

Meeting Notes

Project 2016-02 Modifications to CIP Standards Drafting Team

Week of January 29, 2018

David Revill, Standard Drafting Team (SDT) Chair, called the meeting to order. Mat Bunch reviewed the NERC Antitrust Compliance Guidelines and Public Announcement¹. Attachment 1-3 identify the SDT members who attended each conference call.

CIP-002 posting

The SDT voted to post CIP-002 on January 30, 2018 pending planned/unplanned changes outreach.

CIP-012 posting

The SDT discussed Planned and Unplanned Change language. Mark Riley, Jordan Mallory and Mat Bunch agreed to work on draft language for SDT review and discussion during its next conference call on Friday, February 2, 2018.

J. Mallory provided a status update that the CIP-012 Response to Comments will be ready for review by February 2, 2018. She also requested that the SDT review the Response to Comment report prior the February 13, 2018 in-person meeting.

Control Center definition discussion

D. Revill provided a presentation to the group recapping the history and the ongoing discussions the SDT has held on the Control Center definition (see attachment 4). Towards the end of the discussion, four options were presented as follows: 1) do nothing to the control center definition, 2) write implementation guidance, 3) modify the Control Center definition and 4) draft exclusionary language for the applicability section of CIP-012. A straw vote showed that the majority of the group preferred drafting exclusionary language in the applicability section of CIP-012. Several members voted to modify the definition.

Virtualization discussion

Because of the extensive discussion on the Control Center definition, the virtualization topic will be covered the week of February 5, 2018.

Future In-person Meetings

- February 13-15, 2018 (OUC – Orlando, FL)
- March 27-29, 2018 (Atlanta, GA)
- April 17-19, 2018 (Location TBD—tentative—Ft. Worth, TX)
- May 22-24, 2018 (AEP – Columbus, OH)

¹ See page 4.

- June 19-21, 2018 (Location TBD–tentative — Hydro-Québec TransÉnergie)
- July (TBD – Working with Forrest)

Outreach plan

J. Mallory and M. Bunch to review current Communication plan and update accordingly.

Adjourn

Each meeting was adjourned around 1:55 p.m. E.T.

January 30, 2018

Attachment 1				
Name	Company	Member/ Observer	Straw Vote (X)	Conference Call/Web (Y/N)
Christine Hasha	Electric Reliability Council of Texas	Co-Chair		
David Revill	GSOC	Co-Chair		Y
Steven Brain	Dominion Energy	Member		Y
Jay Cribb	Southern Company	Member		
Jennifer Flandermeyer	Kansas City Power and Light	Member		Y
Tom Foster	PJM Interconnection	Member		Y
Forrest Krigbaum	Bonneville Power Administration	Member		Y
Mark Riley	Calpine	Member		Y
Jordan Mallory	NERC	NERC Staff		Y
Mat Bunch	NERC	NERC Staff		Y
Marisa Hecht	NERC	NERC Staff		Y
Shamai Elstein	NERC	NERC Staff		
Tom Hofstetter	NERC	NERC Staff		
Tobias Whitney	NERC	NERC Staff		
Lonnie Ratliff	NERC	NERC Staff		
Mike Keane	FERC	FERC		Y
Jen	FERC			Y
Jan Bargaen	FERC	FERC		Y

Dave Norton	FERC	FERC		
Margaret Scott	FERC	FERC		
Ken Lanehome	Bonneville Power Administration	PMOS		
Kirk Rosener	CPS Energy	PMOS		Y

February 1, 2018

Straw Vote 1 – *Should Planned vs Unplanned Language be Included in CIP-012?*

Straw Vote 2 – *Options 1, 2, 3, or 4?****

Attachment 2				
Name	Company	Member/ Observer	Vote (X)	Conference Call/Web (Y/N)
Christine Hasha	Electric Reliability Council of Texas	Co-Chair		
David Revill	GSOC	Co-Chair	Y Option 3	Y
Steven Brain	Dominion Energy	Member	Y Option 4 – has the possibility of solving problem	Y
Jay Cribb	Southern Company	Member		
Jennifer Flandermeyer	Kansas City Power and Light	Member	Y Option 4 to solve CIP-12; however, this could have negative impacts to CIP- 002	Y
Tom Foster	PJM Interconnection	Member		
Forrest Krigbaum	Bonneville Power Administration	Member	Y Not Present for Vote	Y
Mark Riley	Calpine	Member	Y Option 4 or Option 1	Y

