	OPERATING PROCEDURE	**Procedure No.**	700-03
		Revision No.	5
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Facility Connection Requirements		**Distribution Restriction: NONE**	

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1. Definitions

None.

2. Acronyms

ANSI—American National Standards Institute
BA – Balancing Authority
BIL—Basic Impulse Surge Level
BSL—Basic Switching Surge Level
DLLB—Dead line, live bus
IEEE—Institute of Electrical and Electronics Engineers
kVAR—Kilovolt-Amp Reactive
kV—Kilovolt
kWh—Kilowatt-hour
LLDB—Live line, dead bus
LLDB/DLLB—Live line, dead bus/dead line, live bus
MVAR—Megavolt-Amp Reactive
MW—Megawatt
NERC—North American Electric Reliability Council
NESC—ANSI/IEEE C2, National Electrical Safety Code
OSHA—Occupational Safety and Health Administration
PA – Planning Authority
PEAK – Peak Reliability (RC)
POTT—Permissive overreaching transfer trip
RC – Reliability Coordinator
RTU—Remote Terminal Unit
SCADA—Supervisory Control and Data Acquisition
SGIA—Small Generator Interconnection Agreement
WECC—Western Electricity Coordinating Council

3. Purpose

The primary purpose of these connection requirements is to ensure the safe operation, integrity and reliability of the Association's Transmission System. These Facility Connection Requirements do not specifically address contractual matters, such as costs, ownership, scheduling, and billing.

4. Applicability

These Facility Connection Requirements address NERC Facility Interconnection Requirements and Studies standard FAC-001-2 and FAC-002-2, WECC and

Association requirements for interconnection of generation facilities, transmission facilities and end-user facilities. Specifically, the Facility Connection Requirements identify the minimum technical requirements and other applicable regulatory requirements for connecting transmission lines, large loads and generation resources to the Association's Transmission System. This document pertains to the Association's BES transmission system of 100 kV and above.

Each of the requirements listed below will be addressed in Association study(ies), as applicable to the specific interconnection request. More general requirements are detailed below.

5. Introduction

These Facility Connection Requirements address NERC Facility Connection Requirement standards FAC-001-2 and FAC-002-2, WECC and Association requirements for interconnection of generation facilities, transmission facilities and end-user facilities. Specifically, the Facility Connection Requirements identify technical requirements, joint studies guidelines, and other applicable regulatory requirements for connecting transmission lines, large loads and generation resources to the Association's BES Transmission System.

6. Connection Requirements

(FAC-001-1 R3)

All requests for interconnection to the Association's transmission system must be consistent with NERC, WECC and Association reliability requirements, and standard utility practices. A proposed connection for Generation, Transmission, or End-user facilities must not degrade the reliability or operating flexibility of the existing transmission system. System Impact Studies are required to evaluate the impact of the requested facility connection and alternative plans to meet established reliability criteria. After acceptable completion of the System Impact Studies, a Facilities Study will be required to determine the detailed facility interconnection requirements. The Facilities Study will address direct assignment facilities, network upgrades, cost estimates, and construction scheduling estimates.

Any entity seeking to connect generation, transmission, or end-user facilities to the Association electric system shall provide a written summary of its plans to achieve the required system performance throughout the planning horizon. The written summary shall be sent to the Association's Engineering Departments, Engineering Manager.

All arrangements for system studies, engineering design, construction, ownership, operations, maintenance, replacement equipment, metering, facility controls, and

telecommunications must be set forth in written contracts between the Association and the requesting party.

The Association's current Facility interconnection requirements shall be available so that entities seeking to interconnect will have the necessary information.
The following procedures apply to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

6.1 Procedures for Coordinated Joint Studies

(FAC-001-2 R3.1 and FAC-002-2 R3, R4)

Entities seeking to connect Generation, Transmission, or End-user facilities shall work cooperatively with the Association in conducting joint studies of the new facilities or modification to existing facilities and their impacts on the interconnected transmission system.

Public Service Company of Colorado d/b/a Xcel Energy is the Association's BA and PA. The Association coordinates with Xcel on joint studies of new or modified facilities and their impacts on the interconnected transmission system. Any new facilities or modifications to existing facilities that have the potential to affect an interconnection require the customer to notify the Association's Engineering Manager, in writing, well in advance.

