

Consideration of Comments on Initial Ballot — Interpretation - CIP-006 - Cyber Security — Physical Security of Cyber Security Assets (Project 2008-10)

Date of Initial Ballot: September 30, 2009 – October 12, 2009

Summary Consideration:

The interpretation drafting team thanks all who commented during the last posting of the revised interpretation for their interest and feedback. Commenters from the last posting of the revised interpretation provided constructive comments and concerns. The interpretation drafting team identified two general themes in the comments:

1. Disagreement concerning whether wiring is a “Cyber Asset.” Several commenters expressed concern that interpreting wiring within the definition of “Cyber Asset” expanded the requirements of the standard; and
2. That CIP-006-1, requirement R1.1 does not specifically discuss particular options that may be used as alternatives to a completely enclosed (“six-wall” border) and should not be addressed by this interpretation.

In response to the comments received and reflective of the team’s revisions to the interpretation, the interpretation drafting team responded as follows:

The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the “alternative measures” question that is beyond the scope of this interpretation.

The definition of “Cyber Asset” in the *NERC Glossary of Terms Used in Reliability Standards* includes “communication networks,” but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of “Cyber Asset,” Requirement R1 of CIP-006-1 does not apply to wiring.

If you feel that the drafting team overlooked your comments, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Herb Schrayshuen, at 404-446-2560 or at herb.schrayshuen@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

| Voter | Entity | Segment | Vote | Comment |
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| Edward P. Cox | AEP Marketing | 6 | Negative | In reviewing the response that the SDT has provided to the Progress Energy Interpretation addressing Requirement R1.1 (specifically addressing security perimeter wiring), AEP has determined that the interpretation process, albeit inadvertently, resulted in expanding the requirements of the standard rather than interpreting the existing requirement. Requirement R1.1 does not specifically discuss |

¹ The appeals process is in the Reliability Standards Development Procedure: http://www.nerc.com/files/RSDP_V6_1_12Mar07.pdf.

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| | | | | wiring, nor does the requirement suggest options that can be used as alternatives to a completely enclosed ("six-wall") border. It is also not fully responsive to the interpretation request by limiting the response just to wiring. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Brock Ondayko | AEP Service Corp. | 5 | Negative | In reviewing the response that the SDT has provided to the Progress Energy Interpretation addressing Requirement R1.1 (specifically addressing security perimeter wiring), AEP has determined that the interpretation process, albeit inadvertently, resulted in expanding the requirements of the standard rather than interpreting the existing requirement. Requirement R1.1 does not specifically discuss wiring, nor does the requirement suggest options that can be used as alternatives to a completely enclosed ("six-wall") border. It is also not fully responsive to the interpretation request by limiting the response just to wiring. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Jason L. Murray | Alberta Electric System Operator | 2 | Negative | The AESO agrees that use of encryption and other logical access control methods may be sufficient in some cases, however that is not what the standard calls for. Logical access controls cannot provide physical protection, and the standard clearly calls for physical protection. Thus, this interpretation would have the effect of changing the standard. Standards are not to be changed through an interpretation. If the standard needs to be changed, then the AESO recommends that a drafting team be assembled to propose changes to the standard requirements. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Kenneth Goldsmith | Alliant Energy Corp. Services, Inc. | 4 | Negative | Wiring itself does not possess programmable intelligence, is not a cyber asset, and should not require the protection as detailed in CIP-006-1, R1. This level of protection will require entities to make considerable investments into atypical cable protection methods without a corresponding gain in protection of the cyber assets within the ESP or the reliability of the Bulk Electric System. |
| <p>Response: Thank you for your comment. The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring. The drafting team has revised the interpretation.</p> | | | | |