Jordan Mallory	NERC	NERC Staff		Y
Mat Bunch	NERC	NERC Staff		
Marisa Hecht	NERC	NERC Staff		
Shamai Elstein	NERC	NERC Staff		
Tom Hofstetter	NERC	NERC Staff		
Tobias Whitney	NERC	NERC Staff		
Lonnie Ratliff	NERC	NERC Staff		
Mike Keane	FERC	FERC		Y
Jan Bargaen	FERC	FERC		
Dave Norton	FERC	FERC		
Margaret Scott	FERC	FERC		
Ken Lanehome	Bonneville Power Administration	PMOS		
Kirk Rosener	CPS Energy	PMOS		

- ***Option 1: Do nothing. Leave the definition as it is.
 - Issues
 - Entities left to wrestle with this during implementation and during audit
 - CIP-012 introduces new challenges
- Option 2: Write Implementation Guidance
 - Issues
- Option 3: Modify the definition
 - Issues
 - Will it hold up CIP-002/CIP-012 from passing?
 - Can we make the case to NERC/FERC that the definition needs to change?
- Option 4: Modify Reliability Standard CIP-012-1
 - Issues
 - Modify the standard to address specific scenarios in the standard itself (e.g. modifications to applicability section)

February 2, 2018

Attachment 3				
Name	Company	Member/ Observer	Vote (X)	Conference Call/Web (Y/N)
Christine Hasha	Electric Reliability Council of Texas	Co-Chair		
David Revill	GSOC	Co-Chair		Y
Steven Brain	Dominion Energy	Member		Y
Jay Cribb	Southern Company	Member		
Jennifer Flandermeyer	Kansas City Power and Light	Member		Y
Tom Foster	PJM Interconnection	Member		Y
Forrest Krigbaum	Bonneville Power Administration	Member		Y
Mark Riley	Calpine	Member		Y
Jordan Mallory	NERC	NERC Staff		Y
Mat Bunch	NERC	NERC Staff		Y
Marisa Hecht	NERC	NERC Staff		Y
Shamai Elstein	NERC	NERC Staff		
Tom Hofstetter	NERC	NERC Staff		
Tobias Whitney	NERC	NERC Staff		
Lonnie Ratliff	NERC	NERC Staff		
Mike Keane	FERC	FERC		Y
Jen	FERC			
Jan Bargaen	FERC	FERC		

Dave Norton	FERC	FERC		
Margaret Scott	FERC	FERC		
Ken Lanehome	Bonneville Power Administration	PMOS		
Kirk Rosener	CPS Energy	PMOS		

NERC Antitrust Guidelines

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition. It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Disclaimer

Participants are reminded that this meeting is public. Notice of the meeting was posted on the NERC website and widely distributed. The notice included the number for dial-in participation. Participants should keep in mind that the audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.

NERC Standards Development Process-Participant Conduct Policy

<http://www.nerc.com/pa/Stand/Documents/Standards%20Development%20Process-Participant%20Conduct%20Policy.pdf>

NERC Email Listserv Policy

<http://www.nerc.com/pa/Stand/Documents/Email%20Listserv%20Policy%2004012013.pdf>

Control Center Definition Discussion

2/1/18

Where we've been...

- Discussed modifying the definition of Control Center as a part of the TOCC issue
- From the April 2017 Summary Slides:
 - The results of the [TOCC] informal comment posting did not indicate a clear consensus for a particular approach
 - Stakeholders did provide strong feedback to
 - Not modify the definition of Control Center,
 - Not use the criteria as drafted in the whitepaper, and
 - Include small TOP Control Centers under the same consideration as TO Control Centers
- The SDT still expressed concerns with the Control Center definition as it relates to CIP-012...

Who wrote this anyway?

