IDAHO POWER®
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MAGGIE BRILZ
Director, Pricing

IPC-E-06-01

May 1, 2007

Ms. Jean Jewell
Commission Secretary
Idaho Public Utilities Commission
472 West Washington Street
PO Box 83720
Boise, Idaho 83720-0074

Re: Phase One AMI Implementation Status Report

Dear Ms. Jewell:

Enclosed please find eight copies of Idaho Power's Phase One AMI Implementation Status Report. This report is filed in compliance with Idaho Public Utilities Commission Order No. 30102.

The Company previewed the information included in this report with Commission Staff on April 23. As stated in the report, the Company is committed to filing a supplement to this report no later than September 1, 2007 detailing the results of its in-depth financial analysis and the specifics on how it will proceed with AMI deployment.

If you have any questions regarding this report, please do not hesitate to contact me.

Sincerely

Maggie Brilz

Maggie Brilz

MB
cc: Ric Gale

P.O. Box 70 (83707)
1221 W. Idaho St.
Boise, ID 83702

IDAHO POWER®
An IDACORP Company

Advanced Metering Infrastructure (AMI) Status Report

Presented by Idaho Power Company
and the Idaho Public Utilities Commission

May 1, 2007

For clarity of understanding, the term AMR (Automated Meter Reading) has been upgraded to AMI (Advanced Meter Infrastructure), which better reflects the capabilities of the technology discussed in this report.

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Acronyms and Definitions

Due to the technical nature of this document, many abbreviations are used throughout to enhance readability. To avoid any confusion, use the table below as a guide to the acronyms and definitions of the terms used in this report.

Acronym	Description	Definition
AMR	Advanced Meter Reading	The components necessary to read a meter remotely using technology to retrieve meter-reading data through a one-way communication network.
AMI	Advanced Metering Infrastructure	Latest terminology for AMR to better reflect the expanded capabilities of two-way communication network. AMI systems measure, collect, and analyze energy usage information from advanced metering devices through various communication media. The infrastructure includes hardware, software, communications equipment, customer associated systems and data management software.
CIS	Customer Information System	Idaho Power's billing and customer system that contains all customer data utilized by Idaho Power employees to provide functionality for customer-related events such as billing, rates, service orders, and meter reading.
DCSI	Distribution Control Systems, Inc.	The vendor who sells the AMI power-line-carrier system Idaho Power implemented during the Phase One project.
EW	Energy Watch	The Critical Peak pricing program Idaho Power implemented in the Emmett area in 2005.
IEE	Itron Enterprise Edition®	The Itron product name of the Meter Data Management System Idaho Power purchased for the Phase One project.
IPC	Idaho Power Company	
IPUC	Idaho Public Utilities Commission	
MDMS	Meter Data Management System	A system that manages meter-reading data intended to validate the accuracy and completeness of the data and provide estimating routines to create billing-quality data. The system is also intended to compile the data to billing intervals for time-variant pricing programs.
MIRA	Multiple Input Receiver Assembly	Substation hardware that enables communication on multiple distribution feeders and phases at the same time, reducing the time it takes to locate and communicate with transponders.

Acronym	Description	Definition
MVRS	Manual Meter-Reading System	The software package and equipment Idaho Power purchased from Itron that facilitates the current manual meter reading process. This consists of the handheld devices that are used to collect the existing meter-reading data and the software to feed the information to the CIS.
NEXUS®	Nexus Energy Software	A hosted, Internet-based tool that Idaho Power contracted with Nexus Energy to provide customers with access to their hourly energy usage via the Idaho Power Web site.
TNS	TWACS® Network Server	This is the host software sold by DCSI that controls the signaling of information between the meter through power-line-carrier.
TOD	Time-of-Day	The Time-of-Use pricing program Idaho Power implemented in the Emmett area in 2005.
TWACS®	Two-Way Automatic Communication System	The DCSI AMI system Idaho Power installed during Phase One. The system uses power-line-carrier technology to communicate with the meter.
VEE	Validate, Estimate, Edit	A primary functional requirement of the MDMS system to validate meter data for accuracy and completeness and provide estimates for any missing interval data. This function also provides validation of any anomalies in the data and edits the data accordingly to achieve billing-quality data.
VSD	Variable Speed Drives	Customer equipment at the meter location that allows the customer to change the load of energy required to operate a piece of equipment.
XM	Extended Memory	A new meter transponder module developed by DCSI for TWACS® that has a rolling 7 days of hourly data stored in memory.