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| Kirit S. Shah | Ameren Services | 1 | Negative | Requirement R1.1 does not specifically discuss wiring. However, the interpretation results in expanding this requirement. |
| <p>Response: Thank you for your comment. The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring. The drafting team has revised the interpretation.</p> | | | | |
| Paul B. Johnson | American Electric Power | 1 | Negative | In reviewing the response that the SDT has provided to the Progress Energy Interpretation addressing Requirement R1.1 (specifically addressing security perimeter wiring), AEP has determined that the interpretation process, albeit inadvertently, resulted in expanding the requirements of the standard rather than interpreting the existing requirement. Requirement R1.1 does not specifically discuss wiring, nor does the requirement suggest options that can be used as alternatives to a completely enclosed ("six-wall") border. It is also not fully responsive to the interpretation request by limiting the response just to wiring. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Raj Rana | American Electric Power | 3 | Negative | In reviewing the response that the SDT has provided to the Progress Energy Interpretation addressing Requirement R1.1 (specifically addressing security perimeter wiring), AEP has determined that the interpretation process, albeit inadvertently, resulted in expanding the requirements of the standard rather than interpreting the existing requirement. Requirement R1.1 does not specifically discuss wiring, nor does the requirement suggest options that can be used as alternatives to a completely enclosed ("six-wall") border. It is also not fully responsive to the interpretation request by limiting the response just to wiring. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Jason Shaver | American Transmission Company, LLC | 1 | Negative | In reviewing the response that the SDT has provided to the Progress Energy Interpretation addressing Requirement R1.1 (specifically addressing security perimeter wiring), ATC has determined that the interpretation process, albeit inadvertently, resulted in expanding the requirements of the standard rather than interpreting the existing requirement. Neither Requirement R1.1 (CIP-006-1) nor Requirement 3 (CIP-002-1) specifically discuss or identify wiring as a cyber asset which would need protection within a six wall barrier. |

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| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the “alternative measures” question that is beyond the scope of this interpretation.</p> <p>The definition of “Cyber Asset” in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes “communication networks,” but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of “Cyber Asset,” Requirement R1 of CIP-006-1 does not apply to wiring.</p> | | | | |
| Paul Rocha | CenterPoint Energy | 1 | Negative | Upon further review of the interpretation provided for CIP_006-1 - R1.1, CenterPoint Energy agrees with the concerns of American Electric Power (AEP). The first part of R1.1 requires that “all Cyber Assets within an Electronic Security Perimeter (ESP) also reside within an identified Physical Security Perimeter. “ Therefore, it is our conclusion that the interpretation includes reference to a condition that should not occur if the entity is to be in compliance with CIP_006-1 - R1.1. Specifically, the statement pertaining to “wiring within the Electronic Security Perimeter that is external to a Physical Security Perimeter,...” should not occur (according to the requirements of R.1.1) and adds a level of complexity to what components/assets are covered and what is expected for compliance. |
| <p>Response: Thank you for your comment. The definition of “Cyber Asset” in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes “communication networks,” but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of “Cyber Asset,” Requirement R1 of CIP-006-1 does not apply to wiring. The drafting team has revised the interpretation.</p> | | | | |
| Daniel Herring | Detroit Edison Company | 4 | Negative | Detroit Edison's opinion is this interpretation is unnecessary and that protecting cabling between physical security perimeters fully contained within an otherwise adequately secured facility is that the cable is sufficiently protected following guidance provided by NIST for use in our nuclear plants. |
| <p>Response: The IDT thanks you for your comment. While the team believes that this comment suggests a good practice, it believes that the comment is beyond the scope of the interpretation.</p> | | | | |
| Jalal (John) Babik | Dominion Resources, Inc. | 3 | Negative | Dominion cannot approve this interpretation without fully understanding what is meant by “Alternative physical control measures may include, but are not limited to, multiple physical access control layers within a non-public, controlled space.” |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the “alternative measures” question that is beyond the scope of this interpretation.</p> | | | | |

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| Mike Garton | Dominion Resources, Inc. | 5 | Negative | Dominion cannot approve this interpretation without fully understanding what is meant by 'Alternative physical control measures may include, but are not limited to, multiple physical access control layers within a non-public, controlled space. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Louis S Slade | Dominion Resources, Inc. | 6 | Negative | Dominion cannot approve this interpretation without fully understanding what is meant by "Alternative physical control measures may include, but are not limited to, multiple physical access control layers within a non-public, controlled space." |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| William L. Thompson | Dominion Virginia Power | 1 | Negative | Dominion cannot approve this interpretation without fully understanding what is meant by "Alternative physical control measures may include, but are not limited to, multiple physical access control layers within a non-public, controlled space." |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Douglas E. Hils | Duke Energy Carolina | 1 | Negative | Thank you for the opportunity to vote on this interpretation. We think that the interpretation is unclear and believe that this issue is best addressed in a comprehensive manner in a revision to the CIP standards. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> <p>The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring.</p> | | | | |
| Walter Yeager | Duke Energy Carolina | 6 | Negative | Thank you for the opportunity to vote on this interpretation. We think that the interpretation is unclear and believe that this issue is best addressed in a comprehensive manner in a revision to the CIP standards." |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is</p> | | | | |