- “One commenter suggested that Control Center as it applies to the function of a Generation Operator has a threshold of generation located at two or more locations, and that this single qualifier could unintentionally sweep in the control centers for multi-location generation of very small capacity. The commenter suggested that a capacity qualifier be added to this definition. The SDT does not think that the threshold should be in the definition, but has amended the criterion for generation Control Centers in the Medium Impact category that addresses this comment. BES Cyber Systems for Control Centers below the Medium Impact threshold must still be protected as Low Impact. See the response to A03 - Attachment 1, Medium Impact.”
- [http://www.nerc.com/pa/Stand/Project20086CyberSecurityOrder706Version5CIPStandards/Consideration of Comments D 2008-06 091012.pdf](http://www.nerc.com/pa/Stand/Project20086CyberSecurityOrder706Version5CIPStandards/Consideration%20of%20Comments%20D%202008-06%20091012.pdf)
- These small generation plants with multiple geographically separated units along a river were dealt with in v5 by including a criteria that effectively made them low impact. As there were no additional requirements for low impact Control Centers and this defined term was not used anywhere else in the NERC Standards, this was an adequate way of dealing with them. Now that we are introducing a new standard (CIP-012) that applies only to low impact Control Centers, our definition must be more precise.

We gave it a shot...

- Posted for informal comment:

Redline Definition:

One or more facilities, including their associated data centers, that monitor and control the Bulk Electric System (BES) and host ~~hosting~~ operating personnel ~~that monitor and control the Bulk Electric System (BES) in real-time to~~ who perform the Real-time reliability related--tasks, ~~including their associated data centers,~~ of: 1) a Reliability Coordinator, 2) a Balancing Authority, 3) a Transmission Operator for ~~transmission~~ Transmission Facilities at two or more locations, or 4) a Generator Operator for generation Facilities at two or more locations.

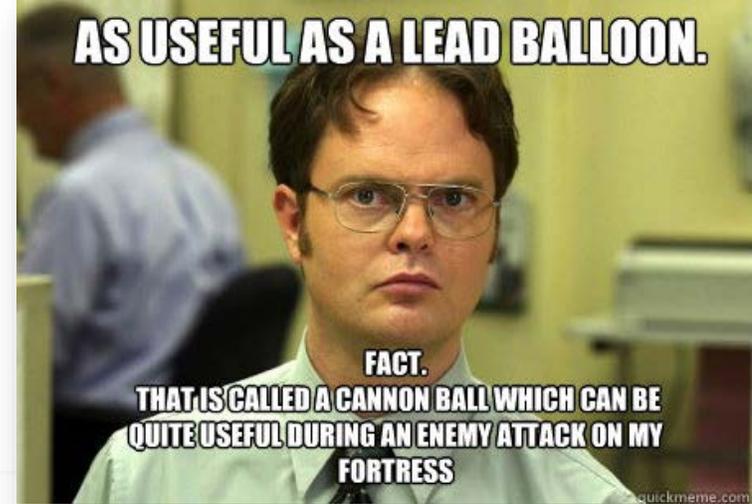
For Reliability Coordinators, Balancing Authorities, and Transmission Operators, the operating personnel above are System Operators.

For Transmission Owners performing the Real-time reliability--related tasks of a Transmission Operator, the operating personnel above consist of personnel, excluding field switching personnel, who can act independently to operate or direct the operation of the Transmission Owner's Bulk Electric System ~~transmission~~ Transmission Facilities in Real-time.

For Generator Operators, the operating personnel above consist of dispatch personnel at a centrally located dispatch center who receive direction from the Generator Operator's Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner, and have the capability to develop specific dispatch instructions for plant operators under their control. These personnel do not include plant operators located at a generator plant site or personnel at a centrally located dispatch center who relay dispatch instructions without making any modifications.

Do you agree with the potential definition of Control Center?