Part 1—Executive Summary

1. Purpose

Idaho Power Company (IPC) implemented a Phase One Advanced Metering Infrastructure (AMI)[1] System in 2004. A status report detailing the progress made and issues identified during Phase One, as well as IPC's two-year action plan for further evaluation and issue resolution, was filed with the Idaho Public Utilities Commission (IPUC) on December 30, 2005. As a result of its review of the Phase One status report, the IPUC issued Order No. 30102 directing IPC to file a report no later than May 1, 2007 specifically addressing the following issues:

A. Progress made on each issue identified in the Next Steps section of the December 2005 Status Report. The issues described in the Next Steps section centered around two main areas:

    1. Status of TWACS® System Issues;

    2. Status of MDMS Software Issues.

B. A more extensive analysis of potential benefits and costs.

C. An assessment of how IPC will proceed with AMI deployment, including an implementation time line.

2. Progress Summary

IPC has been very active improving upon the AMI system installed in Phase One. IPC has implemented numerous software upgrades and hot fixes in the past year and a half, the most significant of which was the Version 5 upgrade to the Meter Data Management System (MDMS) software. As a result of these efforts, all outstanding issues described in the previous report have been resolved, with the exception of the issue regarding meter compatibility with variable speed drives (VSD). IPC does not see this issue as a barrier to expanding AMI since relatively few VSD installations affect our metering equipment.

3. Updated Cost/Benefit Analysis

While IPC continues to consider other technologies, including a hybrid solution for AMI, at the present an AMI system utilizing TWACS® appears to meet the functional requirements for much of our service area. IPC is updating its in-depth financial analysis to incorporate revised pricing from various vendors for the system components needed to install AMI and to incorporate updated benefits examined during the past 15 months. In its December 2005 status report, IPC indicated its plan to conduct an in-depth financial analysis during the second half of 2007.

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[1] The term AMI refers to systems that measure, collect, and analyze energy usage information from advanced metering devices through various communication media on request or on a pre-defined schedule. This infrastructure includes hardware, software, communications equipment, customer associated systems, and data management software.

Following the IPUC's order directing IPC to file a report not later than May 1, 2007, IPC accelerated this analysis time line. However, IPC has not been able to complete the analysis in time to include the results in this report. A comprehensive final analysis will be completed no later than September 1, 2007 and included in a supplemental filing to the IPUC.

4. Conclusions and Future AMI Implementation

Resolution of the technology issues discussed in the Phase One report is critical for success of AMI and was required before further implementation can occur. IPC has been very active improving upon the AMI system installed in Phase One. As a result of these efforts, all outstanding issues described in the December 2005 report have been resolved with the exception of the issue regarding meter compatibility with variable speed drives (VSD). IPC does not see this issue as a barrier to expanding AMI since relatively few VSD installation affect our metering equipment and the vendor has delivered a solution that IPC is currently testing.

IPC is in the process of updating its in-depth financial analysis. This analysis will include several deployment scenarios as well as revised product pricing and benefit valuation. IPC will submit to the Commission no later than September 1, 2007, a supplement to this report detailing its assessment of how it will proceed with AMI deployment.

Part 2—Status of AMI Phase One

1. Background & Procedural History

IPC implemented an AMI[1] System in 2004. A status report detailing the progress made and issues identified during Phase One as well as the Company's two-year action plan for further evaluation and issue resolution was filed with the IPUC on December 30, 2005. As a result of its review of the Phase One status report, the IPUC issued Order No. 30102 directing IPC to file a report no later than May 1, 2007 specifically addressing the following issues:

A. Progress made on each issue identified in the Next Steps section of the December 2005 Status Report. The issues described in the Next Steps section centered around two main areas:

1. Status of TWACS® System Issues:

- Install necessary software upgrades;
- Evaluate new substation equipment to increase bandwidth ability;
- Evaluate new extended memory meter modules;
- Resolve 480-volt meter reading issue;
- Resolve issues concerning meter failures on variable speed drive customer equipment;
- Evaluate primary metering with the AMI vendor;
- Further evaluate tamper detection (energy theft detection) data;
- Evaluate the outage management abilities of AMI to identify operational benefits;
- Further investigate a solution for single-phase substations;
- Investigate AMI performance while substation maintenance occurs.