The significance of any impact has the potential to vary over a broad range. Changes that could affect the operating limits on the interconnected system may require engineering studies and joint studies to determine the implications on surrounding system facilities.

Following the initial contact regarding a proposed Generation, Transmission Interconnection, or End-User facility connection, when the proposed location and power level are established, a plan of service is prepared and system impact studies are undertaken and coordinated by the Association. The system impact studies may identify additional requirements for reliability beyond the minimum requirements covered by this document.

Association approval of a proposed facility or facility change is contingent upon a design review of the proposed connected facility. Operation of a connected facility is also subject to continuing compliance with all applicable construction, maintenance, testing, protection, monitoring, and documentation requirements described herein, as well as the applicable NERC Reliability Standards and WECC Regional Reliability Standards.

It is the responsibility of the facility owner to provide all protection devices necessary to protect the customer's equipment from damage by abnormal conditions and operations that might occur on the interconnected power system. The facility owner shall protect its generator and associated equipment from overvoltage, undervoltage, overload, short circuits (including ground fault conditions), open circuits, phase unbalance, phase reversal, surges from switching and lightning, off-nominal frequency conditions, and other injurious electrical conditions that may arise on the interconnected system.

It is the responsibility of the facility owner to provide for the orderly re-energization and synchronizing of their high-voltage equipment to other parts of the electric system. Appropriate operating procedures and equipment designs are needed to guard against out-of-sync closure or uncontrolled energization. Each owner is responsible to know and follow all applicable regulations, industry guidelines, safety requirements, and accepted practice for the design, operation and maintenance of the facility.

It is the responsibility of the facility owner to make improvements to Association's system to provide required system capacity if needed.

It is the responsibility of the facility owner to conduct all required site assessments, environmental assessments, permitting, land acquisition required for the facility at the facility owners cost.

6.2 Procedures for Notification of New or Modified Facilities

(FAC-001-2 R3.2, FAC-002-2 R3)

The Association will coordinate as applicable the interconnection of new facilities with Xcel Energy or adjacent TOP/BA/PC. Notification of new or modified facilities shall be provided to Xcel and the PEAK RC by the Engineering Department as soon as feasible.

In the event that the Association is seeking to interconnect new transmission Facilities or to materially modify existing interconnections of transmission Facilities, the Association shall coordinate and cooperate on studies with Xcel Energy

6.3 Voltage Level and MW and MVAR Capacity or Demand

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

After the customer supplies the Association with the approximate geographic location and the desired megawatt (MW) and megavolt-amp reactive (MVAR) capacities at the point of interconnection, the Association will exercise engineering judgment and the results of engineering studies to determine appropriate voltage levels, interconnection points, and system capabilities, since the most practical voltage and interconnection points are site and project specific. The nominal transmission system voltage on the Association system is 115kV.

6.4 Breaker Duty—Surge Protection

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

All facilities and equipment must equal or exceed the fault duty capability necessary to meet system short-circuit requirements as determined through short-circuit analyses and should fully comply with the latest American National Standards Institute (ANSI)/Institute for Electrical and Electronics Engineers (IEEE) C37 collection of standards for circuit breakers, switch gear, substations, and fuses.

In order to maintain transmission reliability, each fault-interrupting device must be rated for full fault-interrupting capability to satisfy the short-circuit level requirements at the point of interconnection. Full fault-interrupting capability is per the latest IEEE C37 and C57 collections of standards. As a general rule, neither party should depend on the other for the protection of their respective equipment.

6.5 System Protection and Coordination

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Protective relaying systems and associated communications systems for all facility interconnections shall be planned, designed, constructed, and maintained in accordance with applicable NERC and WECC standards. Utility grade protective relays and fault clearing systems are to be provided on the interconnected power system. All protective relays shall meet or exceed the most recent version of ANSI/IEEE Standard C37.90. Adjoining power systems may share a common zone of protection between two parties. The design must provide coordination of speed and sensitivity in order to maintain power system security, stability, and reliability.

The protection system (relay, control, and communications equipment) arrangement selected by the customer must be compatible with the protection system used by the

Association to protect the transmission grid. Compatible relaying equipment must be used for a given zone of protection. Compatibility includes protection application, redundancy, operating speed, communication type, and communication medium.

A power source for tripping and control must be provided for the protection system by a DC system, including a storage battery. The battery is to be sized with enough capacity to operate all tripping devices for eight hours without an operational battery charger, per IEEE standards. A loss of battery charger and DC undervoltage alarms must be provided for remote monitoring by the facilities owners, who shall take immediate action to restore power to the protective equipment.

