

Subj: **Scope of Inadvertent Interchange Settlement Standard**

Date: 4/2/03 4:53:44 AM Central Standard Time

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In preparation for next Wednesday morning's inaugural standard-development meeting of the Inadvertent Interchange Payback Taskforce (IIPTF), here's a preliminary outline/structure of the key issues to be covered by the Inadvertent Interchange (II) Settlement standard, as I verbalized in last Monday's conference call.

The THREE GENERAL CATEGORIES of the outline in order of priority/importance/complexity are:

1. Pricing
2. Data and consistency
3. Agency

The first two categories are each subdivided into

1. Energy/Transmission component of II
2. Frequency-Contribution (FCC) component of II

DETAILED outline:

1. Pricing

- 1.1 of Energy/Transmission component of II.
- 1.2 of FCC component of II

2. Data and consistency

- 2.1 Accounting by Balancing Authorities (BAs) of the Energy/Transmission transaction component of II
- 2.2 Definition and validation of data input to FCC component of II, and consistency of FCC pricing with Reliability Standards.

3. Agency

- 3.1 Data warehouse and auditor
- 3.2 Clearing/settlement agent
- 3.3 Dispute resolver
- 3.4 FCC Trading-market platform provider(s)
- 3.5 Inputting FCC-trading results into monthly clearing/settlement and NERC reliability-assessment.

POINT-BY-POINT DISCUSSION of outline:

1. Pricing

- 1.1 of Energy/Transmission component of II

Discussion:

SEAMS. This is the same problem as the "seams" issue in the scheduled energy and transmission markets. So, its solution need be no better or worse than what prevails in the underlying scheduled energy/transmission world.

MARKET-PRICE PROXY. For inadvertent settlement purposes, the energy-imbalance price specified in the FERC energy-imbalance tariff in the Balancing Authority RECEIVING the II may suffice to price the energy and transmission/congestion components of II. That this may reflect

phantom congestion or underprice congestion is of no consequence since the same problems would apply to scheduled energy/transmission and would be resolved there first whence they would then extend automatically to II.

#### 1.2 of FCC component of II

Discussion:

STUDY. The pollution rights market must be examined to understand how an appropriate level of DOE-levied pollution-penalty stimulated sufficient trading of pollution "rights" to avoid it.

TESTING. Simulations must be conducted to determine (a) the appropriate NERC-levied CPS1 penalty needed to induce trading of FCC, and (b) a monetary unit (and a mathematical relationship between frequency error and FCC price in terms of that monetary unit) to serve as an interim basis for pricing FCC before a market for trading it eventually emerges. A market for trading FCC can emerge only once NERC has been legislatively empowered to enforce CPS1.

EXPENSE. Testing must be conducted in cooperation with an experienced economics lab, like those at CalTech and/or Cornell, and requires some software development. A means must be determined for funding that testing/software expense. That would be a minimal requirement for FERC approval of any such interim pricing prior to implementation.

TIMING. Testing should not be left to the implementation stage. It is time and resource intensive and determines what if anything CAN be implemented.

### 2. Data and consistency

#### 2.1 Accounting by Balancing Authorities of the Energy/Transaction component of II.

Discussion:

RECONCILIATION BETWEEN BAs. The BA receiving II must reconcile its accounting for the Energy/Transmission component with the BA sending it the II, and they must settle this component.

#### 2.2 Definition and validation of data input to FCC component of II, and consistency of FCC pricing with Reliability Standards.

Discussion:

CLOSE COORDINATION WITH NERC. NAESB's IIPTF needs to coordinate with and follow NERC's Resources Subcommittee and Frequency Standards Drafting Team on a direct-on-going basis, not just indirectly through the JIC.

CERTS. The DOE funds an entity acronymed "CERTS" that is working with NERC's Resources Subcommittee (RS) to define, measure, validate and integrate the II and frequency data required for accurate CPS1 performance assessment by NERC. Successful completion of this work is required before any II Settlement Standard can be implemented.

FREQUENCY/RESPONSE STANDARDS DEVELOPMENT. NERC's Frequency Standards Drafting Team (SDT), under advice of NERC's RS, is in the process of considering revisions to NERC's Frequency Standard Authorization (including CPS1) that risk jeopardizing the efficient functioning of a market for FCC. NAESB's IIPTF needs to prevent any such revision from being incorporated in NERC's Draft Frequency Standard. To this end NAESB's IIPTF needs to directly inform NERC's RS and Frequency SDT on a collaborative technical/economics basis before an inconsistent Draft Frequency Standard is released for public comment, not simply as one of the multitude of policy intervenors during the public comment period on a technically-inconsistent Draft Frequency Standard.

### 3. Agency

#### 3.1 Data warehouse and audit.

Discussion:

NERC? NERC has been the warehouse of data required for CPS1 enforcement, and the CERTS work is focused on further consolidating this data warehousing function. NERC processes will determine the extent to which NERC itself performs this function or contracts out for it. Unlike all other entities, legislation will give NERC an entitlement to funding for this from all industry participants.

#### 3.2 Clearing/settlement agent

Discussion:

NERC, THE INTERCONNECTIONS, FINANCIAL INSTITUTION(S)? This function uses the data warehouse which will probably be paid for by NERC. NERC's reliability responsibility and funding extends to the physical clearing (physical accounting), but not to the financial settlement (financial accounting). Whether the additional financial accounting for FCC should be assigned to NERC under NERC economic enforcement authority, or to the Interconnections, or subcontracted to any financial institution(s) is a matter to consider. In financial markets the physical and financial accounting are not separated, for example in the organization known as Euroclear in the Eurobond market.

RECONCILIATION WITH ENERGY/TRANSMISSION SETTLEMENT. Clearing/settlement of the Energy/Transmission component of II needs to be reconciled, through the data warehouse, with clearing/settlement of the FCC component of II. Do BA's settle for the Energy/Transmission component bilaterally, or via a central clearing/settlement agent for Energy/Transmission component settlement?

### 3.3 Dispute resolution

Discussion:

What mechanism/entity will resolve on a daily basis disputes with the settlement/clearing process? FERC is a court of appeal, not a daily dispute-resolution mechanism.

### 3.4 Trading-market platform provider(s)

Discussion:

OTC? Trading of FCC may be conductible on an OTC basis, without need for a market "operator".

### 3.5 Inputting FCC-trading results into monthly settlement/clearing and NERC reliability-assessment.

Discussion:

FCC-trading results need to be fed into the final monthly settlement/clearing and NERC reliability-assessment.

--Robert Blohm, April 2, 2003