2. Status of Meter Data Management System (MDMS) Software Issues:

- Install Version 5.0 and conduct a functional test;
- Resolve issues concerning MDMS' ability to process hourly data for the two time-variant pricing programs implemented in Phase One.

[1] The term AMI refers to systems that measure, collect, and analyze energy usage information from advanced metering devices through various communication media on request or on a pre-defined schedule. This infrastructure includes hardware, software, communications equipment, customer associated systems, and data management software.

B. A more extensive analysis of potential benefits and costs.

C. An assessment of how IPC will proceed with AMI deployment, including an implementation time line.

2. Scope of Phase One

AMI was installed in IPC's Emmett and McCall operating areas. AMI installation in the Emmett operating area included the communities of Emmett, Sweet, Montour, Horseshoe Bend, Banks, Crouch, Garden Valley, Lowman, and the surrounding rural areas of these communities. AMI installation in the McCall operating area included the communities of McCall, Lake Fork, Donnelly, Cascade, New Meadows, Riggins, and the surrounding rural areas of these communities.

AMI was installed for residential and small and large general service customers. During Phase One, 23,474 AMI meters were installed with 10,742 AMI meters installed in the Emmett operating area and 12,732 meters installed in the McCall operating area. This deployment represented 97% of the total meters in the Emmett and McCall service areas.

Since the completion of the Phase One implementation in 2004, an additional 2,500 AMI meters have been installed in the Emmett and McCall areas due to customer growth. Also, TWACS® equipment has been installed in one more substation bringing the total to nine.

The Phase One AMI project included the installation of the following systems:

- **TWACS® System**—This system, supplied by Distribution Control Systems Inc. (DCSI) is a Two-Way Automatic Communication System (TWACS®) consisting of software and physical equipment located in the field. This system utilizes power-line-carrier technology to communicate with meters and other TWACS® enabled equipment. This is the data collection system.

- **Itron Enterprise Edition (IEE)® Meter Data Management System (MDMS)**—This software system is the data management system for validating, editing, and estimating hourly consumption data retrieved by the TWACS® system and converting this interval data into billing quantities for time-variant pricing programs. In addition, the MDMS is the data source for other operational needs such as outage management, load research, customer usage information, etc.

- **Nexus Energy Software**—This Internet-based software system is the data presentment system through which customers can access their energy use data using the IPC Web site (www.idahopower.com).

Figure 1 illustrates how each of these three systems function within IPC's overall AMI system.