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| <p>relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> <p>The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring.</p> | | | | |
| Edward C Stein | Edward C Stein | 8 | Negative | So you have a system where you can detect when someone has gained "unauthorized access" and you discover that someone has gained unauthorized access, does this mean that you have violated some Standard somewhere. In today's world where the use of the internet is required to exchange market and transmission data to RTOs, I believe that it is impossible to protect yourself from a hacker. The interpretation is politically correct but it does not prevent hacking. |
| <p>Response: The drafting team thanks you for your comment. While the team appreciates your concern, it believes that this issue is beyond the scope of the interpretation.</p> | | | | |
| Kent Saathoff | Electric Reliability Council of Texas, Inc. | 10 | Affirmative | For clarity, we suggest that NERC add a comment in guidelines or FAQs to reflect that steel conduits are acceptable as a 6-wall enclosure for wiring. |
| <p>Response: The drafting team thanks you for your comment. While the team appreciates your concern, it believes that this issue is beyond the scope of the interpretation.</p> | | | | |
| John J. Blazekovich | Exelon Energy | 1 | Negative | Exelon believes that this interpretation, albeit inadvertently, resulted in expanding the requirements of the standard rather than interpreting the existing requirement. Requirement R1.1 does not specifically discuss wiring, nor does the requirement suggest options that can be used as alternatives to a completely enclosed ("six-wall") border. It is also not fully responsive to the interpretation request by limiting the response just to wiring. |
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| Kim Warren | Independent Electricity System Operator | 2 | Negative | We reiterate our previous comment that although directionally the IESO is in favour of the intent of the interpretation, we believe the current interpretation wording may effectively modify the intention of the standard, which is inconsistent with NERC Reliability Standards Development Procedure. Whereas the standard clearly requires physical access control, the interpretation effectively relaxes and hence alters this requirement by permitting logical measures to control physical access. Although we believe the standard should be revised to allow alternative protective |

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| | | | | measures, that is not the issue being balloted. We believe revisions to CIP-006-1, Requirement R1.1 should be made in the future to specifically cater for logical measures to control physical access to the Critical Cyber Assets. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> | | | | |
| Elizabeth Howell | ITC Transmission | 1 | Negative | In reviewing the response that the SDT has provided to the Progress Energy Interpretation addressing Requirement R1.1 (specifically addressing security perimeter wiring), ITC has determined that the interpretation process, albeit inadvertently, resulted in expanding the requirements of the standard rather than interpreting the existing requirement. Neither Requirement R1.1 (CIP-006-1) nor Requirement 3 (CIP-002-1) specifically discuss or identify wiring as a cyber asset which would need protection within a six wall barrier. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> <p>The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring.</p> | | | | |
| Jason L Marshall | Midwest ISO, Inc. | 2 | Negative | The FAQ developed along with the original CIP standards specifically state that the standards are not intended to address the wires between facilities. While we agree that the suggested interpretation is a good idea for a future improvement to the standard, the interpretation process is intended to clarify what the standard says as originally drafted, not what we would like the standard to say. In the response to comments from the initial ballot, the drafting team pointed out that the FAQ is a reference document and not enforceable. While we agree this is true, it does point out what the intent of the drafting team was when writing the requirements and is thus critical to interpreting the CIP standards. Q11 in the FAQ is clear that the drafting team did not intend to include wiring. The drafting team stated that the requirement only applies to assets that are not owned by the Responsible Entity and that the Q11 in the FAQ only addressed non-owned assets. First, we assume that the drafting team is referring to leasing by the statement "assets that are not owned" even though leasing is one form of ownership. Second, leasing of communications circuits is only one example given in the answer to Q11 in the FAQ. Thus, we can't conclude that Q11 does not apply to all communication circuits. If |

