# **Violation Severity Level Guidelines**

A Violation Severity Level (VSL) is a post-violation measurement of the degree to which a Reliability Standard Requirement was violated (Lower, Moderate, High, or Severe). To establish a Base Penalty for a violation, NERC considers the VSL, together with a Violation Risk Factor, which represents the potential risk to reliability.

## Setting VSLs

All draft standards submitted for posting should have VSLs that support the VSL Order,<sup>1</sup> NERC's VSL compliance filing(s), and the concepts documented by the VSL Drafting Team and included in the informational filing on VSLs.

## Start With the End in Mind

Each Standard Drafting Team (SDT) is responsible for documenting its justification for proposing VSLs as part of the request to regulatory authorities to approve the standard. To ensure that the team has this justification and stakeholder response to the justification, each team should provide its justification when it posts its VSLs for comment. In the associated comment form, the team should ask stakeholders if they agree with the proposed VSLs and the team's justification. If the drafting team modifies the standard and its associated VSLs based on stakeholder comments, the team should make sure that the justification for the VSLs is maintained. This justification should, at a minimum, address the following:

- How the proposed VSLs meet NERC's criteria for setting VSLs
- How the proposed VSLs meet FERC's guidelines for setting VSLs

## Format

- VSLs should be written in the past tense and should describe the noncompliant performance rather than the compliant performance. (Pretend you are the Compliance Enforcement Authority with respect to the requirement, how far from full compliance was the measured performance or product?)
- If a requirement has what were called, "sub-requirements," these are now called, "Parts," when cross-referenced in a standard. The reference should include the requirement number followed by a comma, followed by the word "Part," followed by the Part number as shown below:
  - o Requirement R1, Part 1.5
- For requirements that are applicable to multiple functional entities (*e.g.*, "Each Reliability Coordinator, Balancing Authority, Transmission Operator shall . . .") it is acceptable to use the term, "The responsible entity" instead of naming all the entities.
- Every requirement must have a set of one to four VSLs to categorize noncompliant performance with the requirement, in the requirement's entirety. Requirements with "Parts" will be incorporated (*i.e.*, "rolled-up") into a VSLs for each whole numbered requirement.

<sup>&</sup>lt;sup>1</sup> North American Electric Reliability Corp., Order on Violation Severity Levels Proposed by the Electric Reliability Organization, <u>123 FERC ¶ 61,284</u> (2008)("VSL Order"), order on rehearing and clarification, <u>125 FERC ¶ 61,212</u>(2008). VSL Guidelines

#### **General Criteria**

Every requirement will have a set of VSLs that includes from one to four possible levels. Not all requirements will have multiple levels. The determination of whether a requirement has a single VSL assignment or a set of VSLs is made by analyzing the performance required to satisfy a particular requirement.

Lower VSL	Moderate VSL	High VSL	Severe VSL
The performance or product measured did not meet a minor aspect of the requirement.	The performance or product measured did not meet a significant aspect of the requirement, but the majority of the requirement was met.	The performance or product measured did not meet a majority of the requirement, but did meet a significant aspect of the requirement.	The responsible entity failed to meet the performance of the requirement.

Requirements with Gradated Performance — If there are degrees of noncompliance that result in performance that partially meets the reliability objective of the requirement such that the performance or product has some reliability-related value, then the requirement will have multiple VSLs that address a range of severity utilizing two or more of the four VSL categories.

Requirements that are "Pass/Fail" — If the required performance cannot be broken down to categorize degrees of noncompliant performance that at least partially meet the reliability objective of the requirement, any noncompliance with the requirement will have only one VSL – Severe.

Some requirements have many components (called Parts), and in situations where meeting the required performance for some, but not all of the Parts results in performance that at least partially achieves the reliability objective of the requirement, then multiple VSLs (Lower, Moderate, High and/or Severe) will be developed. Where a requirement has numbered Parts, each numbered Part will be clearly identified in at least one of the VSLs so that noncompliance with each of the Parts in support of the main requirement is clearly defined.

In some cases, missing a single Part of a requirement that has multiple Parts will result in noncompliant performance that almost meets the full reliability-related objective of the requirement, meeting the criteria for a Lower VSL.

