

Other Benefits of Smart Meters:

- Gives the Corporation flexibility in terms of offering prepaid or post paid solutions to customers through the smart meter's ability to function in either mode. (Pre-paid to be implemented in future after modifications).
- The system promptly reports existence of faults in the network and BPC faults crews will be able to respond quickly without having to wait for customers to phone.
- The system allows for automatic reconnection and disconnection for change of tenancy and disconnection for non-payment.
- The system eliminates the need to estimate bills as meters will be read remotely.
- When operated in the prepaid mode, the system allows both remote and manual upload of credit into the meter.

Target Customers

The project is targeted at customers in the residential and small business categories. Small business refers to small shops, butcheries, bottle stores hair saloons etc.

Areas to be covered

The project will be implemented in **Gaborone, Francistown, Selebi Phikwe, Lobatse and Jwaneng**. The project will start in **Gaborone from mid October 2009 to mid November 2009**. Block 7 area in Gaborone has been selected to be the first location for project implementation. The project will be rolled out to other areas in Gaborone by mid February 2010 before moving to other towns. **The project is expected to be completed in all the five towns by mid June 2010**. Specific implementation dates will be communicated to customers in the affected areas as the project progresses.

Security Arrangements

For easy identification, contractor employees who will be involved in the meter retrofit exercise will be provided with temporary BPC identification cards. If not satisfied with the identification, customers are advised to contact BPC offices on the numbers listed below.

Gaborone: 3603000/3607000

Francistown: 2413939/2412794

Selebi Phikwe: 2610557/2610422

Jwaneng: 5880480/5880251

Lobatse: 5330542/5300096

**For enquiries please contact BPC Marketing
on: (+267) 360 3425 / 360 3418
or email: powerefficiently@bpc.bw**



BOTSWANA POWER CORPORATION
committed to serve

TODAY...
TOMORROW...



Managing power the smart way!

**Hot Water Load Control
(HWLC) project**



BOTSWANA POWER CORPORATION
committed to serve

Old Meter



New Smart Meter



Managing power the smart way!

As part of its commitment to manage the power supply in the Country, Botswana Power Corporation (BPC) will soon launch the Hot Water Load Control (HWLC) project. The HWLC project is one of the short term strategies aimed at alleviating the power supply problem. It is envisaged that through implementation of the HWLC project a reduction of up to 40MW can be achieved.

• Project Objective

Generally Electricity usage in domestic dwellings is usually at its highest during two peaks of the day; morning from 6-10am and evening from 6-10pm. The main objective of the HWLC project is to manage customer's hot water loads (geysers) as a way of controlling demand especially during peak periods.



• Brief Description Of The System

The HWLC system consists of a Central system at BPC offices, Data Concentrators installed at transformers and Smart meters and geyser contactors which will be installed in customer's houses. The smart meters will communicate with the Central System located at BPC offices through a hybrid communication channel (GPRS and PLC).

• How Does The System Work?

The HWLC system will control system load through the execution of the three stage load control measures.

Stage 1: Remote Geyser Control

In order to control the hot water load, the installed system will enable remote switching OFF of geysers for selected customer load groups (supplied from same transformer). Geysers for customers in the same load groups will be switched OFF at the same time. It is anticipated that geysers are likely to be switched OFF during peak periods whenever demand exceeds supply.

Stage 2: Load Curtailment

If switching OFF of geysers is not sufficient to address the supply deficiency, the next step is load curtailment. The smart meters installed have a facility to be remotely configured to limit load to required levels. The level of load limit will be determined by the extent of supply constraint being experienced.

Stage 3: Remote Disconnect /Reconnect Of Supply To Selected Customer Groups

The third stage is switching OFF supply to selected areas. Switching OFF supply will only be implemented under extreme cases when severe supply constraints are being experienced i.e. situations that can not be addressed by switching OFF geysers and load curtailment only. Once the situation has normalized, supply can then be restored remotely.