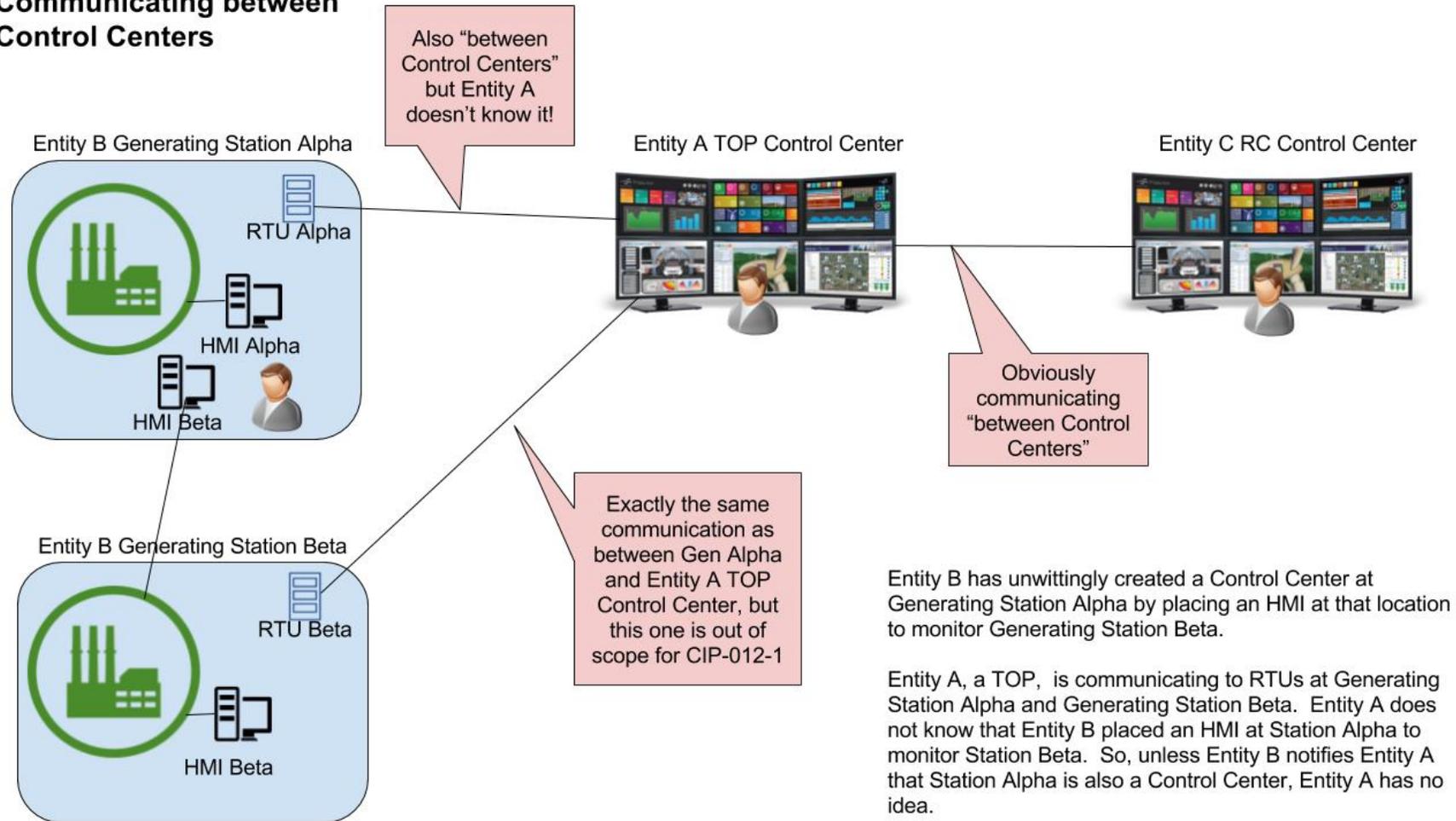
NO ~67%
YES ~33%



Why did we do that?

We talked about the problem some more...