Mechanical and electrical logic and interlocking mechanisms are required between interconnected facilities to ensure safe and reliable operation. These include, but are not limited to, breaker and switch auxiliary contacts, synch-check relays, and physical locking devices.

The facility owner (generator, transmission, and end-user) is responsible for providing a protection system that will protect its equipment against disturbances on the Association's system and minimize the effects of disturbances from its facilities on the Association's equipment and transmission system.

Entities connecting to the Association's transmission system shall investigate and keep a log of all protective relay operations and misoperations, as required by NERC and WECC. In addition, the interconnecting entities must have a maintenance and testing program for their Protection Systems in accordance with the requirements of the NERC and WECC reliability standards. Documentation of the Protection System maintenance and testing program shall be supplied to the Association, WECC, and NERC upon request. As outlined in the maintenance program, maintenance and testing reports are to be made available for review by the Association, WECC and NERC upon request. At intervals described in the documented maintenance and testing program and following any apparent malfunction of the Protection System equipment, the entity shall perform both calibration and functional trip tests of its protection equipment as required by NERC and WECC.

Generator Protection Requirements

Generators connecting to the Association transmission system are responsible for protecting those facilities from electrical faults and other hazardous conditions. Generator interconnections must be equipped with circuit breakers to protect those facilities. The generator owner must provide and own the primary circuit breaker or other interrupting device that protects the facility and disconnects it from the

Association transmission system. The primary purpose of this interrupting device is to protect the generating plant facility.

Synchronous or wind turbine generators connected to the Association transmission system shall be able to withstand certain temporary excursions in voltage, frequency, and reactive and real power output without tripping. A system impact study will determine if additional reactive devices are required to maintain the generation during the temporary excursions. Maintaining the generation is required to support the grid and avoid cascading events. Generation protection and control shall be set in accordance with all applicable ANSI/IEEE Standard requirements to coordinate with excitation limiters.

It is recognized that certain circumstances may exist that necessitate the imposition of performance criteria that is considered more stringent than the default criteria specified above. Such circumstances shall be identified during the conduct of the System Impact Study or operational study for each particular generator. Additional requirements may be required on a case by case basis.

Transmission Protection Requirements

All transmission power systems shall have dual primary protective relaying schemes, that provides backup coverage of the line and remote bus. Communications-aided tripping through the use of a dedicated communications channel may be required based on system stability determination. Communications redundancy may be required depending on critical clearing time. A transfer trip feature may be required for relay coordination, backup protection and islanding schemes. Fiber optics is the preferred means of relay communications.

Backup protective systems should provide additional coverage for breaker and relay failure outside the primary zone. Specific circuit breaker failure protection schemes shall be applied for each circuit breaker. Backup systems shall operate for failures on either side of an interconnection point. Time and sensitivity coordination must be maintained to prevent misoperations.

Each fault-interrupting device must be rated for full fault-interrupting capability to satisfy the short-circuit level requirements at the point of interconnection. Neither party shall depend on the other for the protection of their respective equipment.

6.6 Metering and Telecommunications

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Interconnection points will require metering installed such that the delivery of power between the Interconnection Party and the Association System can be determined. The metering installation shall be of billing accuracy. The metering installation will be installed at the customer's expense and owned and maintained by the Association. The metering installation includes the CTs, VTs, meter, recorder, remote communication unit, and any auxiliaries required. The Association may require in special circumstances, a readily available power quality meter (a.k.a. power quality monitor) be installed.

Supervisory Control and Data Acquisition (SCADA)

The Association may require specific SCADA equipment for the purpose of gathering customer load and equipment status information needed at the Association's operations center. When required, the Association shall own and maintain the SCADA devices at the customer's expense. The customer shall provide, at its expense, a telecommunications data circuit to the operations center designated by the Association. The Association shall specify the communications protocol for this data circuit(s). Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by the Association.

Typical data requirements include the following:

- Status of interrupting devices
- MW flow
- MVAR flow
- Voltage at interconnection point
- Relay alarms
- Lockout relay status
- Loss of AC and DC voltage alarms
- Battery Charger status
- Other control and data points as designated by the Association.
- Automatic Voltage Regulator (AVR) status (for generators)

6.7 Grounding and Safety Issues

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

A safe grounding design must accomplish two basic functions:

1. Ensure that a person in the vicinity of grounded structures and facilities is not exposed to critical levels of step or touch potential.
2. Provide a path for electric currents into the earth under normal and fault conditions without exceeding any operating and equipment limits or adversely affecting the continuity of service.

