

Policy 3 – Interchange

Policy Subsections

- A. Interchange Transactions**
 - B. Interchange Schedules**
 - C. Schedule Specifications**
 - D. Interconnected Operations Services**
 - E. Transfer Capability**
-

Introduction

This Policy addresses:

- Responsibilities of all PURCHASING-SELLING ENTITIES involved in INTERCHANGE TRANSACTIONS.
- Coordination of INTERCHANGE SCHEDULING and IMPLEMENTATION among CONTROL AREAS to preserve INTERCONNECTION reliability.
- Requirements of CONTROL AREAS to assess and confirm INTERCHANGE TRANSACTIONS.
- Accountability of CONTROL AREAS for implementing all INTERCHANGE SCHEDULES in a manner that ensures the reliability of the INTERCONNECTIONS.
- Information requirements for INTERCHANGE TRANSACTIONS.
- Requirements of PURCHASING-SELLING ENTITIES that arrange INTERCHANGE TRANSACTIONS to provide or arrange for the necessary INTERCONNECTED OPERATIONS SERVICES required to support the transactions.
- Requirements of CONTROL AREAS to offer INTERCHANGE SCHEDULING SERVICES to PURCHASING-SELLING ENTITIES.

A. Interchange Transactions

[Policy 2A—Transmission—Transmission Operations]

[Policy 5A—Emergency Operations—Coordinating with other Systems]

[Policy 6A—Operations Planning—Normal Operations]

[Appendix 3A—Section A. Scenarios of Interchange Schedules and Parties to Interchange Schedules; Section B. Interchange Transaction Request Template and Examples]

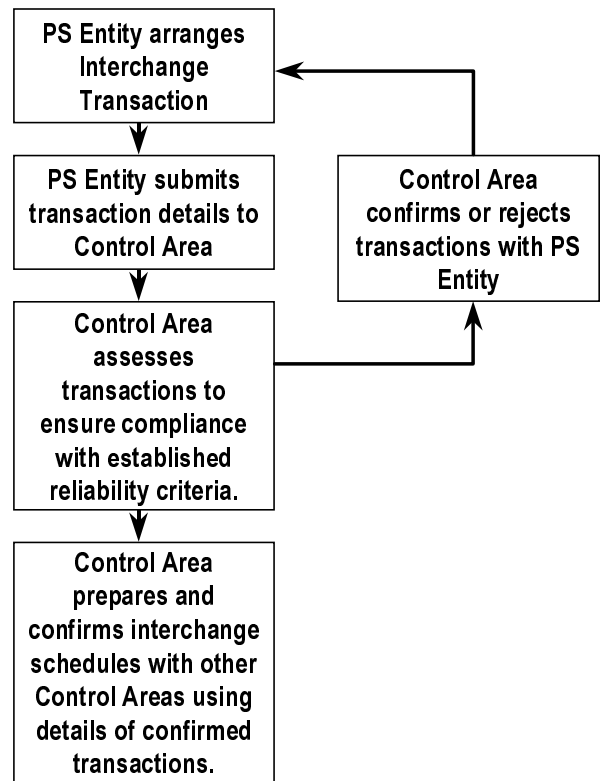
Introduction

Policy 3.A. explains the PURCHASING-SELLING ENTITY’S responsibilities for arranging INTERCHANGE TRANSACTIONS and the CONTROL AREA’S responsibilities for assessing and confirming INTERCHANGE TRANSACTIONS and implementing INTERCHANGE SCHEDULES.

PURCHASING-SELLING ENTITIES “arrange” INTERCHANGE TRANSACTIONS — that is, they buy or sell energy and capacity and record the transaction by forwarding the required data to the appropriate CONTROL AREA(S). [See Requirement 4 below and Appendix 3.A Section B., “Interchange Transaction Request Template and Examples”]

CONTROL AREAS assess and “approve” or “deny” INTERCHANGE TRANSACTIONS based on reliability criteria and adequacy of INTERCONNECTED OPERATIONS SERVICES and transmission rights. The SENDING CONTROL AREA and RECEIVING CONTROL AREA confirm the transaction with each other and notify the INTERMEDIARY CONTROL AREAS. These CONTROL AREAS assess whether INTERCHANGE TRANSACTIONS may be consummated while complying with established reliability criteria and notify participating PURCHASING-SELLING ENTITIES accordingly.