However, in other cases, missing a single Part of the required performance may result in a product or performance that has only limited reliability value, resulting in a Moderate, or High VSL – or may result in a product or performance that has no value, thus meeting the criteria for a Severe VSL.

## **Binary Performance**

A binary requirement is a "pass or fail" type requirement where any degree of noncompliant performance would result in totally or mostly missing the reliability intent of the requirement, then the single VSL must be "Severe."<sup>2</sup> This is not the same as saying that the requirement is important and any noncompliance would have an adverse reliability impact – the impact to reliability is addressed through the Violation Risk Factor, not the VSL. Table 1 illustrates the application of a binary requirement.

Table 1. Binary Performance Description					
Lower VSL	Moderate VSL	High VSL	Severe VSL		
N/A	N/A	N/A	The responsible entity failed to meet the (SDT to insert the required performance).		

#### Sample Standard and Requirement (Binary)

Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
<ul> <li>BAL-003-0.1b</li> <li>R3. Each Balancing Authority shall operate its Automatic Generation Control (AGC) on Tie Line Frequency Bias, unless such operation is adverse to system or Interconnection reliability.</li> </ul>	N/A	N/A	N/A	The Balancing Authority did not operate its Automatic Generation Control (AGC) on Tie Line Frequency Bias, during periods when such operation would not have been adverse to system or Interconnection reliability.

<sup>&</sup>lt;sup>2</sup> See <u>VSL Order</u> at P 24 ("Requirements of Reliability Standards where compliance is defined in terms of 'pass' or 'fail' are referred to by NERC as 'binary' requirements.")(internal citation omitted). VSL Guidelines

### Wide Range of Performance

If a requirement has a wide range of performance, then that requirement should have two or more VSLs. There are many different ways of developing VSLs to categorize different degrees of noncompliant performance. The set of VSLs should collectively address all of the elements in the requirement. Thus, if a requirement includes both specific actions and a timeframe for completion of those actions, then the VSLs should address noncompliance with both the completeness of the actions and the timeliness of those actions. Not all VSLs need to address both components of the requirement, but collectively the set of VSLs must address all aspects of the requirement. Table 2 illustrates the application of a requirement containing a wide range of performance.

Table 2. Wide Range of Performance Description (Percentage)					
Lower VSL	Moderate VSL	High VSL	Severe VSL		
The responsible entity failed to (SDT to insert deliverable language here – e.g., produce, distribute, maintain, etc.) 5% or less of (SDT to insert the required performance).	The responsible entity failed to (SDT to insert deliverable language here – e.g., produce, distribute, maintain, etc.) more than 5% but less than (or equal to) 10% of (SDT to insert the required performance).	The responsible entity failed to (SDT to insert deliverable language here - e.g., produce, distribute, maintain, etc.) more than 10% up to (and including) 15% of (SDT to insert the required performance).	The responsible entity failed to (SDT to insert deliverable language here - e.g., produce, distribute, maintain, etc.) more than 15% of (SDT to insert the required performance).		

#### Sample Requirement and VSLs (Wide Range of Performance)

Standard/Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
Standard/Requirement MOD-016-1.1 R3. The Planning Authority shall distribute its documentation required in R1 for reporting customer data and any changes to that documentation, to its Transmission Planners and Load-Serving Entities that work within its Planning Authority Area.	Lower VSL The responsible entity failed to distribute its documentation required in Requirement R1 and any changes to that documentation to 5% or less of all Transmission Planners and Load-Serving Entities that work within its Region. OR The responsible entity	Moderate VSL The responsible entity failed to distribute its documentation required in Requirement R1 and any changes to that documentation to more than 5% up to (and including) 10% of all Transmission Planners and Load-Serving Entities that work within its Region. OR	High VSL The responsible entity failed to distribute its documentation required in Requirement R1 and any changes to that documentation to more than 10% up to (and including) 15% of all Transmission Planners and Load-Serving Entities that work within its Region. OR	Severe VSL The responsible entity failed to distribute its documentation as specified in Requirement R1 to more than 15% of all Transmission Planners and Load-Serving Entities that work within its Region. OR The responsible entity failed to make the distribution
R3.1. The Planning Authority	distributed the	The responsible entity made the distribution more than	The responsible entity made the distribution more than	more than 60 calendar days



Standard/Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
shall make this	documentation more than	40 calendar days but less	50 calendar days but less	following approval.
distribution within 30	30 calendar days but less	than or equal to 50 calendar	than or equal to 60 calendar	
calendar days of	than or equal to 40 calendar	days following approval.	days following approval.	
approval.	days following approval.			

