



**AUTOMATED METERING INFRASTRUCTURE
KANSAS COOPERATIVES UPDATE**

HOUSE ENERGY & ENVIRONMENT COMMITTEE

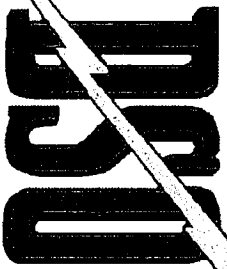
February 7, 2013

Presented by:

Donald Hellwig

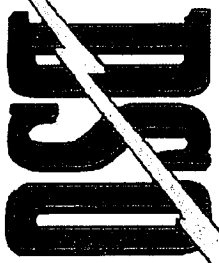
General Manager

DS&O Electric Cooperative



Where Are We?

- Kansas Coops – Using PLC or Mesh Radio technology
 - AMI/AMR – 25 Coops – 60% of meters.
 - 2 more Coops just beginning installation.
- **Several types of AMI technology.**
 - Power line carrier.
 - Low power radio.
 - Cell Phone.



AMI Capabilities

- Improved meter reading info.
- Reduced Meter Reading Cost.
 - Low Coop customer density makes automation very valuable.
 - Eliminates need for periodic employee meter readings.
- Timely and Accurate Billing Data.
 - Reduced losses from billing lag.
 - Lower “Doubtful Account” write-off.
 - More accurate pricing signals for summer-winter rate differentials.



AMI Capabilities

- **Increased Capabilities.**
- **Load Control**
 - More accurate control.
 - Few control events.
 - Verification of control.
 - Expanded control base.
- **Energy Efficiency**
 - Accurate load control improves efficiency.
 - Increases number of customers willing to participate.



AMI Capabilities

- **Increased Customer Information.**
 - Individual customer data will be available on Cooperative's E-bill Website.
 - Daily data can be viewed with NWS temperature data.
 - Data can be viewed in one-hour increments for trouble shooting.

- **New Rate Structures.**
 - Time-of-Use.
 - Pre-pay.
 - Residential demand.
 - Co-incident peak .



AMI Capabilities

Example:

Pre-Pay Residential – Optional Rate.

– Pay in Advance

- No minimum
- pay as often as preferred.
- No Security Deposit.
- Payments accepted by 24/7.
- Payment impact effective within 10 minutes.