To “implement” the INTERCHANGE TRANSACTION, all affected CONTROL AREAS incorporate the transaction into their INTERCHANGE SCHEDULES.



Requirements

1. **PURCHASING-SELLING ENTITIES responsible for INTERCHANGE arrangements.** Each PURCHASING-SELLING ENTITY shall be responsible for all INTERCHANGE arrangements and INTERCHANGE TRANSACTIONS to which it is a party.
 - 1.1. **Transmission services.** Each PURCHASING-SELLING ENTITY shall be responsible for arranging and scheduling transmission services necessary for the receipt, transfer, and delivery of the INTERCHANGE.
 - 1.2. **Interconnected Operations Services.** Each PURCHASING-SELLING ENTITY must provide or arrange for all associated INTERCONNECTED OPERATIONS SERVICES necessary to comply with NERC and Regional Council policies.

A. Interchange Transactions

Operating Committee Clarification of Interchange Transaction Information and Implementation Responsibilities

Recognizing that:

- Tools are still being developed for Transaction Management, and
- Security Coordinator Policies are still being developed,

The NERC Operating Committee, at its meeting of November 18 – 19, 1997, approved the following resolution to clarify the requirements of Policy 3. These are effective immediately and will remain in effect until April 1, 1998 or until modified by the Operating Committee.

To be in compliance:

- PSEs must provide tags for all Interchange Transactions in accordance with Policy 3 via the NERC template. However, as an alternative to providing the complete template for transactions that will start within the next four hours, PSEs need to provide only the following tag information via phone, fax, or electronically:
 - Unique transaction ID
 - Transaction dates, and start and end times
 - Energy profile
 - Identities of the transaction sending, receiving, and intermediary control areas, transmission providers, and responsible purchasing-selling entities
 - Transmission priority for each transmission segment.
- Control Areas must accept the tags
- Control Areas must implement Interchange Transactions in a non-discriminatory manner
 - Load serving Control Areas must arrange for the submittal of tags to their Security Coordinators
- Security Coordinators must curtail Interchange Transactions in a non-discriminatory manner
 - Eastern Interconnection Security Coordinators must enter all Interchange Transactions (that cross Control Area boundaries and that are accommodated by the iIDC) into the iIDC
 - Similar processes are used in ERCOT and WSCC
- Control Areas must curtail Interchange Transactions as ordered by their Security Coordinators
- Any exceptions to this process must be approved by the NERC OC prior to their implementation

B. Interchange Schedules

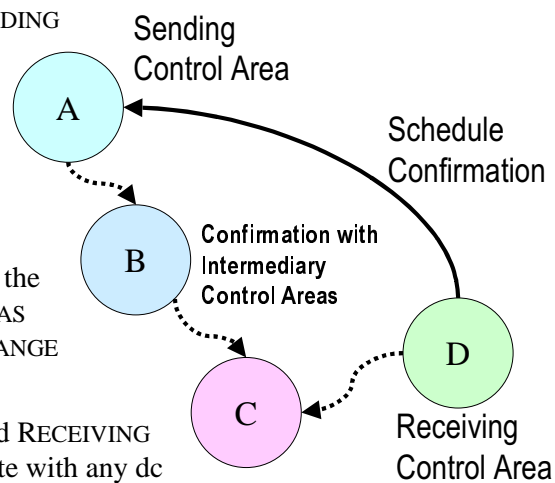
[Appendix 3A Section B, “Interchange Transaction Request Template and Examples”]

Introduction

Policy 3B prescribes the obligations of CONTROL AREAS when scheduling, confirming, and implementing INTERCHANGE SCHEDULES.

