On-Line Pre-Payment Metering Solution



Genus Power Infrastructures Limited

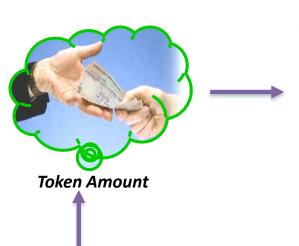
Introduction



- ☐ *On-line "Pre-paid"* Metering Solution
 - Introduction of Present System
 - Limitation of Present System
 - Proposed System
 - Advantage Over Present System
- ☐ Benefits to Power Utilities

Smart Pre-Paid Metering Solution







POS for Transaction

GSM/GPRS Cloud



Meter Reading
Data Analysis

Tariff Update
Recharge Token &
Revenue
Management

Settlement/Reconc iliation Management



SMS to consumer

- On Recharge &
- On Low balance





- ■Alerts on Fault/Tamper
- **■**Outage Notification
- **■**Demand / Load monitoring
- ■Remote Load Dis/re-connect



No Token Entry on Meter Calculation of remaining Balance on Central Server Tariff Update on Central Server



Smart prepayment Meter



Head END Server (HES) based Revenue Management

- •No token entry by keypad,
- •Real time tariff Update
- No Meter dependant Credit Calculation

Integrated GPRS modem (two way communication)

- Online Alert in case of any abnormality
- Online Load Pattern Availability
- •All Credit information like Current balance, Rate/Unit, Last recharge amount, settlement amount are on Server
- •Configurable load Limit (Peak Load Management)

DLMS/COSEM → Open protocol

Benefits to Utility:-



- Remote Communication facility (Two-Way)
 - Save Revenue, Real time Tariff Update
 - Save per token OPEX cost, Remote Credit Update
 - Suitable for Govt. Deptt./VIP/Temporary Consumer, Remote Amount Settlement
- Online Data Monitoring facility
 - Save Revenue, Reduced Billing Cycle
 - reduce OPEX of Meter reading, Eliminate Manual Reading through CMRI
 - Use of Existing Infrastructure, Can be integrated with existing Billing System
 - Enhanced MIS information

Continue..

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Fault/Tamper Alert Notification



- *Save the Revenue,* Alert information enable early identification of Power Theft through proactive action
- Improve Supply Condition, notification for various Electrical Conditions etc
- **☐** Power Outage Notification
 - Immediate Outage information enable utility for better Customer Services
- ☐ Remote Load/Demand Management
 - In case of limited power availability load limit reduction (*Brown Out facility*) rather complete black out
 - Disconnection remotely of Temporary or default consumers
 - Remote ON/OFF in Emergency
 - Provision for Auto Disconnection → can be based on logics defined by utility i.e. Demand Response, Over Drawl



Thanks You