

## Analysis of Impact of Revising Definition of “System Operator” to Remove “Generator Operator”

There are 41 instances in approved reliability standards where the defined term, “System Operator” is used. Most of these instances are associated with measures and violation severity levels. The following table shows all instances where the defined term is used in the requirement of an approved standard. The only instances when the term, “System Operator” is used in reference to the Generator Operator entity is in a WECC Regional Standard. In all other instances, the term, “System Operator” is tied to a requirement that is clearly assigned to the Reliability Coordinator, Transmission Operator, or Balancing Authority, or some combination of these functional entities. There are no continent-wide requirements where the term “System Operator” is used in reference to the personnel working for an entity registered as the Generator Operator or Generator Owner.

Standard	Requirement	Impact
EOP-005-2 — System Restoration from Blackstart Resources	<b>R5.</b> Each Transmission Operator shall have a copy of its latest Reliability Coordinator approved restoration plan within its primary and backup control rooms so that it is available to all of its System Operators prior to its implementation date.	None - no requirements assigned to the Generator Operator
EOP-005-2 — System Restoration from Blackstart Resources	<b>R10.</b> Each Transmission Operator shall include within its operations training program, annual System restoration training for its System Operators to assure the proper execution of its restoration plan. This training program shall include training on the following:	None - no requirements assigned to the Generator Operator
Standard EOP-006-2 — System Restoration Coordination	<b>R6.</b> Each Reliability Coordinator shall have a copy of its latest restoration plan and copies of the latest approved restoration plan of each Transmission Operator in its Reliability Coordinator Area within its primary and backup control rooms so that it is available to all of its System Operators prior to the implementation date.	None - no requirements assigned to the Generator Operator
Standard EOP-006-2 — System Restoration Coordination	<b>R9.</b> Each Reliability Coordinator shall include within its operations training program, annual System restoration training for its System Operators to assure the proper execution of its restoration plan. This training program shall address the following:	None - no requirements assigned to the Generator Operator
Standard PER-005-1 — System Personnel Training	<b>R1.</b> Each Reliability Coordinator, Balancing Authority and Transmission Operator shall use a systematic approach to training to establish a training program for the BES company-specific reliability-related tasks performed by its System Operators and shall implement the program.	None - no requirements assigned to the Generator Operator

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Standard PER-005-1 — System Personnel Training	<b>R1.1.</b> Each Reliability Coordinator, Balancing Authority and Transmission Operator shall create a list of BES company-specific reliability-related tasks performed by its System Operators.	None - no requirements assigned to the Generator Operator
Standard PER-005-1 — System Personnel Training	<b>R1.1.1.</b> Each Reliability Coordinator, Balancing Authority and Transmission Operator shall update its list of BES company-specific reliability-related tasks performed by its System Operators each calendar year to identify new or modified tasks for inclusion in training.	None - no requirements assigned to the Generator Operator
Standard PER-005-1 — System Personnel Training	<b>R2.</b> Each Reliability Coordinator, Balancing Authority and Transmission Operator shall verify each of its System Operator’s capabilities to perform each assigned task identified in R1.1 at least one time.	None - no requirements assigned to the Generator Operator
Standard PER-005-1 — System Personnel Training	<b>R2.1.</b> Within six months of a modification of the BES company-specific reliability-related tasks, each Reliability Coordinator, Balancing Authority and Transmission Operator shall verify each of its System Operator’s capabilities to perform the new or modified tasks.	None - no requirements assigned to the Generator Operator
Standard PER-005-1 — System Personnel Training	<b>R3.</b> At least every 12 months each Reliability Coordinator, Balancing Authority and Transmission Operator shall provide each of its System Operators with at least 32 hours of emergency operations training applicable to its organization that reflects emergency operations topics, which includes system restoration using drills, exercises or other training required to maintain qualified personnel.	None - no requirements assigned to the Generator Operator
Standard PER-005-1 — System Personnel Training	<b>R3.1.</b> Each Reliability Coordinator, Balancing Authority and Transmission Operator that has operational authority or control over Facilities with established IROLs or has established operating guides or protection systems to mitigate IROL violations shall provide each System Operator with emergency operations training using simulation technology such as a simulator, virtual technology, or other technology that replicates the operational behavior of the BES during normal and emergency conditions.	None - no requirements assigned to the Generator Operator
Standard PER-005-1 — System Personnel Training	<b>R2.</b> Each Reliability Coordinator, Balancing Authority and Transmission Operator shall verify each of its System Operator’s capabilities to perform each assigned task identified in R1.1 at least one time.	None - no requirements assigned to the Generator Operator

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WECC Standard PRC-004-WECC-1 – Protection System and Remedial Action Scheme Misoperation	<b>R.1.</b> System Operators and System Protection personnel of the Transmission Owners and Generator Owners shall analyze all Protection System and RAS operations.	Regional Standard
WECC Standard PRC-004-WECC-1 – Protection System and Remedial Action Scheme Misoperation	<b>R1.1.</b> System Operators shall review all tripping of transmission elements and RAS operations to identify apparent Misoperations within 24 hours.	Regional Standard
WECC Standard PRC-004-WECC-1 – Protection System and Remedial Action Scheme Misoperation	<b>R1.2.</b> System Protection personnel shall analyze all operations of Protection Systems and RAS within 20 business days for correctness to characterize whether a Misoperation has occurred that may not have been identified by System Operators.	Regional Standard