Communicating between Control Centers

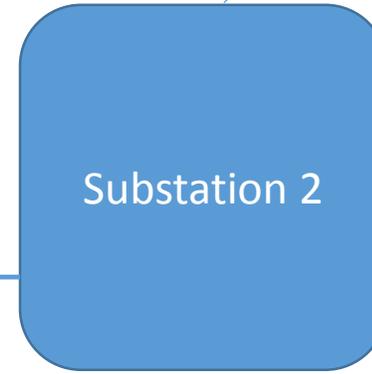


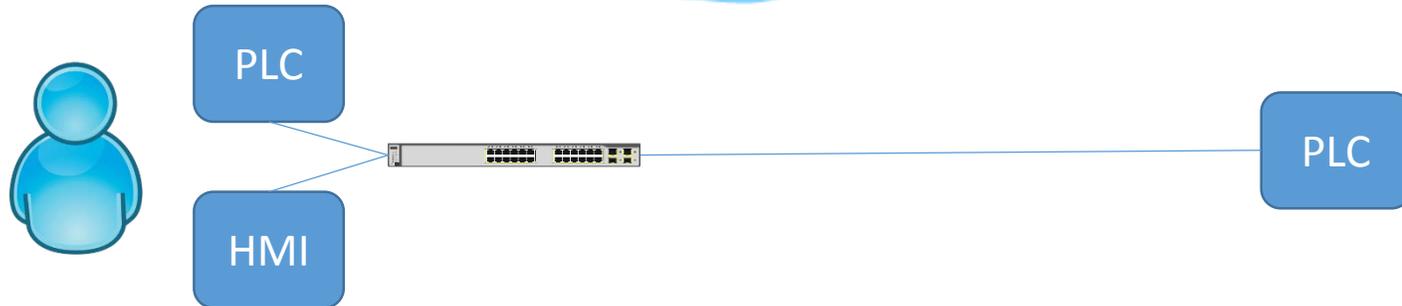
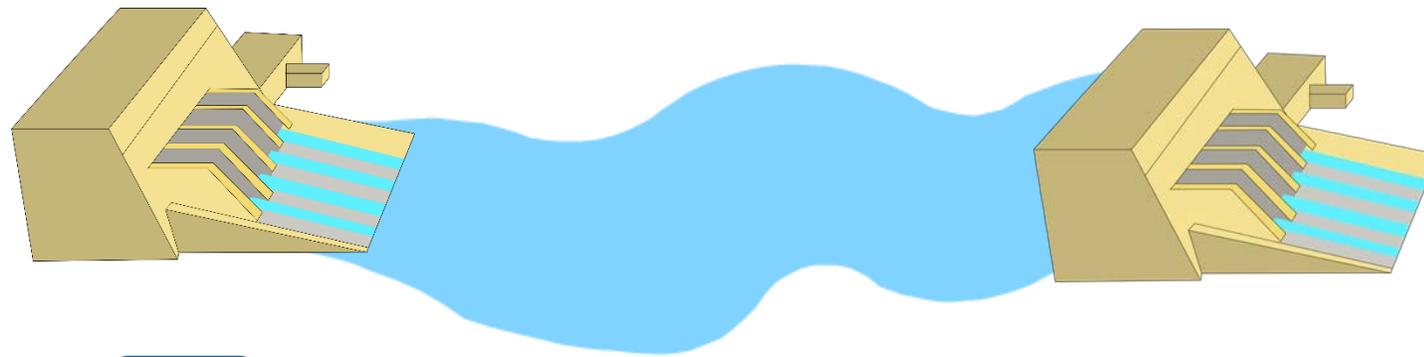
Entity B has unwittingly created a Control Center at Generating Station Alpha by placing an HMI at that location to monitor Generating Station Beta.

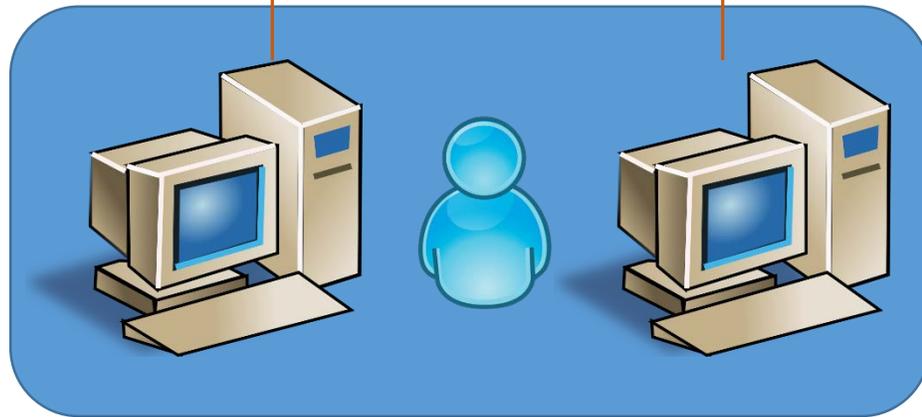
Entity A, a TOP, is communicating to RTUs at Generating Station Alpha and Generating Station Beta. Entity A does not know that Entity B placed an HMI at Station Alpha to monitor Station Beta. So, unless Entity B notifies Entity A that Station Alpha is also a Control Center, Entity A has no idea.