#### Parts that Contribute Unequally to Performance

If a requirement has several Parts, and the Parts contribute unequally to the reliability-related objective of the requirement, then noncompliance with each of the Parts should be clearly associated with at least one of the VSLs. Note – not all VSL levels (except for "Severe") need to be populated and multiple Parts may be encompassed within the same VSL designation. The SDT would need to "fill in" the "deliverable language" parenthetical. Tables 3 and 3a illustrate the application of a requirement containing Parts with unequal performance.

Table 3. Parts that Contribute Unequally to Performance Description					
Lower VSL	Moderate VSL	High VSL	Severe VSL		
The responsible entity (SDT to insert deliverable language here – e.g., coordinated, established, documented, etc.) but failed to (SDT to insert Requirement RX, Part X.C).	The responsible entity (SDT to insert deliverable language here – e.g., coordinated, established, documented, etc.) but failed to (SDT to insert Requirement RX, Part X.B). OR The responsible entity (SDT to insert deliverable language here – e.g., coordinated, established, documented, etc.) but failed to (SDT to insert Requirement RX, Part X.D).	The responsible entity (SDT to insert deliverable language here – e.g., coordination, establishment, documentation, etc.) but failed to (SDT to insert Requirement RX, Part X.A).	The responsible entity failed to (SDT to insert deliverable language here – e.g., coordinate, establish, document, etc.).		

Table 3a. Parts that Contribute Unequally to Performance Description					
Lower VSL	Moderate VSL	High VSL	Severe VSL		
The responsible entity (SDT to insert deliverable language here – e.g., coordinated, established, documented, etc but one element of (SDT to insert Requirement RX, Parts X.B through X.D) was not included.	The responsible entity (SDT to insert deliverable language here – e.g., coordination, establishment, documentation, etc.) but two elements of (SDT to insert Requirement RX, Parts X.B through X.D) were not included.	The responsible entity (SDT to insert deliverable language here – e.g., coordination, establishment, documentation, etc but (SDT to insert Requirement RX, Parts X.B through X.D) were applicable and were not included. OR The responsible entity (SDT to insert deliverable language here – e.g., coordinated, established,	The responsible entity (SDT to insert deliverable language here – e.g., coordinated, established, documented, etc.) but (SDT to insert Requirement RX, Part X.A and one or more of RX, Parts X.B through X.D) were not included. OR The responsible entity failed to		

Table 3a. Parts that Contribute Unequally to Performance Description					
Lower VSL	Moderate VSL	High VSL	Severe VSL		
		<i>documented, etc.)</i> but ( <i>SDT to insert</i> <i>Requirement RX, Part X.A</i> ) was not included.	(SDT to insert deliverable language here – e.g., coordinate, establish, document, etc.)		

## Sample Requirement and VSLs (Parts that Contribute Unequally to Performance)

Standard/Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
<ul> <li>EOP-001-0</li> <li>R7. The Transmission Operator and Balancing Authority shall coordinate its emergency plans with other Transmission Operators and Balancing Authorities as appropriate. This coordination includes the following steps, as applicable:</li> <li>R7.1. The Transmission Operator and Balancing Authority shall establish and maintain reliable communications between interconnected systems.</li> <li>R7.2. The Transmission Operator and Balancing Authority shall arrange new interchange agreements to provide for emergency capacity or energy transfers if existing agreements cannot be used.</li> <li>R7.3. The Transmission Operator and Balancing Authority shall coordinate transmission and generator maintenance schedules to maximize capacity or conserve the fuel in short supply. (This includes water for hydro generators.)</li> <li>R7.4. The Transmission Operator and Balancing Authority shall arrange deliveries of electrical energy or fuel from remote systems through normal operating channels.</li> </ul>	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in R7.4 was applicable and was not included.	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in R7.3 was applicable and was not included.	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in either R7.1 or R7.2 was applicable and was not included	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in two (2) or more of the sub- requirements was applicable and was not included.

