

AGENCY REQUEST FOR APPROVAL OF SPECIAL STANDARD

NAME OF AGENCY: ALL USING STATE AGENCIES

NATURE OF REQUEST: To establish a Special Standard for the Uses, Incorporated's Shunt Efficiency Systems (Power Conditioners) for use in State agencies with large demands for electricity due to motors, compressors, air conditioning, pumps, etc. or prone to erratic surges and/or spike. Uses, Inc. systems are U.L. Listed (Industrial Control Equipment Section 5B-81, File No. E 132743) C.S.A. Listed (Canadian Standards Association File No. LR99910). Uses holds a United States Patent (Pat No. 5,105,327, dated April 14, 1992).

JUSTIFICATION:

The Uses, Inc. Shunt Efficiency System, a power conditioner for AC Power lines, has a choke and capacitor coupled in series across the power lines. The Choke comprises a coil terminating in a line, with the line looped back through the coil. The power lines are thereby balanced to provide greater operating efficiency. Capacitors and transient suppressors (e.g, varistors) are used for transient suppression and power factor correction. Uses technology principally consists of parallel, wrap-around magnetic chokes oriented to couple magnetic forces generated across each electrical phase by the current. On the basis of the magnetic fields sensed, a signal is generated that enhances the AC wave form and matches it to the requirements of the inductive load. The peak portion of the current wave on the line side is decreased and the electrical system inefficiencies that originate in the supplying transformer are reduced. Superior surge and spike suppression is a derivative of the process.

The Uses, Inc. systems are designated for those agencies experiencing loss of power, poor voltage regulation, surges and/or spikes and high electrical rates. The system once installed on the load side of the main disconnect, improves voltage regulation, reduces line transmitted interference and noise generated by motors or appliances, increases power factor, lowers amperage and reduces wattage contents on the line which reduces kWh per hour of operation. This will save the agency money.

State agencies requesting Uses, Inc. System (s) shall receive prior approval from the Standards Section of the State Bureau of Purchases. The agency shall supply a Uses, Inc. analysis detailing type of unit proposed, unit location within the facility, projected savings, R.O.I. figures, written justification and any additional detailed information as requested. This shall allow the Standards Section to establish a history file on number of units purchased, location of units and the ability to monitor progress and savings per agency over a specified period of time. This information will be jointly shared with the Advisory Committee on Standards for Electrical Hardware and Supplies. The members were responsible for approving Uses, Inc. systems for State agency use.

JUSTIFICATION: (cont'd.)

The Advisory Committee, in justifying their recommendation, have taken the following into consideration, the owner/inventor is a native Connecticut resident, has refused numerous large monetary offers to sell and/or relocate to other U.S. cities, North and South America and Europe, chose to remain located in the economically depressed area of New London County. The Advisory Committee believes the Uses, Inc. product will save our State agencies funds from continually shrinking budgets.

RECOMMENDATION OF ADVISORY COMMITTEE:

RECOMMEND APPROVAL:

ADVISORY COMMITTEE ON STANDARDS FOR ELECTRICAL HARDWARE AND SUPPLIES

RECOMMENDATION OF THE BUREAU OF PURCHASES:

PROCESSED BY

T.A. Faraci, CPPO

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Chief of Standards & Tests

APPROVED BY

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