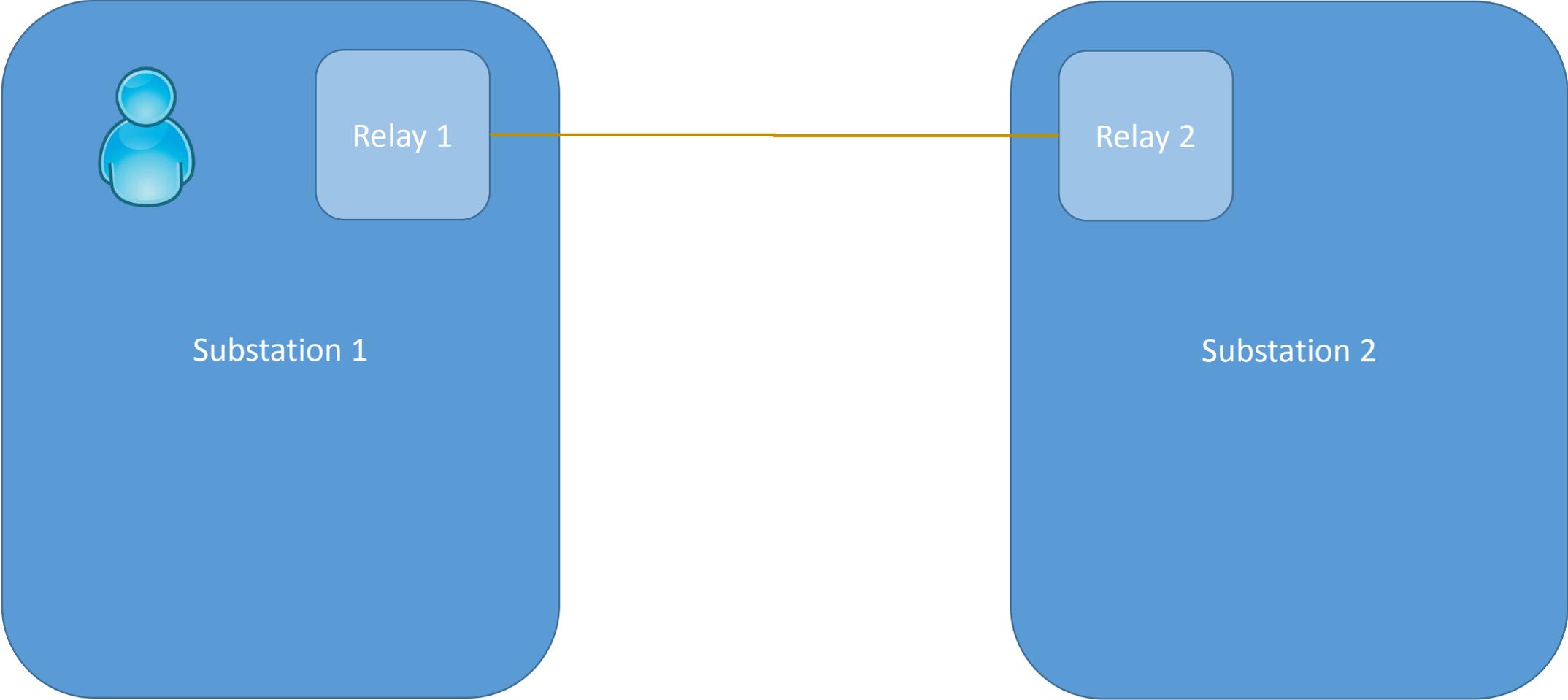
Entity B probably has no idea that it created a Control Center...

Wind Control Center









We tried a few things...Anything good left on the cutting room floor?

(Taken from various “scrap yard” files from meetings primarily in September 2017)

- Append “Generating plants and Transmission substations are not Control Centers” to the existing definition.
- Append “The term does not include generating plants and Transmission substations” to the existing definition.
- Modify *operating personnel* with “(not including plant operators and field switching personnel)”

Concerns have been raised...

- Control Center definition is used in Ops/Planning & CIP standards. Unintended consequences? #AskingForANonCipFriend
- Will our changes inadvertently remove control centers from scope that are currently identified today creating a reliability gap?
- What about the “monitor and control” language?

Where do we go from here?

- ~~Option 1: Do nothing. Leave the definition as it is.~~

- ~~Issues~~

- ~~Entities left to wrestle with this during implementation and during audit~~
- ~~CIP-012 introduces new challenges~~

- ~~Option 2: Write Implementation Guidance~~

- ~~Issues~~

- ~~Can we even write IG against a definition?~~
- ~~Would it even get endorsed?~~

- Option 3: Modify the definition

- Issues

- Will it hold up CIP-002/CIP-012 from passing?
- Can we make the case to NERC/FERC that the definition needs to change?

- Option 4: Modify Reliability Standard CIP-012-1 (Applicability section)

- Issues

- Temporary fix