Usage & Billing Systems



MDMEXPLORER

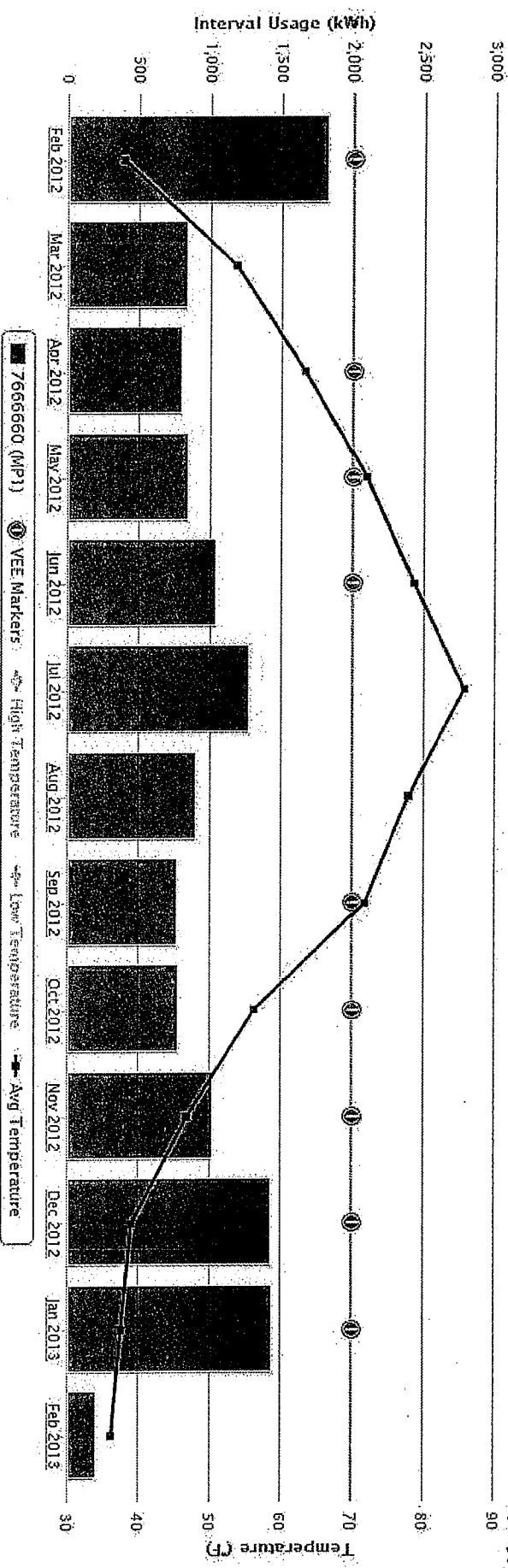
22/13/11

MONTHLY

DONALD HELLMG - 000002828 Solomon KS 67480 - 1011411

- Admin
- Dashboard
- Logout

February, 2012 - February, 2013



Usage Charge: \$119.75
 Billed kWh Usage: 1,669.00

Average kWh Usage: 1,216.36
 Total kWh Usage: 15,812.71

7666660 (MPT) VEE Markers High Temperature Low Temperature Avg Temperature



MDMEXPLORER

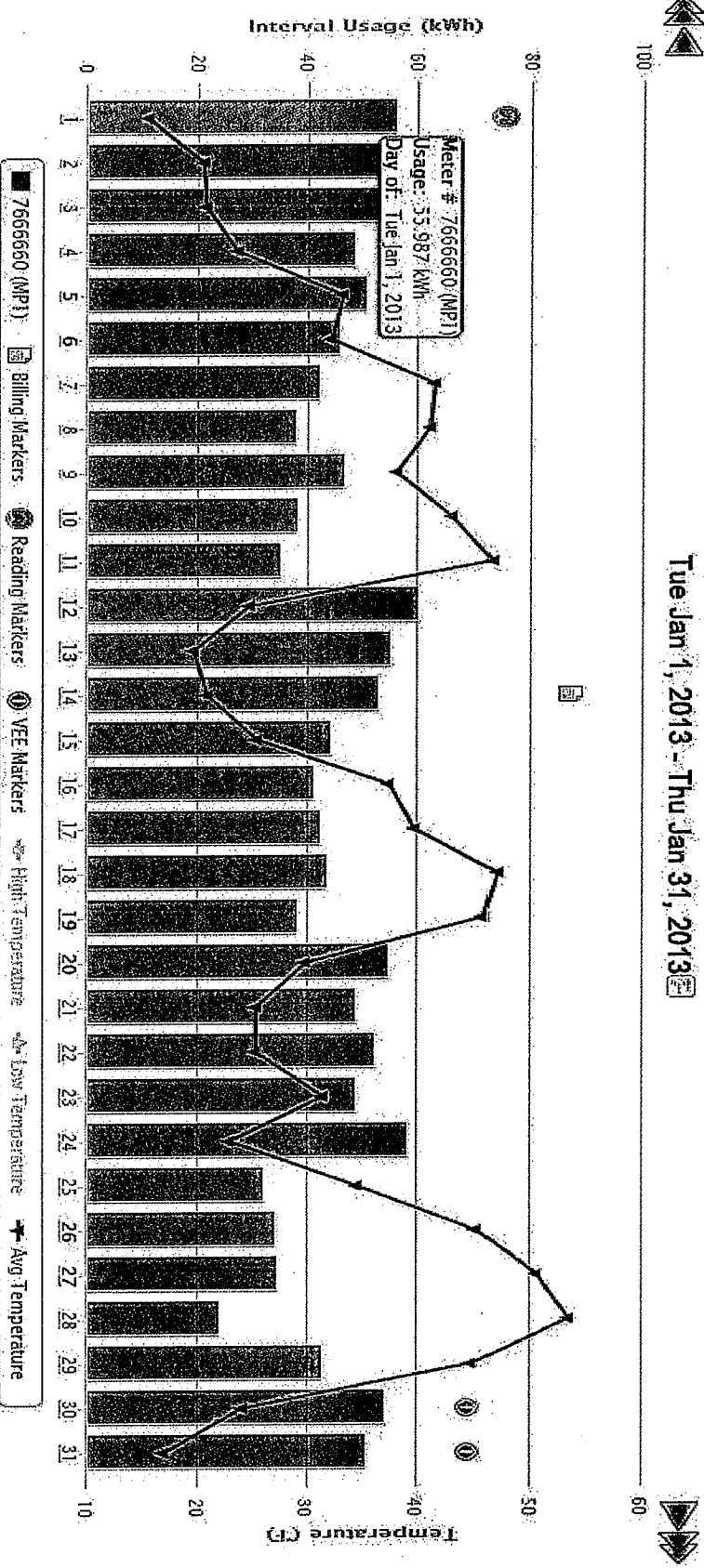
22/13/13

- Admin
- Dashboard
- Logout

MONTHLY DAILY

Tue Jan 1, 2013 - Thu Jan 31, 2013

DONALD HELWIG - 0000028 28 Solomon KS 67480 - 1011411



- 7666660 (MP1)
- Billing Markers
- Reading Markers
- VEE Markers
- High Temperature
- Low Temperature
- Avg Temperature