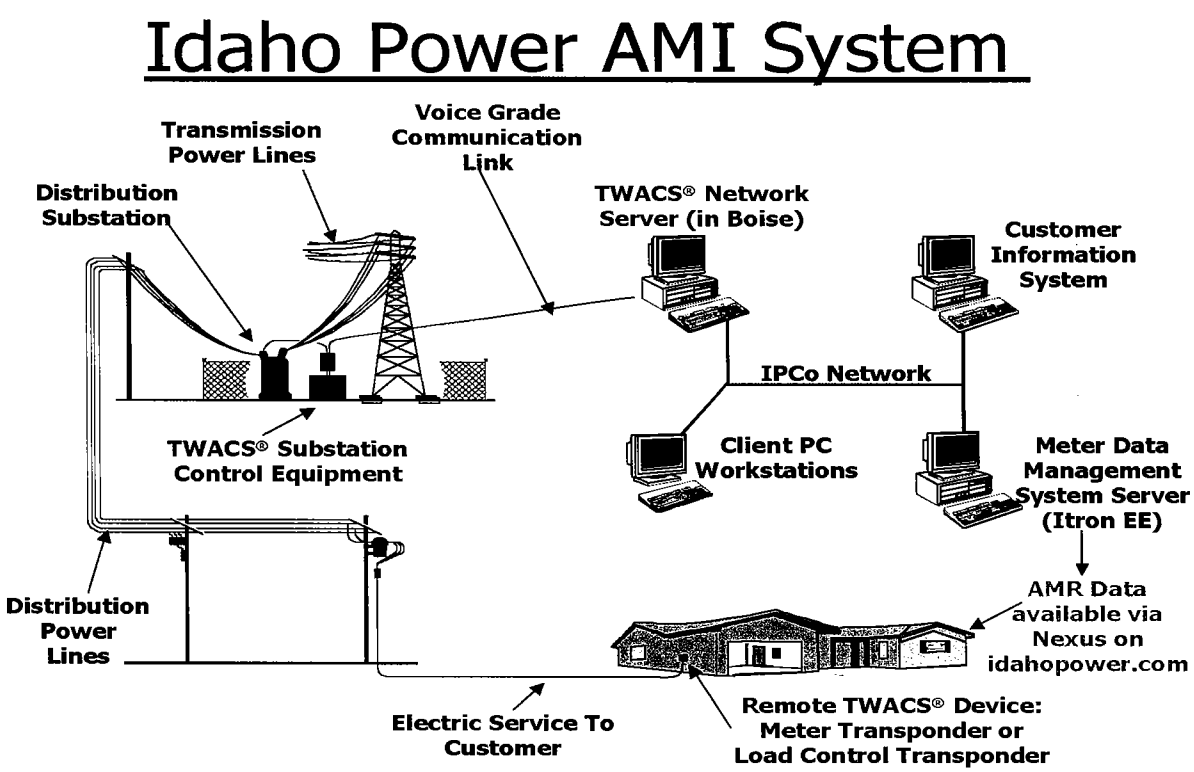

Figure 1 Idaho Power Company's AMI System

3. Status of Next Steps Identified in December 2005 Status Report

A. Specific Activities

During the past 15 months, IPC has investigated and evaluated the issues identified in the December 2005 Status Report. Following is the current status of each issue.

- **TWACS® Software Upgrade**—IPC has performed numerous TWACS® Network Server (TNS) software upgrades and hot fixes in the past year and a half. The current version in service is TNS 2.4. All known issues have been resolved and the software is performing as expected. IPC is investigating the next generation of TNS software in order to remain current with this evolving technology.

- **Bandwidth Capability**—Since the initial deployment of Phase One, DCSI developed and made available the Multiple Input Receiver Assembly (MIRA) for installation at the substation. IPC installed and evaluated MIRA. This enhancement improved the speed of data retrieval and reduced the frequency of missing hourly data.

- **Extended Memory (XM) Modules**—IPC purchased, installed, and tested meters with extended memory (XM) modules. The module has been successful in retrieving historic data. This new feature will enable time-variant rates.

- **480 Volt Meters**—All existing 480-volt meters in the Phase One deployment areas were retrofitted with new hardware that solved IPC's issues with those installations. No further problems have been reported on 480-volt meter installations since the retrofit.

- **Variable Speed Drive (VSD) Compatibility**—IPC is still working with DCSI to resolve the meter failure issues associated with VSD compatibility. IPC has installed the latest hardware revision and is currently testing it in the field. As a result of these efforts, all outstanding issues described in the previous report have been resolved, with the exception of the issue regarding meter compatibility with variable speed drives (VSD). IPC does not see this issue as a barrier to expanding AMI since relatively few VSD installations affect our metering equipment, and the vendor has delivered a solution that IPC is currently testing. IPC and DCSI are dedicated to resolving the issue associated with VSDs.

- **Primary Metering**—Since the initial deployment of Phase One, DCSI developed and made available a TWACS® solution for primary metered customers. IPC installed and evaluated the primary metering equipment. The solution is working well and IPC is satisfied this issued is resolved.

- **Tamper Detection**—IPC has evaluated the TWACS® tamper detection data over the past year and has determined that the value of tamper data could be enhanced with further development of additional analysis tools. IPC will research the availability and capability of tamper detection software.

- **Outage Assessment**—IPC has used DCSI's outage assessment software for the past two years for cycling air-conditioners and for the analysis of the TWACS® power outage management capabilities. IPC is confident that the outage assessment software can enhance IPC's outage management capabilities as AMI is expanded system-wide.

