



Operating Procedures

ISO New England Operating Procedure No. 18

*Metering and Telemetering Criteria – Appendix A –
ISO New England ICCP CNP Telemetered Data
Definitions*

Effective Date: September 05, 2008
Revision No. 5

Appendix A - ISO New England ICCP CNP Telemetered Data Definitions

I. INTRODUCTION

This Appendix A of OP-18 is designed to be used by all Market Participants (MPs), Local Control Centers (LCCs) and ISO New England (ISO) to define all metered and/or telemetered data that may be sent or requested by a dispatch center. The data referenced in this Appendix is used primarily for real time power system dispatch purposes.

II. PURPOSE

The purpose of this Appendix is to allow the MPs, LCCs and/or ISO to uniquely identify all data items which are to be transmitted via the New England dispatch communications network, and allows other MPs, LCCs and/or ISO to identify the data items of interest.

III. NOMENCLATURE DEFINITIONS

Each dispatch center should strive to develop a set of nomenclature for the following categories of power system data to aid in the identification of the data to other interested parties.

- A. Transmission station names
- B. Transmission lines
- C. Transformers
- D. Generating stations/units
- E. Breakers/switches
- F. Other

IV. DATA DEFINITION UPDATES

Each dispatch center will be required to prepare an initial set of data definitions prior to implementing the communications network. Subsequent updates will be required as the data definitions are changed via additions, deletions, or modifications. ISO will assume the responsibility for receiving and distributing definition updates to other New England dispatch centers.

ICCP Bilateral Table Data Description

POINT	POINT DESCRIPTION	Equip Data				Station	Change Volt	Code/Date	Bilateral Table	Exch. Freq.	Bilateral Type
		Type	Type	Sign	Source						
Cxxxxxxxx	40 Char. Description	XX	XXXX	X	XXX	XXXXXXXXXXXXXXX	XXX	XXX/date	Y/N	XXXX	G/R

A. Field #1 – Company Identification; This field is the first two (2) ASCII characters of the ICCP Point Identifier. They are:

- GL - GLOBAL
- NX - ISO
- CX - CONVEX
- ME - MAINE
- NH - PSNH

- BH - BANGOR HYDRO
- BE - NSTAR

- UL - UICO
- VE - VELCO
- NE - NGRID

Additions will be made as other sites join the ICCP network.

B. Field #2 – Point ID; this field is the next eight (8) characters of the ICCP point identifier. This is a free form entry field and each entry has to be unique. Examples of point IDs are:

- NE1210XFMW - NGRID Point 1, 210 transformer MW
- NE2210XFMX - NGRID Point 2, 210 transformer MV
- NE11670BKS - NGRID Point 1, 1670 Breaker status

NOTE: Fields #1 and #2 make up the ICCP bilateral identifier for each point and will be used for all bilateral tables.

- C. **Field #3 – Point Description; this field is a free form entry of up to forty (40) characters for the point description of each point identifier.**

EX:

- 1 – Auburn 210 Auto Transformer MegaWatts**
- 2 – Auburn 210 Auto Transformer MegaVars**
- 10 – Bridgewater 1670 SF6 Gas Circuit Breaker**

- D. **Field #4 – Equipment Type; this field is a two (2) character ASCII field for the equipment type. The following are the defined equipment types to be used:**

LN -	LINE
TR -	TRANSFORMER
BN -	BUS
SC -	SYNCHRONOUS CONDENSER
PS -	PHASE SHIFTER
UN -	UNIT
RD -	REACTIVE DEVICE
CB -	CIRCUIT BREAKER
SW -	SWITCH
GN -	GENERATION
IF -	INTERFACE
SY -	SYSTEM
CS -	CIRCUIT SWITCHER
OT -	OTHER
GD -	GROUND DEVICE
CM -	COMMUNICATIONS
SD -	SERIES DEVICE

E. **Field #5 – Data Type; this field is a four (4) character ASCII field for the data type. The following are the defined data types to be used:**

FLOW - POWER FLOW
VOLT - VOLTAGE
STAT - STATUS
LOAD - LOAD
GEN - GENERATION
FREQ - FREQUENCY
ANGL - ANGLE
TAP - TRANSFORMER TAP POSITION
LIMIT - LIMITS
BSPT - UNIT BASEPOINTS
UCM - UNIT CONTROL MODES
FCST - FUEL COSTS
CFS - CUBIC FEET/SECOND
FT - FEET
SP - SETPOINT
DES - DESIRED GENERATION
PUL - PULSE DATA
INTG - INTERCHANGE
OTHR - OTHER
AS - ACRE FEET

F. Field #6 – Unit Description; this field is a four (4) character ASCII field for the unit description. The following are the defined unit descriptions to be used:

**MW - MEGAWATTS
MVAR - MEGAVARS
KW - KILOVOLTS
PU - PER UNIT
MVA - MVA
STAT - STATUS
HZ - HERTZ
POS - TAP POSITION
MPH - MILES/HOUR
PUL - PULSE
OTHE - OTHER
ACT - ACTUAL
SCHD - SCHEDULED
REQ - REQUIRED RESERVE
LIMT - LIMIT
NET - NET
CFS - CUBIC FEET/SECOND
AS - ACRE FEET
FT - FEET
DEG - DEGREES
DEGF - DEGREES FAHRENHEIT
DEGC - DEGREES CENTIGRADE
MWH - MEGAWATTHOUR
VOLT - VOLTAGE**

G. Field #7 – Sign Convention; this field is a one (1) character ASCII field for the sign convention. The definition of the sign convention is as follows:

**+ = Power flow out of station from the metering point
- = Power flow into station from the metering point**

- H. Field #8 – Source Description; this field is a three (3) character ASCII field for the source description of the data. The following are the defined source descriptions:**
- STE - STATE ESTIMATOR**
 - RAW - ACTUAL FIELD DATA**
 - CAL - CALCULATED DATA**
 - MAN - MANUALLY ENTERED DATA**
- I. Field #9 – Station Name; this field is a free form entry of up to twelve (12) characters for the station name of the associated data value.**
- J. Field #10 – Voltage Class; this field is a free form entry of up to three (3) characters for the voltage class of the associated data value.**
- K. Field #11 – Change Code; this field is a three (3) character code used to define changes to the bilateral table. The acceptable codes are REP to replace a point, DEL to delete a point, and ADD to add a point.**
- L. Field #12 – Change Date; this field is used to indicate the date of the change to this point.**
- M. Field #13 – Bilateral Table Y/N; this field is for use when the bilateral agreement form is used. It allows for the designation of all points a site wishes to receive from another site via the ICCP network.**
- N. Field #14 – Frequency in seconds (4, 10, 20, 30, 60) at which the data will be available to be transmitted.**
- O. Field #15 – Bilateral Type; this field has two selectable units to choose from: Global and Restricted (Database default is Global). Global designates the data point as accessible to all other sites. Restricted designates the data point as restricted and available on a site by site basis as defined by the owner of the data.**

OP 18 APPENDIX A REVISION HISTORY

Document History (This Document History documents action taken on the equivalent NEPOOL Procedure prior to the RTO Operations Date as well revisions made to the ISO New England Procedure subsequent to the RTO Operations Date.)

Rev. No.	Date	Reason
Rev 0	04/13/99	
Rev 1	10/21/99	
Rev 2	06/21/2002	
Rev 3	10/01/04	
Rev 4	02/01/05	Updated to conform to RTO terminology
Rev 5	09/05/08	Made minor editorial changes; Updated to clarify the ICCP CNP versus ISO CFE (Rig upgrade) path terminology