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| | | | | the drafting team wants to apply the standard to the wiring in the request for interpretation, they need to submit a SAR to modify the standard. |
| <p>Response: Thank you for your comment. The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring. The drafting team has revised the interpretation.</p> | | | | |
| James D. Hebson | PSEG Energy Resources & Trade LLC | 6 | Negative | <p>Comments from the last ballot of this interpretation clearly show a strongly diverse set of opinions on the subject. While the RFI response drafting team has done a diligent job of responding to those comments, it is clear that there will still be a strong divide on the issue. PSEG agrees with CAL ISO's position that this interpretation should not be "...what should have been done," Southern Company's position the "...it actually represents an extension of the standards without sufficient discussion within the industry or comparison to acknowledged industry best practice....," ISO New England's position that "...the interpretation adds requirements that are not already part of the Standard...." and PJM's position that: "...the interpretation adds requirements that are not already part of the Standard. EIP-006 describes the requirements for physical access controls. An interpretation of a standard should not be confused with "what should have been done." The NERC Standards development process says that an interpretation cannot modify a standard, only clarify its meaning. By including an explicit reference to data in transit over communication links between discrete perimeters, the interpretation moves into an area which the standard intentionally does not address." PSEG believes that the only appropriate way to reach agreement on Progress Energy's question is to submit a SAR to address the issue via the standards approval process. If the team is unwilling to have the question settled by the SAR process, then, at a minimum, an appropriate implementation schedule must also be issued."</p> |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> <p>The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring.</p> | | | | |
| Thomas Piascik | PSEG Power LLC | 5 | Negative | <p>Comments from the last ballot of this interpretation clearly show a strongly diverse set of opinions for the subject. While the RFI response drafting team has done a diligent job of responding to those comments, it is clear that there will still be a strong divide on the issue. PSEG agrees with CAL ISO's position that this interpretation should not be "...what should have been done.", Southern Company's</p> |

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| | | | | <p>position that "...it actually represents an extension of the standards without sufficient discussion within the industry or comparison to acknowledged industry best practice...", ISO New England's position that "...the interpretation adds requirements that are not already part of the Standard..." and PJM's position that: "...the interpretation adds requirements that are not already part of the standard. CIP-006-1 describes the requirements for physical access controls. An interpretation of a standard should not be confused with "what should have been done". The NERC Standards development process says that an interpretation cannot modify a standard, only clarify its meaning. By including an explicit reference to data in transit over communications links between discrete perimeters, the interpretation moves into an area which the standard intentionally does not address." PSEG believes that the only appropriate way to have agreement of Progress Energy's question is submit a SAR to address the issue via the standards approval process. If the team is unwilling to have the question settled by the SAR process, then, at a minimum, an appropriate implementation schedule must also be issued</p> |
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| Kenneth D. Brown | Public Service Electric and Gas Co. | 1 | Negative | <p>Comments from the last ballot of this interpretation clearly show a strongly diverse set of opinions for the subject. While the RFI response drafting team has done a diligent job of responding to those comments, it is clear that there will still be a strong divide on the issue. PSE&G agrees with CAL ISO's position that this interpretation should not be "...what should have been done.", Southern Company's position that "...it actually represents an extension of the standards without sufficient discussion within the industry or comparison to acknowledged industry best practice...", ISO New England's position that "...the interpretation adds requirements that are not already part of the Standard..." and PJM's position that "...the interpretation adds requirements that are not already part of the standard. CIP-006-1 describes the requirements for physical access controls. An interpretation of a standard should not be confused with "what should have been done". The NERC Standards development process says that an interpretation cannot modify a standard, only clarify its meaning. By including an explicit reference to data in transit over communications links between discrete perimeters, the interpretation moves into an area which the standard intentionally does not address." PSE&G</p> |