- **Single-Phase Substations**—After further evaluation of the single-phase substation solution, IPC has determined TWACS® is not cost effective for stations that serve a small number of customers. This is true for three-phase or single-phase substations. None of IPC's single-phase stations serve enough customers for TWACS® to be economically feasible. Therefore, IPC will analyze other technologies for use in these areas.

- **Temporary Substation Transformers**—IPC used mobile transformers and temporary TWACS® installations during the upgrade of the Cascade substation and during the replacement of the metal-clad switch gear at Emmett substation. In both cases the system and equipment performed adequately and no significant issues were encountered.

B. Status of the Meter Data Management System

The IEE® MDMS was not functional during Phase One, requiring manual intervention for bill processing associated with the two time-variant pricing programs offered in the Emmett area.

IPC has worked continuously with Itron since beginning deployment of Phase One. IPC stated in the December 2005 Status Report that a solution to the MDMS issue was expected to be implemented in April of 2006. IPC has tested and implemented numerous versions of this quickly developing software. The work has focused mainly around developing and testing the complex algorithms required to Validate, Estimate and Edit (VEE) hourly energy use data to support time-variant rates. After steadfast dedication by IPC and Itron employees, IEE® version 5, revision 11 was implemented in March of 2007. The software now has the specific functionality to support time-variant pricing, including critical-peakpricing. IPC is collecting hourly energy-use data on all 25,000 customers in the Phase One deployment area and supporting the Time-of-Day (TOD) and Energy Watch (EW) programs offered in the Emmett area by providing validated billing data to our billing system. IPC is working closely with Itron to insure the needs for functionality and scalability are addressed in future software releases.

IPC is currently developing daily work processes and the system functionality to support high-volume data validation and processing for billing.

C. Other Issues Further Investigated

While IPC continues to consider other technologies, including a hybrid solution for AMI, at the present an AMI system utilizing TWACS® appears to meet the functional requirements for much of our service area. IPC is updating its in-depth financial analysis to incorporate revised pricing from various vendors for the system components needed to install AMI. Variouse implementation scenarios will be evaluated as part of the financial analysis.

IPC has further investigated, identified, and quantified benefits available from AMI. Detailed results of this benefit investigation are included in Section 4.

4. AMI Benefits

A. General Discussion

Benefits of AMI can vary significantly from utility to utility based upon each utility's existing cost structure, geography, and customer base. IPC has investigated the benefits associated with AMI. Those benefits have been categorized as:

- Quantified (those for which a specific value has been determined);
- Unquantifiable (those for which a value is recognized, but for which an amount cannot be determined);
- Benefits not likely to provide significant value.

B. Quantified Benefits of AMI

Metering Operational Benefits

Meter reading operations change significantly through the introduction of AMI technology. IPC was able to identify the following benefits associated with full implementation of AMI:

- Reduction of the manual meter-reading workforce;
- Reduction of the Manual Meter-Reading System (MVRS) software-maintenance fees, hand-held data-collector maintenance fees, and repair costs;
- Elimination of erroneous meter readings are essentially eliminated reducing the number of re-read orders;
- Reduction of estimated meter readings due to access or weather issues are reduced;
- Elimination of the need to perform remote connect/disconnects in the field (this benefit requires additional devices and investment in order to be realized);
- Reduction of vehicle purchases, maintenance, and fuel costs associated with the manual meter reading process;
- Reduction of safety incidents and accidents that occur while performing metering functions in the field (reading, connect/disconnect and maintenance);
- Elimination of field visits for move-in/move-out orders that do not physically require a meter connect or disconnect;
- Enhanced ability to identify failed meters within 24 hours.

Customer Service Benefits

Based on Phase One, full implementation of AMI is estimated to result in a reduction in full-time employees at IPC's Customer Service Center. This benefit is derived from the following:

- Reduction in the cost associated with customer calls due to the reduction in erroneous bills, improved credibility with customers, fewer billing complaints filed with the IPUC, and the reduction in call length due to the availability of more energy use data.:
- Reduction in time spent in the Customer Service Center reviewing exception reports from manual meter reading, issuing orders, and completing billing adjustments due to erroneous readings and estimated readings.