Accordingly, each electrical facility must have a grounding system or grid that solidly grounds all metallic structures and equipment in accordance with the standards outlined in the most recent versions of ANSI/IEEE 80, IEEE Guide for Safety in AC Substation Grounding, ANSI/IEEE C2, National Electrical Safety Code (NESC). The grounding system study and design shall be submitted to the Association for review prior to construction. Testing must be performed to ensure safe step and touch potential parameters have been met in accordance with IEEE 80.

The Association maintains effective grounding on its transmission systems, as defined by IEEE 142. All Interconnection Party facilities connected to the Association system must be effectively grounded per the most recent version IEEE 142 requirements. The calculations shall be made as if the Association system was disconnected for the Interconnection Party. Therefore, the interconnected transmission power system is to be effectively grounded from all sources. This is defined as the positive sequence reactance is greater than the zero sequence reactance ($X_1 > X_0$); and the zero sequence reactance is less than three times the positive sequence reactance ($X_0 < 3X_1$). Interconnected generators should provide for effective system grounding of the high-side transmission equipment by means of a grounded high-voltage generation step-up transformer.

Safety is of utmost importance. Strict adherence to established switching, tagging, and grounding procedures is required at all times for the safety of personnel. Any work carried out within a facility shall be performed in accordance with all applicable laws, rules, and regulations and in compliance with Occupational Safety and Health Administration (OSHA), NESC, and good utility practice. Automatic and manual disconnect devices are to be provided as a means of removing all sources of current to any particular element of the power system. Only trained operators are to perform

switching functions within a facility under the direction of the responsible dispatcher or designated person as outlined in the NESC.

6.8 Insulation and Insulation Coordination

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Insulation coordination is the selection of insulation strength. Insulation coordination must be done properly to ensure electrical system reliability and personnel safety. Basic switching surge levels (BSL), surge arrester, conductor spacing and gap application, substation and transmission line insulation strength, protection, and shielding shall be documented and submitted for evaluation as part of the interconnection plan.

The Association's standard is to shield substations and transmission lines from direct lightning strokes and to provide line entrance arresters at transmission line terminals. Surge arresters are also applied at major components and equipment.

Interconnection facilities to be constructed in areas with salt spray contamination or other type of contamination shall be properly designed to meet or exceed the performance of facilities not in a contamination area with regard to contamination-caused outages. Equipment basic impulse surge levels (BIL) shielding and surge protection shall be designed to meet the most recent version IEEE C62 standards, along with Association standards.

6.9 Voltage, Reactive Power, and Power Factor Control

(FAC-001-2 R3.2)

Generation Facilities

The Interconnection Customer shall design its Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging.

The Association's transmission system is designed to operate between 95% and 105% of nominal voltage during normal and single-contingency conditions. If the requirements of the Interconnection Customer's equipment is more restrictive than these limits, the installation of voltage regulation devices by the Interconnection Customer is required. The generation facility must be capable of continuous non-interrupted operation at a specified voltage setpoint that is within a steady-state voltage range during both system normal and single-contingency conditions.

Transmission Facilities
All interconnections will be reactive compensated pursuant to good utility practice to ensure proper operation of the interconnection. The Association will evaluate whether the connection to the Association system creates a significant reactive burden. Voltages and reactive flows associated with the new interconnection will be assessed for impacts on the Association system. The Interconnection Party is responsible to address any reactive flows or voltage issues that are created as a result of the interconnection.

All facilities interconnected to the Association transmission system should have the tap ranges and self-regulation necessary to accommodate the transmission system's reactive power flow requirements.

End-User Facilities
The Association strives to supply end-user facilities with voltage that is +/- 5% from nominal. End-user facilities connected directly to the transmission system should plan and design their systems to operate within the range of 0.95 lagging to 0.95 leading to minimize the reactive power burden on the transmission system. Capacitors generally provide an effective means of controlling the power factor of a Requester's facility. However, there are several factors that should be addressed in applying capacitors. These factors can include, but are not limited to, transient voltages due to capacitor switching and voltage amplification due to resonance conditions.