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| Jeffrey Mueller | Public Service Electric and Gas Co. | 3 | Negative | <p>"Comments from the last ballot of this interpretation clearly show a strongly diverse set of opinions for the subject. While the RFI response drafting team has done a diligent job of responding to those comments, it is clear that there will still be a strong divide on the issue. PSEG agrees with CAL ISO's position that this interpretation should not be "...what should have been done.", Southern Company's position that "...it actually represents an extension of the standards without sufficient discussion within the industry or comparison to acknowledged industry best practice...", ISO New England's position that "...the interpretation adds requirements that are not already part of the Standard..." and PJM's position that: "...the interpretation adds requirements that are not already part of the standard. CIP-006-1 describes the requirements for physical access controls. An interpretation of a standard should not be confused with "what should have been done". The NERC Standards development process says that an interpretation cannot modify a standard, only clarify its meaning. By including an explicit reference to data in transit over communications links between discrete perimeters, the interpretation moves into an area which the standard intentionally does not address." PSEG believes that the only appropriate way to have agreement of Progress Energy's question is submit a SAR to address the issue via the standards approval process. If the team is unwilling to have the question settled by the SAR process, then, at a minimum, an appropriate implementation schedule must also be issued."</p> |
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| explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring. | | | | |
| Kyle M. Hussey | Public Utility District No. 2 of Grant County | 1 | Affirmative | I agree with this interpretation. This clarifies that wiring can not only be secured through physical means but also logical. |
| Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, approved appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation. | | | | |
| Henry Delk, Jr. | SCE&G | 1 | Negative | SCE&G does not think the interpretation adds enough clarity. The issue should be addressed during development of the next set of NERC CIP Standards. |
| Response: Thank you for the comment. The Interpretation Drafting Team has revised the interpretation so that it limits itself to the specific question about wiring, and other issues raised regarding CIP-006-1 will be addressed in future versions. | | | | |
| Hubert C. Young | South Carolina Electric & Gas Co. | 3 | Negative | SCE&G does not think the interpretation adds enough clarity. The issue should be addressed during development of the next set of NERC CIP standards. |
| Response: Thank you for the comment. The Interpretation Drafting Team has revised the interpretation so that it limits itself to the specific question about wiring, and other issues raised regarding CIP-006-1 will be addressed in future versions. | | | | |
| Martin Bauer | U.S. Bureau of Reclamation | 5 | Affirmative | While Reclamation agrees with the interpretation, it is contingent on the basis that no TFE is required when Alternative Measures are deployed. |
| Response: Thank you for the comment. The Interpretation Drafting Team has revised the interpretation so that consideration of alternative measures and whether a TFE is required are beyond the scope of this Request for Interpretation. | | | | |
| Allen Klassen | Westar Energy | 1 | Negative | Do not agree with wire as a cyber asset |
| Response: Thank you for your comment. The drafting team agrees and has revised the interpretation. | | | | |

| Voter | Entity | Segment | Vote | Comment |
|--|------------------------------------|---------|----------|---|
| Linda Horn | Wisconsin Electric Power Co. | 5 | Negative | Wisconsin Electric is concerned with the use of the term "effective security". This does not identify what type of physical protection is equivalent to six wall borders. Does cabling protected by metallic conduit constitute effective security? Communication networks utilizing fiber optic cabling is very difficult to splice in a tap allowing unapproved logical access. Does fiber optic cable require the same protective measures as copper? There are still questions or clarification required. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> <p>The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring.</p> | | | | |
| James R. Keller | Wisconsin Electric Power Marketing | 3 | Negative | Wisconsin Electric is concerned with the use of the term "effective security". This does not identify what type of physical protection is equivalent to six wall borders. Does cabling protected by metallic conduit constitute effective security? Communication networks utilizing fiber optic cabling is very difficult to splice in a tap allowing unapproved logical access. Does fiber optic cable require the same protective measures as copper? There are still questions or clarification required. |
| <p>Response: Thank you for the comment. The drafting team has determined that the interpretation must be limited to the question asked: whether CIP-006-1 R1 applies to the aspects of the wiring that comprises the ESP. The drafting team has revised the interpretation to be limited accordingly. The team furthermore acknowledges and notes that a different interpretation, appended to CIP-006-3c as appendix 3, is relevant to the "alternative measures" question that is beyond the scope of this interpretation.</p> <p>The definition of "Cyber Asset" in the <i>NERC Glossary of Terms Used in Reliability Standards</i> includes "communication networks," but it does not explicitly include wiring or communication mediums in general. Since wiring is not included in the definition of "Cyber Asset," Requirement R1 of CIP-006-1 does not apply to wiring.</p> | | | | |

END OF REPORT