Requirements

1. **CONTROL AREAS shall be known to each other.** The CONTROL AREAS that are parties to an INTERCHANGE SCHEDULE shall be known to each other before confirming and implementing the schedule. The parties to an INTERCHANGE SCHEDULE and the information required by CONTROL AREAS are illustrated in Appendix 3A.
 - 1.1. **Sharing schedule details.** The CONTROL AREAS that are parties to an INTERCHANGE SCHEDULE must enter the details of the schedule into the Interregional Security Network as specified in Policy 4.B.
2. **Interchange Schedule agreement.** As a minimum, the SENDING CONTROL AREA, RECEIVING CONTROL AREA, and INTERMEDIARY CONTROL AREA(S) shall agree with each other on the magnitude, scheduling path, starting and ending times, ramp start time and duration, terms of interruption for GENERATION SERVICES and TRANSMISSION SERVICES, and responsibility for operating reserve of the INTERCHANGE SCHEDULE. This agreement shall be made before either the SENDING or RECEIVING CONTROL AREA makes any generation changes to implement the interchange schedule.
 - 2.1. **Operating Reliability Criteria.** CONTROL AREAS shall operate such that INTERCHANGE SCHEDULES or schedule changes do not cause any other system to violate established operating reliability criteria.
 - 2.2. **Interchange Schedule confirmation and implementation.** The RECEIVING CONTROL AREA is responsible for initiating the CONFIRMATION and IMPLEMENTATION of the INTERCHANGE SCHEDULE with the SENDING CONTROL AREA.
 - 2.2.1. The SENDING CONTROL AREA and RECEIVING CONTROL AREA shall each initiate confirmation and implementation of the INTERCHANGE SCHEDULE with the INTERMEDIARY CONTROL AREAS that are parties to the INTERCHANGE SCHEDULE.
 - 2.2.2. **DC tie operator.** SENDING and RECEIVING CONTROL Areas shall coordinate with any dc tie operators on the scheduling path.

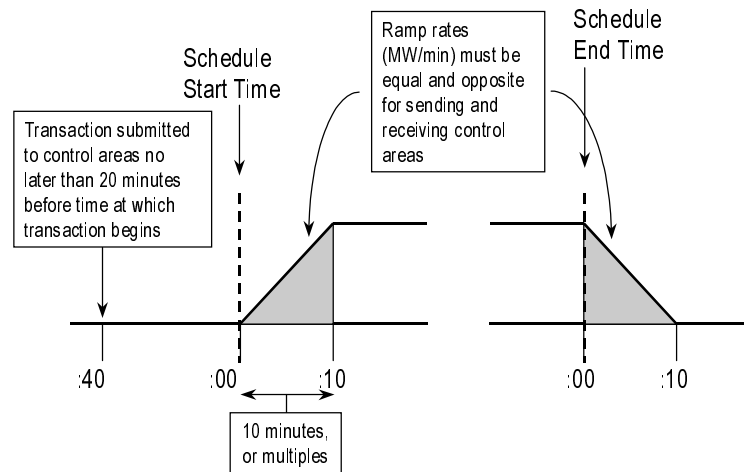


C. Schedule Specifications

Introduction

Policy 3.C. explains the default specifications for INTERCHANGE SCHEDULES and INTERCHANGE TRANSACTIONS.

The figure to the right is an example to help explain these specifications.



Requirements

1. **Period.** Interchange shall begin and end on a Clock Hour unless agreed to otherwise by the Sending Control Area, Receiving Control Area, and intermediary Control Areas.
 - 1.1. **Transaction revisions.** Under normal operations, an interchange transaction shall not be revised until the end of the current clock hour, unless agreed to otherwise by the Sending Control Area, Receiving Control Area, and intermediary Control Areas.
2. **Transaction submission time.** To provide adequate time for security assessment, Interchange Transactions shall be submitted to all the control areas on the scheduling path no later than 20 minutes before the time at which the transaction is to begin unless agreed to otherwise by the Sending, Receiving, and, as applicable, Intermediary Control Areas.
 - 2.1. This Requirement can be waived if changes to the transactions are required to preserve the security of the Interconnection.
3. **Ramp-start times and duration.** The Sending, receiving, and, as applicable, intermediary Control Areas, shall use the same ramp, start times, and durations.
 - 3.1. **Ramp start times.** The Sending, Receiving, and, as applicable, Intermediary Control Areas shall begin to ramp the Interchange Schedule at the start and end times of the schedule change, unless they agree otherwise.
 - 3.2. **Ramp durations.** Ramp durations shall consist of one or more ten-minute periods, with the normal ramp duration equal to one ten-minute period, unless Sending, Receiving, and, as applicable, Intermediary Control Areas agree otherwise.