### Parts that Contribute Equally to Performance

If a requirement has several Parts, and the Parts contribute equally to the reliability-related objective of the requirement, the VSLs should be set either on counts (*e.g.*, missing one of five Parts) or percentages (*e.g.*, missing 5% of the Parts). The SDT would need to "fill in" the requirement number and Part numbers as noted by "X." Table 4 illustrates the application of a requirement containing Parts with equal performance.

Table 4. Parts that Contribute Equally to Performance Description					
Lower VSL	Moderate VSL	High VSL	Severe VSL		
The responsible entity failed to (SDT to insert performance – e.g., coordinate, establish, document, etc.) one of following (SDT to insert Requirement number and list of Requirement Parts).	The responsible entity failed to (SDT to insert performance – e.g., coordinate, establish, document, etc.) two of the following (SDT to insert Requirement number and list of Requirement Parts).	The responsible entity failed to (SDT to insert performance – e.g., coordinate, establish, document, etc.) three of the following (SDT to insert Requirement number and list of Requirement Parts).	The responsible entity failed to (SDT to insert performance – e.g., coordinate, establish, document, etc.) four or more of the following (SDT to insert Requirement number and list of Requirement Parts).		

## Sample Requirement and VSLs (Parts that Contribute Equally to Performance)

Standard/Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
<ul> <li>PRC-009-0</li> <li>R1. The Transmission Owner, Transmission Operator, Load-Serving Entity, and Distribution Provider that owns or operates a UFLS program (as required by its Regional Reliability Organization) shall analyze and document its UFLS program performance in accordance with its Regional Reliability Organization's UFLS program. The analysis shall address the performance of UFLS equipment and program effectiveness following system events resulting in system frequency excursions below the initializing set points of the UFLS program. The analysis shall include, but not be limited to:</li> <li>R1.1. A description of the event including initiating conditions.</li> <li>R1.2. A review of the UFLS set points and tripping times.</li> <li>R1.3. A simulation of the event.</li> <li>R1.4. A summary of the findings.</li> </ul>	The responsible entity that owns or operates a UFLS program failed to include one of the elements listed in PRC- 009-0 R1.1 through R1.4 in the analysis of the performance of UFLS equipment and Program effectiveness, as described in PRC-009-0 R1, following system events resulting in system frequency excursions below the initializing set points of the UFLS program.	The responsible entity that owns or operates a UFLS program failed to include two of the elements listed in PRC- 009-0 R1.1 through R1.4 in the analysis of the performance of UFLS equipment and Program effectiveness, as described in PRC-009-0 R1, following system events resulting in system frequency excursions below the initializing set points of the UFLS program.	The responsible entity that owns or operates a UFLS program failed to include three of the elements listed in PRC- 009-0 R1.1 through R1.4 in the analysis of the performance of UFLS equipment and Program effectiveness, as described in PRC-009-0 R1, following system events resulting in system frequency excursions below the initializing set points of the UFLS program.	The responsible entity that owns or operates a UFLS program failed to conduct an analysis of the performance of UFLS equipment and Program effectiveness, as described in PRC- 009-0 R1, following system events resulting in system frequency excursions below the initializing set points of the UFLS program.

### **Use of Percentages**

When percentages are used to describe noncompliant performance, the following should be used unless other percentages can be justified. Table 5 provides sample language for providing a distribution for percentages.

Table 5. Use of Percentages Description				
Lower VSL	Moderate VSL	High VSL	Severe VSL	
The responsible entity failed to (SDT to insert performance – e.g., coordinate, establish, document, etc.) 5% or less of (SDT to insert required performance).	The responsible entity failed to (SDT to insert performance) more than 5% but less than (or equal to) 10% of (SDT to insert required performance).	The responsible entity failed to (SDT to insert performance) more than 10% up to (and including) 15% (SDT to insert required performance).	The responsible entity failed to (SDT to insert performance) more than 15% of (SDT to insert required performance).	