6.10 Power Quality Impacts
(FAC-001-2 3.2)

Interconnection Requirement for Harmonic Levels
The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Facilities shall not have harmonic current distortion levels exceeding the levels recommended in most recent revision of IEEE-519, *Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems*. Generation facilities must meet the stated current limits specified for generators as presented in the Current Distortion Limits tables for the applicable voltage levels.

Facilities shall not cause the harmonic voltage distortion levels to exceed the voltage distortion limits recommended in the most recent revision of IEEE-519.

Interconnection Requirement for Flicker
Transmission Facilities and End-User Facilities
Transmission facilities and end-user facilities are required to limit voltage fluctuations to the limits specified in the most recent revision of IEEE-519.

6.11 Equipment Ratings

(FAC-001-2 R3.2)
The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

For all connections, the Interconnection Customers high voltage bus and associated equipment, such as breakers, switches, connectors, and other conductors shall have continuous, long-term emergency, short-term emergency, and momentary asymmetrical current ratings which: (1) do not limit the Association transmission system network capability and (2) have adequate capability for the initial and future system conditions identified by the Association. All substations connected to the Association system shall meet the requirements of the Association's substation design and construction standards, and must be designed to the applicable requirements of NESC, RUS, ANSI, and IEEE standards.

All circuit breakers and other fault-interrupting devices shall be capable of safely interrupting fault currents for any fault they may be required to interrupt. Application of circuit breakers shall be in accordance with the ANSI/IEEE C37 collection of standards.

All current-carrying equipment and devices shall be designed to carry the maximum loads that are predicted and used in load flow analysis. Loads exceeding nameplate or normal design capacities are acceptable only when allowed by manufacturers' design documentation or standard industry practices.

Equipment BILs, shielding, and surge protective device application must meet requirements as determined by the latest IEEE C62 standards. The Association will provide the BIL for the system in the interconnection area. Also, equipment must meet all applicable ANSI/IEEE standards and specifications communicated by the Association in pre-interconnection meetings.

6.12 Synchronizing of Facilities

(FAC-001-2 R3.2)
The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Synchronizing facilities consisting of potential transformers and associated protective relaying/controls are required at the point of interconnection on transmission facilities where energy can be sourced on both sides of an interconnection circuit breaker. These facilities verify that the voltages on both sides of a circuit breaker fall within certain tolerances of both magnitude and phase angle as established by system conditions, supervise the closing and automatic reclosing of the circuit breaker, and prevent the closing of the circuit breaker when the two systems are out of synchronism.

Voltage magnitudes, phase angles, and frequency constraints shall be determined on a case-by-case basis depending on system characteristics, conditions, interconnection location, etc.

Generation Facilities
Live line, dead bus (LLDB) control is used in the interconnection circuit breaker reclosing scheme when generation facilities are connected to transmission facilities. In summary, the circuit breaker cannot be closed unless the generation side has essentially zero voltage. The transmission facility interconnection circuit breaker shall not be used to synchronize a generator to the transmission system. Instead, the generation facilities shall have their own synchronizing facilities to synchronize to the system. In addition, the generation facility shall remain disconnected from the Association's system until system voltage and frequency are within an established range should a generation facility become disconnected from the Association's system.

6.13 Maintenance Coordination
(FAC-001-2 R3.2)
The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

The Interconnection Customer is to consult and coordinate with the Association System Operations on all requests for outages that affect the Association's system.

The maintenance of facilities is the responsibility of the owner of those facilities. Adjoining facilities on the interconnected power system are to be maintained in accordance with accepted industry practices and procedures. Each party is to have a documented maintenance program ensuring the proper operation of equipment. The Association will have the right to review maintenance reports and calibration records of equipment that could impact the Association system if not properly maintained. The Association is to be notified as soon as practicable about any out-of-service equipment that might affect the protection, monitoring, or operation of

interconnected facilities. In accordance with NERC Reliability Standard TOP-003, each Generator Operator shall provide outage information daily to the Association operations for scheduled generator outages planned for the next day for any generator greater than 50 MW.

Maintenance of facilities interconnected to the Association transmission system shall be done in a manner that does not place the reliability and capability of the Association's transmission system, or other portions of the WECC transmission system, at risk. Planned maintenance must be coordinated and scheduled with the Association.

