)

# NERC CIP v5 Transition Plan

- Differences between CIP Version 3 and CIP Version 5 standards;
- Technical security practices needed to meet CIP Version 5 requirements; and
- Practices to demonstrate compliance with the CIP Version 5 requirements

<http://www.nerc.com/pa/CI/Pages/Transition-Program-V5-Implementation-Study.aspx>



# NERC Memorandums

- Under the direction of WECC Management the CIP Team will continue auditing and providing outreach on the **strict language** of the standard.
  - Reasonable approach
  - Expertise & professional judgment
  - Provide appropriate guidance

# Topics Not Pursued as LL or FAQ

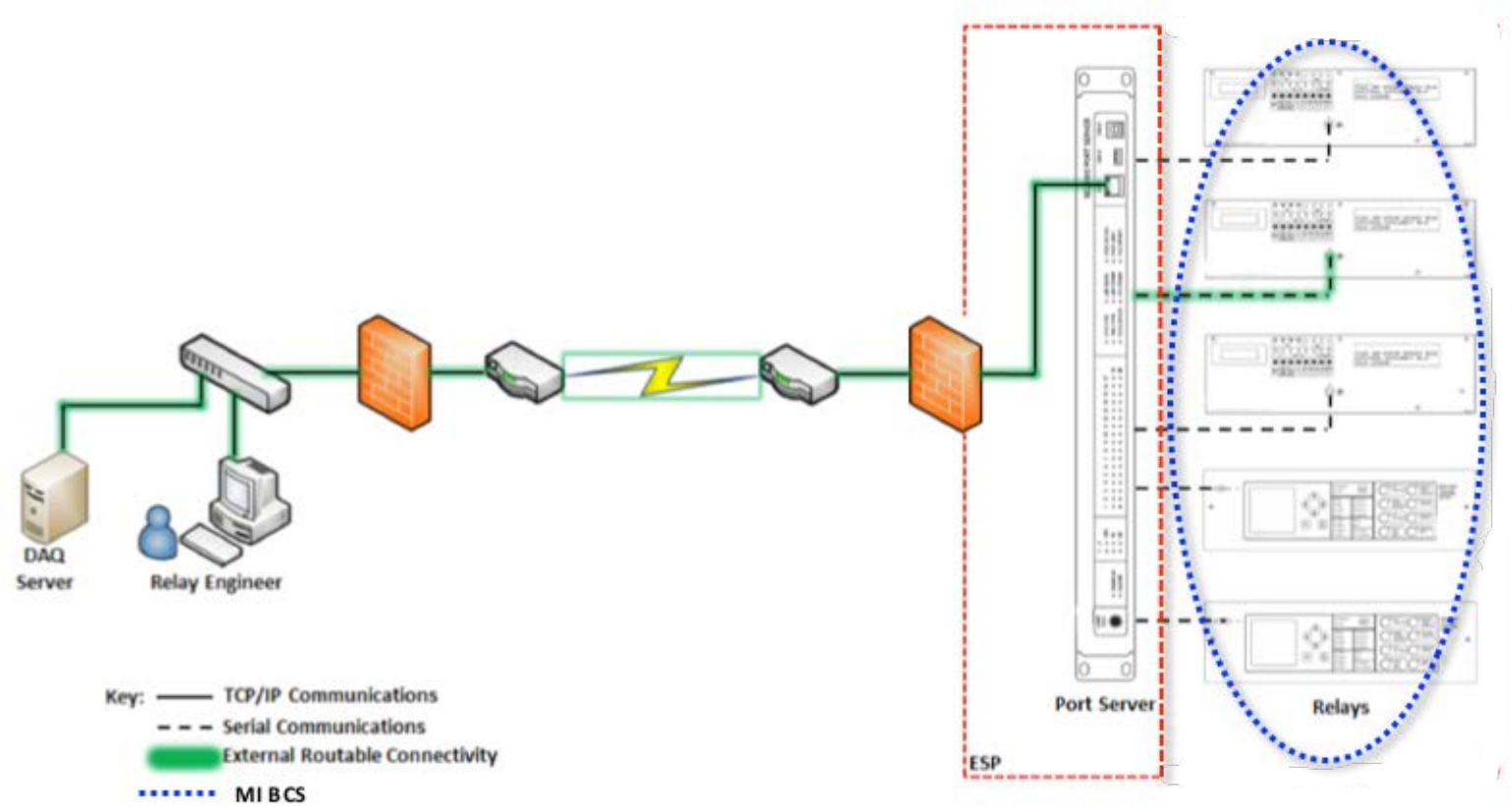
- Follow-Up to Implementation Study Report
- Impact Rating Criteria 2.3 and 2.6
- Impact Rating for Gen Interconnection Facilities
- Network and Externally Accessible Devices
- Programmable Electronic Device
- Control Center Functional Obligation