MDMEXPLORER

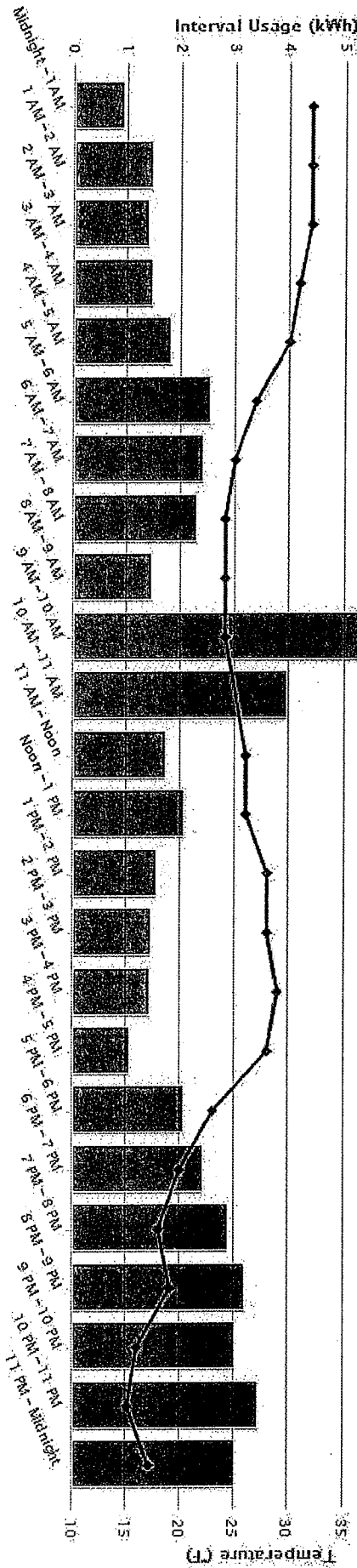
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[Admin](#) [Dashboard](#) [Logout](#)

MONTHLY DAILY HOURLY

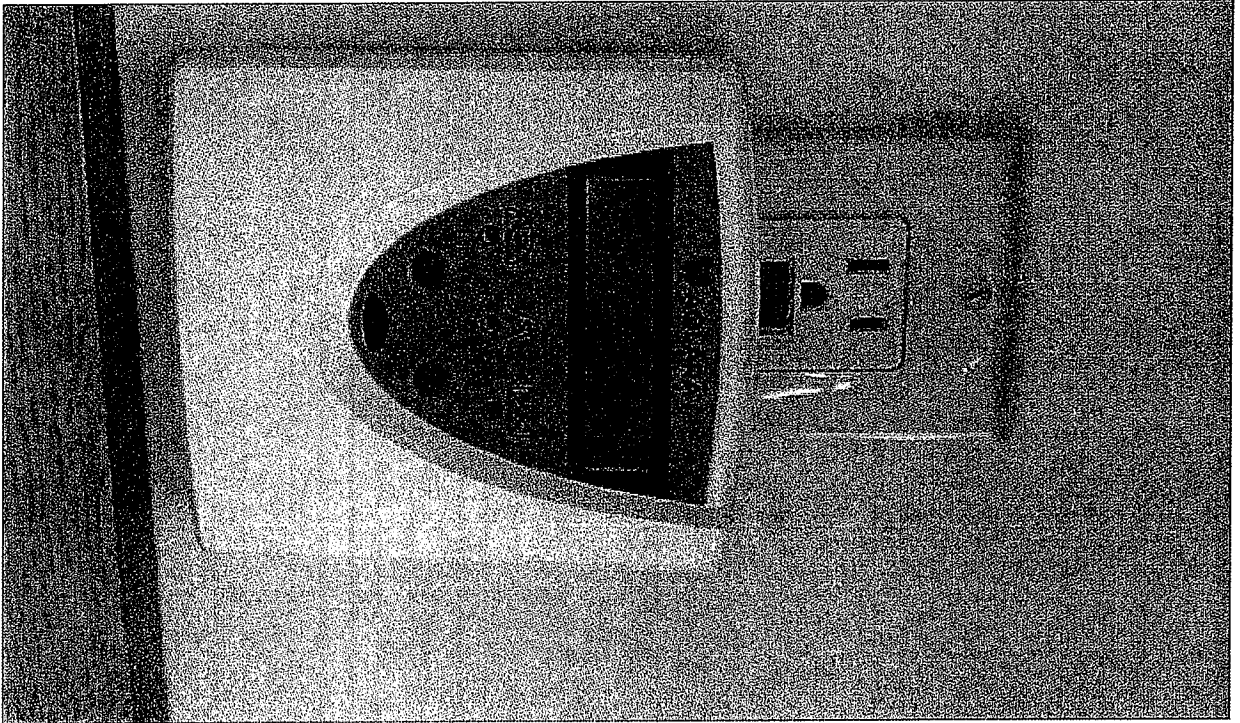
Wed Jan 30, 2013

DONALD HELLMIG - 0000028 28 Solomon KS 67480 - 70141411



7666660 (MP1) VEE Markers Avg. Temperature

~~TRD~~



~~ESU~~

Thank You