6.14 Operational Issues (Abnormal Frequency and Voltages)

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Operational procedures are to be established in accordance with all applicable NESC, OSHA, WECC, and NERC requirements. Each party shall designate operating representatives to address the following:

- Lines of communications
- Maintenance coordination
- Actions to be taken after de-energization of interconnected facilities
- Other required operating policies

All parties are to be provided with current station operating diagrams. Common, agreed-upon nomenclature is to be used for naming stations, lines, and switches. Updated diagrams are to be provided when changes occur to interconnected facilities.

The operator of facilities interconnecting to the Association transmission system will not perform any switching that energizes or de-energizes portions of the Association transmission system or that may adversely affect the Association transmission system without prior notice to the Association or its designated operating representative. Operators of facilities interconnecting to the Association transmission system will notify the Association, or its designated operating representative, before performing any switching that would significantly affect voltages, power flows, or reliability in the Association transmission system.

During emergency conditions, the facility operator shall raise or lower generation output, adjust reactive power, switch facilities in or out, or reduce end-user load as directed by the Association system operator.

6.15 Inspection Requirements for Existing or New Facilities

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Each party to the interconnection agreement shall perform routine inspection and testing of its facilities and equipment in accordance with good utility practice and regulatory requirements to ensure the continued interconnection of the facilities with the Association's transmission system.

Each party shall, at its own expense, have the right to observe the testing of any of the other party's facilities and equipment whose performance may reasonably be expected to affect the reliability of the observing parties' facilities and equipment.

Each party shall notify the other party in advance of facility and equipment testing, and the other party may have a representative attend and be present during such testing. If a party observes any deficiencies or defects on—or becomes aware of a lack of scheduled maintenance and testing with respect to—the other party's facilities and equipment that might reasonably be expected to adversely affect the observing party's facilities and equipment, the observing party shall provide notice to the other party that is prompt under the circumstance, and the other party shall make any corrections required in accordance with good utility practices and as required by regulatory agencies. Site access is to be provided to Association personnel where Association equipment is located within the interconnection customer's facility for installation, maintenance and inspections.

6.16 Communications and Procedures During Normal and Emergency Operating Conditions

(FAC-001-2 R3.2)

The following requirement applies to all three types of facilities 1) generation facilities, 2) transmission facilities, and 3) end-user facilities.

Complete, precise, and timely communication is an essential element for maintaining reliability and security of a power system. Under normal operating conditions, the major link of communication with various interconnects shall be by telephone lines. The Association and its customer shall maintain communications that shall include, but not be limited to:

- system paralleling or separation.
- scheduled or unscheduled shutdowns.
- equipment clearances.
- periodic load reports.
- maintenance schedules.
- tagging of interconnection interrupting devices.
- meter tests.
- relay tests.
- billing.
- other routine communication.

In case of emergency or abnormal operating conditions, various communication channels may be used. Emergency telephone numbers should be agreed upon by both parties prior to the actual connection date.

7. Maintenance and Update of Facility Connection Requirements

(FAC-001-2, R1)

The Association shall maintain and update its facility connection requirements as required. The Association shall make its facility connection requirements documentation available to the users of the transmission system, WECC and NERC on request. The Engineering Department is responsible for maintaining these facility connection requirements and making documentation of the requirements available to requesting entities.

The Facility Connection Requirements are published on the Association's website at www.intermountain-rea.com.

8. NERC and Regional Reliability Standard Reference

NERC Reliability Standards

FAC-001-2 – Facility Connection Requirements
FAC-002-2 – Facility Interconnection Studies

9. Review and Update Cycle

Review cycle: Annually, at least once per calendar year
Responsibility: Engineering Manager

10. Procedure Approvals

	Date	Name	Title
Reviewed	12/7/2015		Engineering Manager
Approved	12/17/2015		Asst. GM, Operations & Engineering

11. Procedure Revision History

Effective Date	Revision Number	Revised By:	Revision History
06/28/2010	0	Pam Pederson	Document Implemented
03/23/2012	1	Pam Pederson	2012 Annual Review and minor edits
06/06/2012	2	Pam Pederson	Reviewed and Updated. Increased detail and specificity.
11/12/2013	3	Pam Feuerstein	Annual review and coordinated with revised standard FAC-001-1
10/2/2014	4	Pam Feuerstein	Annual review; Replaced WECC RC with PEAK RC where applicable
12/4/2015	5	Dave Breihan	Annual review; Joined FAC-001-2 and FAC-002-2