### Sample Requirement and VSLs (Use of Percentages)

Standard/Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
<ul> <li>EOP-003-1</li> <li>R3. Each Transmission Operator and Balancing Authority shall coordinate load shedding plans among other interconnected Transmission Operators and Balancing Authorities.</li> </ul>	The responsible entity did not coordinate load shedding plans, as directed by the requirement, affecting 5% or less of its required entities.	The responsible entity did not coordinate load shedding plans, as directed by the requirement, affecting more than 5% up to (and including) 10% of its required entities.	The responsible entity did not coordinate load shedding plans, as directed by the requirement, affecting more than 10%, up to (and including) 15% or less, of its required entities.	The responsible entity did not coordinate load shedding plans, as directed by the requirement, affecting more than 15% of its required entities.

#### Use of Time

Where there is a requirement with timing as an element that includes the number of minutes, hours, days, or longer for delivering a product; identify a reasonable delay in delivering that product that would have only a minor impact on achieving the intent of the requirement and use that as the starting point for the Lower VSL. To develop the Moderate, High, and Severe VSLs for time-based requirements; use the following as a guide:

- Minutes- T<sub>incr</sub> minute increments
- Calendar Days- T<sub>incr</sub> day increments
- Hours- T<sub>incr</sub> hour increments
- Other-increments determined by experience

Table 6 provides sample language for writing time-based VSLs. Where R<sub>time</sub> is the required time and the incremental time is T<sub>incr</sub>.

Table 6. Use of Time Description				
Lower VSL	Moderate VSL	High VSL	Severe VSL	
The responsible entity provided (SDT to insert deliverable language here – e.g., documentation, plans, data, etc.) more than (SDT to insert $R_{time}$ ) but less than or equal to (SDT to insert $R_{time}$ + $T_{incr}$ ).	The responsible entity provided (SDT to insert deliverable language here – e.g., documentation, plans, data, etc.) more than (SDT to insert $R_{time}$ + $T_{incr}$ ), but less than or equal to (SDT to insert $R_{time}$ + $2T_{incr}$ ).	The responsible entity provided (SDT to insert deliverable language here – e.g., documentation, plans, data, etc.) more than (SDT to insert $R_{time}$ + $2T_{incr}$ ), but less than or equal to (SDT to insert $R_{time}$ + $3T_{incr}$ ).	The responsible entity provided (SDT to insert deliverable language here – e.g., documentation, plans, data, etc.) more than (SDT to insert $R_{time}$ + $3T_{incr}$ ).	

#### Sample Requirement and VSLs (Use of Time)

Standard/Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
<ul> <li>PRC-016-0.1</li> <li>R3. The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall provide documentation of the misoperation analyses and the corrective action plans to its Regional Reliability Organization and NERC on request (within 90 calendar days).</li> </ul>	The responsible entity provided documentation of its SPS Misoperation analyses and the corrective action plans more than 90 calendar days but less than or equal to 120 calendar days following a request from its Regional Reliability Organization or NERC.	The responsible entity provided documentation of its SPS Misoperation analyses and the corrective action plans more than 120 calendar days but less than or equal to 130 calendar days following a request from its Regional Reliability Organization or NERC.	The responsible entity provided documentation of its SPS Misoperation analyses and the corrective action plans more than 130 calendar days but less than or equal to140 calendar days following a request from its Regional Reliability Organization or NERC.	The responsible entity provided documentation of its SPS Misoperation analyses and the corrective action plans more than 140 calendar days following a request from its Regional Reliability Organization or NERC. OR Did not provide the documentation.

### **Keep VSLs Size-Neutral**

When developing VSLs based on percentages or numbers, ensure that the developed VSLs are "size neutral." In some instances, applying a percentage to an entity with a small size may result in grading a violation higher or lower than might be intended. Similarly, applying a fixed number to an entity with a large size may result in a determination of violation that is higher or lower than might have been intended. In such cases, establish VSLs that categorize noncompliant performance by referencing either a percentage of noncompliant performance or a fixed number of noncompliant items. Table 7 provides sample language for keeping VSLs "size neutral."