Outage Restoration Benefits

Communication with the meter provides two types of information that are useful in outage situations. The first being, a communication response from the meter signifies there is an electrical connection to the customer and power is available at the customer's premises. Conversely, a lack of communication with the meter indicates that power may not be available.

a. Restoration Confirmation

Typically, crews respond to an outage situation and the problem is one isolated event. Frequently, however, there are multiple events that are not apparent to the Lineman. AMI equipment can be used to verify that all customers are back in service before the Lineman or Line Crew leaves the location, thereby eliminating a return trip and restoring power to the remaining customers sooner.

b. Avoided Dispatch

The AMI System can verify if the cause of the outage is due to a problem with IPC facilities. Customers who call with a power outage often are unaware of the cause of the problem. If the cause of the outage is actually the customer's equipment, the customer needs to hire an electrician to make repairs. If IPC receives a reply after pinging the meter, then IPC and the customer are assured that the electrical problem involves the customer equipment. IPC responded to 2,588 such calls in 2006.

Often during a power outage situation, Line Operation Technicians are called to assist the Lineman and/or Line Crew. AMI has the ability to "ping" the meters, and that provides information to determine the scope of the outage. IPC anticipates that with a more clear definition of the outage that there will be a reduction in the number of times it is necessary for the Line Operation Technicians to be involved with the outage.

c. Overloaded Equipment

At times transformers are overloaded from customer load. As a result, the fuse on the transformer melts and the circuit is broken, as designed. In these situations, a trouble call is dispatched, the fuse is replaced, and the transformer is potentially replaced as well. With AMI

data, the amount of actual load on a transformer could be compared to the transformer size and the transformer could be replaced prior to the fuse melting. IPC's typical procedure is for the Lineman to replace the fuse and then the next day the crew would replace the transformer. With AMI overload data, the trouble call would be eliminated and a second outage for the customer avoided.

Distribution Engineering and Operations Benefits

AMI has the ability to provide voltage and the energy-load data for each distribution circuit, thereby allowing IPC to optimize the planning and operation of the distribution system. Also, AMI can work in concert with IPC's outage management system to improve the accuracy of customer outage data.

Irrigation Peak Rewards Program

Currently, our Irrigation Peak Rewards program utilizes electronic timer switches to turn-off irrigation pumps at specified intervals. Each year the customer chooses to change his participation the timers have to be manually reprogrammed in the field. With AMI technology at these locations, the timer could be remotely controlled and a field visit would not be necessary to customize the switches to satisfy the customer's needs.

C. Unquantifiable Benefits of AMI

Unquantifiable benefits are those AMI-related benefits that don't translate into manpower reductions or some other form of actual cost savings for IPC. The unquantifiable benefits include the following:

Customer Satisfaction

AMI deployment results in increased customer satisfaction in several areas:

- Customers will no longer need to provide IPC access to meters located on their property on a monthly basis. This access requires customers to control their pets and to locate fences and other objects so as not to conflict with IPC's access. In addition, having a stranger on one's property causes irritation for some customers.
- More accurate bills due to elimination of meter reading errors and estimated bills.
- Flexibility to participate in a time-variant pricing program if desired. Large-scale time-variant pricing programs will require additional investment in our Customer Information System (CIS).
- Energy-usage data made available to customers to help them make educated decisions regarding their energy usage.
- AMI's ability to communicate with the meter will help validate that all services have been restored following an outage, rather than waiting for the customer to call again.

Reduced Read-to-Pay Time

The manual read process allows for a three day period to collect the meter data and convert the data into a bill for the customer. With AMI, there is potential to reduce this time and therefore gain a one-time improvement in IPC's cash flow. IPC questions whether this one-time benefit will actually be realized. Those customers who pay their bill on a certain date every month may find that receiving their bill a couple days sooner probably won't effect when they pay.