# Network & Externally Accessible Devices

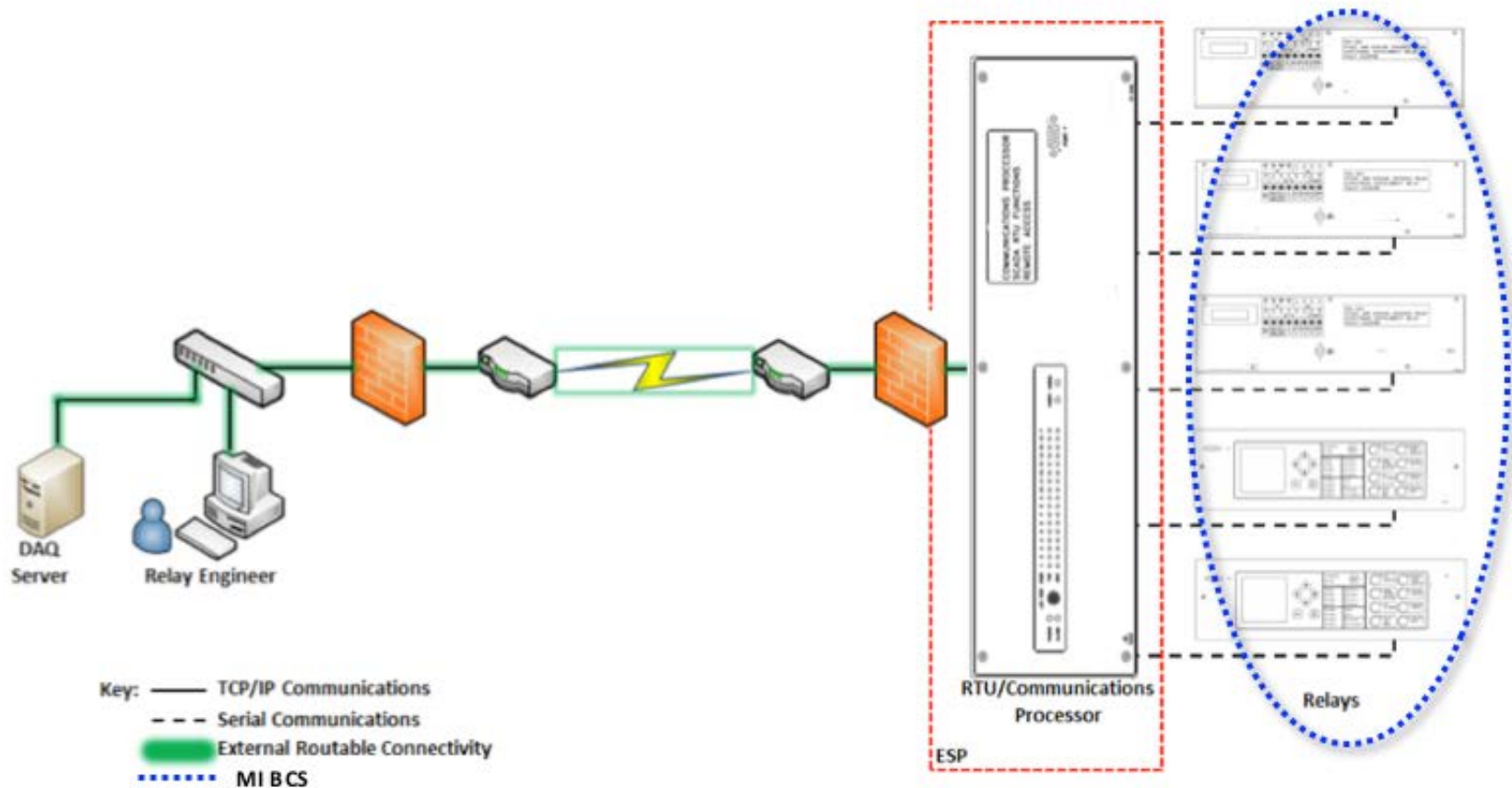
- Memorandum appears to expand the reach of previously defined terms
- WECC will remain consistent in its approach
- Multiple ways to achieve compliance with BES Cyber Systems with & without External Routable Connectivity
- WECC will remain consistent in its approach



# Medium BCS with ERC



# Medium BCS without ERC



# Programmable Electronic Device

- Memorandum is too vague
- WECC intends to leverage the definition previously identified in the CIP v5 Pilot Study  
Lesson Learned
  - *A programmable electronic device is a device that has a microprocessor and field-updateable firmware, software, or logic. “Field Updateable” would include devices that have a management port, web interface, or any external interface that would allow the introduction of a firmware, software, or logic update by a customer or field-service technician.*

# Programmable Electronic Device

- Examples of possible PED's
  - Digital Relays
  - Breaker Controls
  - Programmable CT & PT coils
  - RTU's
  - DCS elements such as PLCs, controllers, sensor transmitters, etc...

# Control Center Functional Obligation

- Concerns for industry?
  - Smaller Transmission Owners, Generation Owners and Distribution Providers may be considered to have Medium Impact BES Cyber Systems
  - Compliance obligation for Medium BCS begins 4/1/2016

# Control Center Functional Obligation

- WECC Approach
  - Targeted outreach efforts for TO, GO, DP that may be impacted.
  - Work with NERC and Regions to determine the course forward
  - Focus efforts on impacted Registered Entities to facilitate understanding once this has been resolved

# Next Steps

- No the sky isn't falling
- WECC will continue to bring logic sense and reason to bear on these transitional issues
- Speak up!
  - SAR
  - RFI
  - Comments to NERC
- Get involved
  - CUG / CIPUG
  - Low Impact
  - CIP 101
  - Open Webinar