Table 7. Size-Neutral Description			
Lower VSL	Moderate VSL	High VSL	Severe VSL
For responsible entities with XX or more ( <i>SDT to insert language here -</i> <i>e.g., employees, facilities, elements,</i> <i>etc.</i> ), the responsible entity failed to ( <i>SDT to insert deliverable language</i> <i>here – e.g., produce, distribute,</i> <i>maintain, etc.</i> ) 5% or less of ( <i>SDT to</i> <i>insert the required performance</i> ); OR	For responsible entities with XX or more ( <i>SDT to insert language here -</i> <i>e.g., employees, facilities, elements,</i> <i>etc.</i> ), the responsible entity failed to ( <i>SDT to insert deliverable language</i> <i>here – e.g., produce, distribute,</i> <i>maintain, etc.</i> ) more than 5% but less than (or equal to) 10% of ( <i>SDT to</i> <i>insert the required performance</i> );	For responsible entities with XX or more ( <i>SDT to insert language here -</i> <i>e.g., employees, facilities, elements,</i> <i>etc.</i> ), the responsible entity failed to ( <i>SDT to insert deliverable language</i> <i>here - e.g., produce, distribute,</i> <i>maintain, etc.</i> ) more than 10% up to (and including) 15% of ( <i>SDT to insert</i> <i>the required performance</i> );	For responsible entities with XX or more ( <i>SDT to insert language here -</i> <i>e.g., employees, facilities, elements,</i> <i>etc.</i> ), the responsible entity failed to ( <i>SDT to insert deliverable language</i> <i>here - e.g., produce, distribute,</i> <i>maintain, etc.</i> ) more than 15% of ( <i>SDT to insert the required</i> <i>performance</i> );
For responsible entities with fewer than XX ( <i>SDT to insert language here</i> - <i>e.g., employees, facilities, elements,</i> <i>etc.</i> ), the responsible entity failed to ( <i>SDT to insert deliverable language</i> <i>here</i> – <i>e.g., produce, distribute,</i> <i>maintain, etc.</i> ) one of ( <i>SDT to insert</i> <i>the required performance</i> ).	OR For responsible entities with fewer than XX (SDT to insert language here - e.g., employees, facilities, elements, etc.), the responsible entity failed to (SDT to insert deliverable language here – e.g., produce, distribute, maintain, etc.) two of (SDT to insert the required performance).	OR For responsible entities with fewer than XX (SDT to insert language here - e.g., employees, facilities, elements, etc.), the responsible entity failed to (SDT to insert deliverable language here - e.g., produce, distribute, maintain, etc.) three of (SDT to insert the required performance).	OR For responsible entities with fewer than XX (SDT to insert language here - e.g., employees, facilities, elements, etc.), the responsible entity failed to (SDT to insert deliverable language here - e.g., produce, distribute, maintain, etc.) more than three of (SDT to insert the required performance).

## Sample Requirement and VSLs (Size-Neutral)

Standard/Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
FAC-003-1 R1.3. All personnel directly involved in the design and implementation of the TVMP shall hold appropriate qualifications and training, as defined by the Transmission Owner, to perform their duties.	For responsible entities directly involving fewer than 20 persons in the design and implementation of the TVMP, one of those persons did not hold appropriate qualifications and training to perform their duties. For responsible entities directly involving 20 or more persons in the design and implementation of the TVMP, 5% or less of those persons did not hold appropriate qualifications and training to perform their duties.	For responsible entities directly involving fewer than 20 persons in the design and implementation of the TVMP, two of those persons did not hold appropriate qualifications and training to perform their duties. For responsible entities directly involving 20 or more persons in the design and implementation of the TVMP, more than 5% up to, (and including) 10% of those persons did not hold appropriate qualifications and training to perform their duties.	For responsible entities directly involving fewer than 20 persons in the design and implementation of the TVMP, three of those persons did not hold appropriate qualifications and training to perform their duties. For responsible entities directly involving 20 or more persons in the design and implementation of the TVMP, more than 10% up to, (and including) 15% of those persons did not hold appropriate qualifications and training to perform their duties.	For responsible entities directly involving fewer than 20 persons in the design and implementation of the TVMP, more than three of those persons did not hold appropriate qualifications and training to perform their duties. For responsible entities directly involving 20 or more persons in the design and implementation of the TVMP, more than 15% of those persons did not hold appropriate qualifications and training to perform their duties.
Standard/Requirement				
	Lower VSL	Moderate VSL	High VSL	Severe VSL

#### FERC's Guidelines

In its June 19, 2008 Order on Violation Severity Levels, FERC indicated it would use the following four guidelines for determining whether to approve VSLs:

#### Guideline 1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance

Compare the VSLs to any prior Levels of Non-compliance and avoid significant changes that may encourage a lower level of compliance than was required when Levels of Non-compliance were used.