D. Interconnected Operations Services

[*Interconnected Operations Services Reference Document, NERC, 1995*]

Introduction

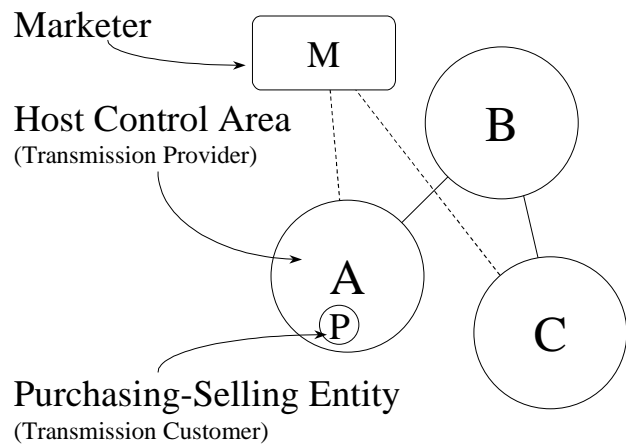
Policy 3D prescribes the obligations of CONTROL AREAS and PURCHASING-SELLING ENTITIES regarding the provision and acquisition of INTERCONNECTED OPERATIONS SERVICES when scheduling, confirming, and implementing INTERCHANGE transactions. Purchasing-selling entities fall into two categories: 1) Those that operate generation or serve end users, and 2) those that perform marketing functions only, and do not operate generation or serve end users, directly.

PURCHASING-SELLING ENTITIES that operate generation or serve end users directly include, but are not limited to, distribution-only utilities, non-control area partial-requirements customers, and non-control area independent power producers. These entities must implement their INTERCHANGE SCHEDULE through a HOST CONTROL AREA. The HOST CONTROL AREA must be the CONTROL AREA within whose metered boundaries the PURCHASING-SELLING ENTITY is located. These PURCHASING-SELLING ENTITIES must arrange for the necessary INTERCONNECTED OPERATIONS SERVICES to enable them to engage in INTERCHANGE transactions with a PURCHASING-SELLING ENTITY other than their HOST CONTROL AREA. These PURCHASING-SELLING ENTITIES must be able to demonstrate to their respective HOST CONTROL AREA that the required INTERCONNECTED OPERATIONS SERVICES are being supplied.

PURCHASING-SELLING ENTITIES that neither operate generation nor serve end users directly, such as independent marketers, are not within the metered boundaries of a CONTROL AREA. This type of entity is not associated with a HOST CONTROL AREA per se, but must still rely on CONTROL AREAS for INTERCHANGE SCHEDULE confirmation and implementation as well as the provision for certain INTERCONNECTED OPERATIONS SERVICES.

Requirements

1. **Control Area² Obligations.** Each CONTROL AREA shall offer to provide comparable arrangements for INTERCHANGE SCHEDULING SERVICES to PURCHASING-SELLING ENTITIES who are not CONTROL AREAS, but plan to SCHEDULE INTERCHANGE.
 - 1.1. **Confirming and implementing interchange schedules.** The CONTROL AREA shall confirm and implement each interchange schedule on behalf of the PURCHASING-SELLING ENTITY. The CONTROL AREA shall also determine the necessary INTERCONNECTED OPERATIONS SERVICES consistent with its tariffs required by the PURCHASING-SELLING ENTITY.
 - 1.1.1. **Other scheduling arrangements.** The CONTROL AREA may agree to allow the PURCHASING-SELLING ENTITY to SCHEDULE the interchange transaction for implementation by the CONTROL AREA. In this case, the PURCHASING-SELLING



² Pertains only to CONTROL AREAS in the United States.

