GEORGIA DEPARTMENT OF CORRECTIONS Standard Operating Procedures		
Functional Area: SUPPORT SERVICES /ENGINEERING AND CONSTRUCTION SERVICES	**Reference Number:** IVK01-0001	**Revises Previous Effective Date:** NEW
Subject: ELECTRIC COST OPTIMIZATION DURING PEAKING PERIOD (RTP PROGRAM)		
Authority: WETHERINGTON/FERRERO/BROWN	**Effective Date:** 6/01/00	Page **1** of **4**

I. POLICY:

Each Georgia Department of Corrections facility on Georgia Power's RTP (Real Time Pricing) rate shall implement the following procedure to minimize extreme costs during high-priced periods while not affecting the integrity of their power supply.

II. APPLICABILITY:

Engineering and Construction Services, GDC Communication Center and the following GDC facilities currently on Georgia Power's RTP rate: Augusta State Prison, Georgia State Prison, Hancock State Prison, Macon State Prison and Smith State Prison.

III. RELATED DIRECTIVES:

None

IV. DEFINITIONS:

A. Customer Base Line (CBL) - Each facility on the RTP rate has an established Customer Base Line. Electricity used up to the CBL is billed at the standard published rate (Power and Light Large (PLL)).

B. Real Time Pricing Rate (RTP) Rate - All additional load above the CBL is billed at Georgia Power's **real time price** to generate electricity.

The electric load above the CBL, sometimes referred to as incremental load, is the only load exposed to the

fluctuating pricing on RTP. Throughout the winter months (October through April) the RTP prices have historically been extremely low; the shoulder months of September and May have been moderate; while the summer months of June through August experience extremely high prices.

Each of GDC's facilities on the RTP rate has enough generator capacity to fully cover the amount of load being purchased at the volatile RTP prices in the summer.

C. Strike Price - This is a price that is used to determine whether a generator should be utilized. Any time RTP prices climb above this predetermined price and assuming the use of generators does not affect the facility adversely for other considerations, then the generators should be utilized. Whenever RTP prices remain above 25 cents* per kWh for a sustained period of time (over four hours) then the generators should be used.

1. Engineering and Construction Services has determined 25 cents per kWh is a good conservative estimate of the cost of running a generator. After the initial phase of this program further evaluation of generator operating costs may result in a change in the strike price. The objective is to calculate the lowest possible strike price because greater savings can be realized by responding to lower RTP prices.

V. ATTACHMENTS:

None

VI. PROCEDURE:

A. The Utilities Project Manager for GDC's Engineering and Construction Services section will identify capacity and loading of generators (in terms of kW) at each RTP facility and compile a list of each facility's specific load.

B. The Utilities Project Manager will verify that each generator is optimally loaded to maximize protection from high prices on RTP rate. Any shortfalls will be brought to the attention of the appropriate Regional and Facility Maintenance Engineers for correction.

C. The Utilities Project Manager will evaluate the previous summer's actual demands compared to the respective customer base lines to determine any changes in incremental load and therefore generator requirements for the upcoming summer peak period.

D. The Facility Maintenance Engineer will verify proper operation of each generator at each location through typical testing and report any problems to the appropriate Regional Maintenance Engineer and the Utilities Project Manager for correction.

E. The Facility Maintenance Engineer (or designated alternates in his absence) will serve as the facility's primary contact for coordinating generator use and compliance. The Facility Maintenance Engineer will provide the Utilities Project Manager with contact telephone and fax numbers.

F. During the summer months, the Utilities Project Manager will monitor Georgia Power's RTP hourly prices posted by 4 PM to determine if generator operation is necessary for the next day based upon the established strike price.

G. The Facility Maintenance Engineer should verify the facility has an adequate supply of diesel fuel for its generator(s).

H. The Facility Maintenance Engineer should test generators weekly even during non-peaking conditions and report any problems to the Warden, Regional Maintenance Engineer and Utilities Project Manager.

I. If the RTP hourly or daily average price warrants a designated load-shed period to be called the next day, the Utilities Project Manager will determine the appropriate generator run time and communicate the designated load-shed period by 9 AM on the given day to GDC's Communication Center. The load-shed period will be referred to as the **RTP Power Conservation Mode.**

J. The Communications Center will contact the Facilities Division Director, appropriate Regional Directors and the five facilities affected informing them of the **RTP Power Conservation Mode** and designated load-shed period.

K. The Facility Maintenance Engineer will comply by starting the generator one hour prior to the designated load-shed period, apply load and keep the generator running for the duration of the load-shed period.

L. If the load-shed period extends beyond the first maintenance work shift, the Warden will ensure the necessary personnel are assigned to keep the generator running for the remainder of the load-shed period.

M. The Facility Maintenance Engineer or other staff designated by the Warden will evaluate diesel fuel levels after each day of generation operation and refuel as necessary.

N. The Warden shall ensure all non-critical loads are reduced during the load-shed period. This will result in additional economic benefit by reducing load below the respective customer base line.

O. All shifts shall keep a central log of generator use and run time on load-shed days. The log should be faxed or e-mailed daily to the Utilities Project Manager.

P. The Facility Maintenance Engineer will communicate any problems with generator use to the Warden, Regional Maintenance Engineer and Utilities Project Manager.