Inadvertent Interchange Payback

Purpose:

This standard defines the method (s) in which Inadvertent Energy is paid back.

Applicability:

Balancing Authorities

Definitions:

<u>Area Control Error (ACE)</u> - The instantaneous difference between net actual and scheduled interchange, taking into account the effects of frequency bias, including a correction for meter error.

Balancing Authority (BA) - The entity responsible for integrating resource plans ahead of time, maintaining load-interchange-generation balance within a Balancing Authority Area, and supporting Interconnection frequency in real time.

Balancing Authority Area - An electrical system bounded by interconnection (tieline) metering and telemetry, where the Balancing Authority controls (either directly or by contract) generation to maintain its Interchange Schedule with other Balancing Authority Areas and contributes to frequency regulation of the Interconnection.

<u>CPS</u> – Control Performance Standard as defined by NERC

Inadvertent Interchange - The difference between a Balancing Authority's net actual interchange and net scheduled interchange.

Interchange Schedule - The planned energy exchange between two adjacent Balancing Authorities.

Interconnection – Any one of the three major electric system networks in North America: Eastern, Western, and ERCOT.

 \underline{L}_{10} – A control error limitation specified in NERC standards.

<u>Regions</u> - One of the North American Electric Reliability Council regional councils or affiliate.

<u>**Transmission Service Provider (TSP)</u>** - The entity that administers the transmission tariff and provides transmission services to qualified market participants under applicable transmission service agreements</u>

Business Practices Requirements:

- 1. **Inadvertent Interchange payback.** Each Balancing Authority shall be diligent in reducing Inadvertent Interchange accumulations. Balancing Authorities shall payback Inadvertent Interchange accumulations by one of the following methods:
 - 1.1. **Energy "in-kind" payback.** Inadvertent Interchange accumulated during "On-Peak" hours shall only be paid back during "On-Peak" hours. Inadvertent Interchange accumulated during "Off-Peak" hours shall only be paid back during "Off-Peak" hours. [See Appendix A, "On-Peak and Off-Peak Periods."]
 - 1.1.1. **Bilateral payback.** Inadvertent Interchange accumulations may be paid back via an Interchange Schedule with another Balancing Authority.
 - 1.1.1.1. **Opposite balances.** The source Balancing Authority Area and sink Balancing Authority Area must have Inadvertent Interchange accumulations in the opposite direction.
 - 1.1.1.2. **Payback terms.** The terms of the Inadvertent Interchange payback shall be agreed upon by all involved Balancing Authorities and Transmission Service Providers.
 - 1.1.2. **Unilateral payback.** Inadvertent Interchange accumulations may be paid back unilaterally controlling to a target of non-zero ACE. Controlling to a nonzero ACE ensures that the unilateral payback is accounted for in the CPS calculations. The unilateral payback control offset is limited to Balancing Authority 's L₁₀ limit and shall not burden the Interconnection.
 - 1.2. **Other payback methods.** Upon agreement by all Regions within an Interconnection, other methods of Inadvertent Interchange payback may be utilized.

Appendix A

Inadvertent Interchange On and Off Peak Periods

1. **On-Peak and Off-Peak Hours (Monday Through Sunday)**

On and Off-Peak designation. The hourly inadvertent energy created by a Balancing Authority is classified as either On-Peak or Off-Peak inadvertent. The peak designation assigned is a function of hour of day, day of week, time zone, prevailing time (standard or daylight savings), and special holiday status.

Daylight Saving Time. The On-Peak to Off-Peak and Off-Peak to On-Peak boundary hours are unaffected by transitions to or from daylight savings time. If a Balancing Authority remains on either standard or daylight savings time throughout the year, their inadvertent accounting practices shall use prevailing time.

On-peak hours. Each Interconnection has a reference time zone and standardized On-Peak and Off-Peak periods. On-Peak periods are summarized in the table below for each Interconnection. Sundays and special holidays are designated to be Off-Peak periods for the entire day. Hours for Monday through Saturday that are not shown in the table below are also designated as Off-Peak hours.

2. On-Peak Hours For Monday Through Saturday In Hour-Ending Format

Interconnection		Reference Time Zone		Hour Ending	
				From	То
Eastern		Central		0700	2200
ERCOT		Central		0800	2200
Western		Pacific		0700	2200

3. Off-Peak Holidays for the Eastern and Western Interconnections

There are six identified U.S. holidays each year:

New Year's Day Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day If any of these holidays fall on a Sunday, the following Monday will be considered an Off-Peak day. Otherwise, the Off-Peak day will be the holiday itself.