Policy 3 – Interchange

D. Interconnected Operations Services

ENTITY shall demonstrate to the CONTROL AREA'S satisfaction that all obligations to the Regional Councils and NERC can be met.

2. **Purchasing-Selling Entity obligations.** A PURCHASING-SELLING ENTITY shall make arrangements for INTERCHANGE SCHEDULING SERVICES from the appropriate CONTROL AREA(S) as follows:
 - 2.1. **System control and dispatch services.** Provides for interchange scheduling confirmation and implementation with other CONTROL AREAS, including contract Intermediary CONTROL AREAS providing transmission service, and for operational security during the INTERCHANGE transaction.
 - 2.2. **Accounting services.** Provides for energy accounting services associated with INTERCHANGE.
3. **Purchasing-selling entity that operates generation or serves end users directly.** A PURCHASING-SELLING ENTITY that operates generation or serves end users directly and plans to SCHEDULE INTERCHANGE shall arrange for the CONTROL AREA(S) in whose metered boundaries the PURCHASING-SELLING ENTITY'S generation or load is located to be its HOST CONTROL AREA(S).
 - 3.1. **Generation and Transmission Services³.** A PURCHASING-SELLING ENTITY that operates generation or serves end users directly shall provide for the necessary GENERATION SERVICES and TRANSMISSION SERVICES consistent with the HOST CONTROL AREA'S tariffs. These services may be provided by the PURCHASING-SELLING ENTITY itself, or acquired from either its HOST CONTROL AREA, other CONTROL AREA, or other generation supplier or transmission provider, to fulfill the PURCHASING-SELLING ENTITY'S operating commitments to the HOST CONTROL AREA and respect established reliability criteria. These GENERATION SERVICES and TRANSMISSION SERVICES are listed and explained in NERC's *Interconnected Operating Services Reference Document*, NERC, 1995.
 - 3.2. **Demonstration of services.** The PURCHASING-SELLING ENTITY that operates generation or serves end users directly shall demonstrate to its HOST CONTROL AREA that the PURCHASING-SELLING ENTITY has provided or arranged for these necessary GENERATION SERVICES and TRANSMISSION SERVICES.
 - 3.3. **Agreement of services.** The PURCHASING-SELLING ENTITY that operates generation or serves end users directly and its HOST CONTROL AREA shall agree upon those GENERATION SERVICES and TRANSMISSION SERVICES the PURCHASING-SELLING ENTITY is providing, and which are being provided by the HOST CONTROL AREA, other CONTROL AREAS, or other generation suppliers and transmission providers.

³ This Requirement is not intended to obligate CONTROL AREAS outside the United States to provide transmission services or provide or transmit generation services unless by mutual agreement.

E. Transfer Capability

Requirements

[*Available Transfer Capability Definitions and Determination*, NERC, June 1996.]

1. **Maximum scheduled interchange.** The maximum net scheduled INTERCHANGE between two CONTROL AREAS shall not exceed the lesser of the following:
 - 1.1. **Total capacity of facilities.** The total capacity of the owned and arranged-for transmission facilities in service between the two CONTROL AREAS, or
 - 1.2. **Total Transfer Capability.** The established network Total Transfer Capability (TTC) between the CONTROL AREAS which considers other transmission facilities available to them under specific arrangements, and the overall physical constraints of the transmission network. Total Transfer Capability is defined in *Available Transfer Capability Definitions and Determination*, NERC, June 1996.
2. **Available Transfer Capability.** Available Transfer Capability (ATC) is an indication of the additional transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses between two CONTROL AREAS. Available Transfer Capability is defined in *Available Transfer Capability Definitions and Determination*, NERC, June 1996.