

PACKAGE ID - 000249IBMPC00 ISA

KWIC TITLE - WAPA Daily Energy Accounting Activities

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LIMITATION CODE -UNL **AUDIENCE CODE** - UNL

COMPLETION DATE - 10/01/1990 **PUBLICATION DATE** - 06/02/1990

DESCRIPTION - ISA (Interchange, Scheduling, & Accounting) is the interchange scheduling system used by the DOE Western Area Power Administration to perform energy accounting functions associated with the daily activities of the Watertown Operations Office (WOO). The system's primary role is to provide accounting functions for scheduled energy which is exchanged with other power companies and power operating organizations. The system has a secondary role of providing a historical record of all scheduled interchange transactions. The following major functions are performed by ISA: scheduled energy accounting for received and delivered energy; generation scheduling accounting for both fossil and hydro-electric power plants; metered energy accounting for received and delivered totals; energy accounting for Direct Current (D.C.) Ties; regulation accounting; automatic generation control set calculations; accounting summaries for Basin, Heartland Consumers Power District, and the Missouri Basin Municipal Power Agency; calculation of estimated generation for the Laramie River Station plant; daily and monthly reports; and dual control areas.

PACKAGE CONTENTS - Media Directory; Software Abstract; ISA USER'S MANUAL, Interchange, Scheduling, and Accounting;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 3.5 Diskette

METHOD OF SOLUTION - ISA is based on a local area network (LAN) consisting of file servers, network cable, workstations, and printers. A personal workstation allows each system user to handle all calculations, data manipulation, and report processing. The file servers provide long-term data storage and shared data management functions (i.e. database, file management, printer spooling, and workstation communications services). The servers are arranged in a redundant fashion with manual failover capability. The network cable provides interconnection between the components.

COMPUTER - IBM PC

OPERATING SYSTEMS - MS DOS

PROGRAMMING LANGUAGES - C++

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SOFTWARE LIMITATIONS - ISA supports accounting for 2 control areas for scheduling purposes and up to 1000 contract agreements for the 2 control areas combined. The scheduling section supports up to 200 received and 200 delivered schedules per day in each control area. The generation section supports 6 fossil and 8 hydro-electric plants. The metering section supports 1 D.C. Tie and the metering totals for received and delivered.

SOURCE CODE AVAILABLE (Y/N) - Y

OTHER PROG/OPER SYS INFO - ISA requires the proprietary Btrieve Record Manager software; this software is not included.

HARDWARE REQS - The WOO ISA configuration consists of 2 Compaq 385/25 file servers, each with 215 Mbytes storage capacity, 12 Compaq personal computers, 2 OKIDATA u193+ printers, 1 EMERALD 1/4- inch cartridge tape system, and 2 network cable systems.

REFERENCES - ISA USER'S MANUAL, Interchange, Scheduling, & Accounting, Western Area Power Administration Watertown Operations Office report, received June 1990\ ISA, NESC No. 9421.PCB, ISA Edition B Flexible Disk Cartridge Directory, National Energy Software Center Note 91-08, October 31, 1990.

ABSTRACT STATUS - Abstract first distributed August 1990. IBM PC version submitted June 1990, replaced October 1990 by Edition B.

SUBJECT CLASS CODE - M

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
I CODES
ENERGY ACCOUNTING
WESTERN AREA POWER ADMINISTRATION
DATA PROCESSING
POWER GENERATION
METERING
SCHEDULES
FOSSIL-FUEL POWER PLANTS
HYDROELECTRIC POWER PLANTS
PERSONAL COMPUTERS

EDB SUBJECT CATEGORIES -
990200 290100

SPONSOR - DOE/PE

PACKAGE TYPE - SCREENED