(If a team is revising a requirement that has VSLs, then in support of this guideline, the team should compare any new set of VSLs against VSLs already established for the original requirement.)

#### Guideline 2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties

All violations of "binary" type requirements must be consistently assigned the same VSL, and using a "Severe" VSL is an acceptable approach.

Do not use ambiguous terms such as "minor" and "significant" to describe noncompliant performance.

(Most requirements are not binary and can have multiple degrees of noncompliant performance. Any instance of noncompliance with a binary requirement must be a Severe VSL.)

#### Guideline 3: Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement

VSLs should not expand on, nor detract from, what is required in the requirement.

(Avoid adding using any new terminology in a VSL that doesn't already exist in the associated requirement.)

#### Guideline 4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations

... unless otherwise stated in the requirement, each instance of non-compliance with a requirement is a separate violation. Section 4 of the Sanction Guidelines states that assessing penalties on a per violation per day basis is the "default" for penalty calculations.

(This does not mean that a single violation needs to be binary. In the VSL Order, FERC provided examples showing how you can set VSLs based on a single violation and also have 'degrees' of noncompliant performance. This is accomplished by categorizing partial compliance with the single task. What the team cannot do is use different VSLs for multiple instances of noncompliance with the same task.)

# NERC

In its <u>March 18, 2010 Order Addressing VSL Assignments in CIP Standards</u>, FERC offered the following additional guidance relative to VSLs for CIP requirements:

Specifically, we have developed the following two additional guidelines for analyzing the validity of Violation Severity Levels that pertain to cyber security:

- (1) Requirements where a single lapse in protection can compromise computer network security, i.e., the "weakest link" characteristic, should apply binary rather than gradated Violation Severity Levels; and
- (2) Violation Severity Levels for cyber security Requirements containing interdependent tasks of documentation and implementation should account for their interdependence.

# NERC

#### References

June 7, 2007 Order, 119 FERC ¶ 61,248 (2007)(directs NERC to develop VSLs by March 1, 2008)

March 3, 2008 Filing (delivery of initial set of VSLs for 83 approved standards and a proposed set of VSL guidelines – includes several attachments – go to NERC Filings Page for links to attachments)

March 4, 2008 Filing (Appendix A for March 3, 2008 filing – initial set of proposed VSLs)

June 19, 2008 Order on VSLs, 123 FERC ¶ 61,284 (2008)(Includes FERC's initial set of VSL Guidelines)

June 30, 2009 Filing (Request for approval of initial set of VSLs for CIP Version 1 standards)

<u>August 10, 2009 VRF/VSL Filing</u> (NERC's revised VRF/VSL Guidelines - assign a single VRF and a single set of VSLs to each requirement, in its entirety)

March 5, 2010 Filing (NERC's request that the August 10, 2009 filing be considered a request for approval of the roll up method of assigning a single set of VSLs

March 18, 2010 Order Addressing VSL Assignments in CIP Standards, 130 FERC ¶ 61,211 (2010) (Includes directive to modify many CIP VSLs within 60 days of Order and FERC's supplementary set of VSL Guidelines for CIP standards)

May 19, 2011 Order on March 5 and May 21 Filing, 135 FERC ¶ 61,211 (2010) (Includes acceptance of NERC's revised approach to setting VRFs/VSLs as described in the August 10, 2009 VRF/VSL filing)

Latest BOT approved/FERC approved VSLs: Select link to latest sets of VSLs from the Reliability Standards web page:

<u>http://www.nerc.com/page.php?cid=2|20</u> (link delivers an excel workbook with separate worksheets identifying VSLs submitted for FERC approval but not yet approved; FERC approved VSLs)