Meter Operations—Theft Detection

The AMI technology offers features that assist in investigating potential instances of energy theft. These features are helpful, but are not expected to solely result in any significant cost savings. Some utility companies have identified as much as a 1% increase in revenues due to improved theft detection. However, during the Phase One AMI deployment very few instances of energy theft were discovered while performing approximately 24,000 meter exchanges and inspections. In addition, IPC is cautious about a potential increase in attempted theft when IPC employees are no longer visiting customer premises monthly.

High Bill/Energy Cost Inquiries

More accurate, timely data provided by AMI enables faster resolution of billing questions.

Additional Pricing Options

The more detailed usage information made available by AMI, whether it is hourly, daily, or grouped into time blocks, can provide customers with useful information to make informed decisions and more directly manage their energy consumption.The ability to capture individual customer usage data on an hourly basis allows for a adoption of alternative pricing structures to provide price signals to customers that encourage changes in usage patterns. Even small changes in consumption due to modifications in price signals could provide significant benefits. Implementing an AMI system that enables time-variant rates and other demand response programs can help meet future energy demands.

D. Potential Benefits Unlikely to Provide Significant Value

The following potential benefits were reviewed by IPC and after careful consideration at this time were deemed unlikely to provide a significant benefit:

- **Sale of used meters**—Replacement of meters during AMI implementation allows for the used meters to be sold to other electric utilities. The bulk of meter purchases today are solid-state electronic meters. With many utilities looking toward implementing some form of advanced metering, there is very little value in used mechanical meters.

- **Summary Billing**—Customers with multiple accounts and a summary bill could have the meters read and usage billed quicker with AMI. There are relatively few summary-bill customers, so this benefit has very little value.

- **Selectable bill date and bill frequency**—The ability of AMI to daily obtain customer usage potentially allows for customer choice of billing date and

frequency. While this is a potential customer benefit this option possesses some risk of increased costs. IPC does need to maintain a somewhat uniform distribution of billing dates throughout the month in order to achieve system efficiency.

- **Meter reading for other utilities**—With specific enhancements, the AMI system has the capability to read other utility meters (gas, water, etc.). While this is a potential benefit, IPC has not had any discussions with other utilities or AMI vendors to quantify the likely increases in AMI licensing and maintenance costs.

- **Load research equipment**—AMI has the potential to provide hourly data for all customers. This could eliminate the need for customer load research meters that are used to sample and predict energy use characteristics. However, customer load research recently began collecting volt-amp reactive measurements for residential services. The typical residential AMI meter does not currently provide this data.

- **Optimized transformer and service wire sizing**—AMI can provide customer specific energy usage profiles and therefore the transformer and service wire can be optimized for delivering energy consumed by the customer with higher reliability. There is a cost balance to be considered between fewer standard sizes of transformers and service wires versus numerous custom-sized transformers and service wires. Customization also limits operational flexibility as system loads change over time.

- **End-of-Line Voltage**—Upon request, line voltage can be retrieved for a limited number of commercial meters, thus ensuring quality of service for the customer. This will benefit in determining when upgrades to the distribution system are necessary.

- **Power factor losses**—With additional investment, TWACS® can deliver power factor data on a limited number of commercial meters. This enables administering more equitable rates. This has very limited potential benefit since IPC already recovers its costs in the existing rates. This may be a shift between customers, but neutral to IPC.

- **Power quality monitoring**—With additional investment, TWACS® can deliver basic power quality data for a limited number of commercial meters. AMI can promote good power quality information, but actual power quality monitoring equipment is much more sophisticated and collects far more data than TWACS® can transmit.

- **Distribution Automation**—With additional investment, TWACS® has the ability to remotely control and communicate with distribution equipment such as reclosers, capacitors and generators. IPC has an existing radio-controlled capacitor system that will not be replaced by TWACS® until the end of the existing equipment's life.

- **Market segmentation and targeting**—AMI's ability to provide hourly usage data for all customers helps identify homogenous subgroups within traditional customer classifications that can be used for developing targeted programs.

E. AMI Benefits to Demand Side Management Programs

IPC's two demand response programs—A/C Cool Credit and Irrigation Peak Rewards—utilize switches to turn off customer load, thereby managing peak loads on IPC's system. Although TWACS® can provide the same service with the added benefit of two-way communication with each switch, it does not appear to be cost effective to replace the existing system with TWACS®.

IPC offered the TOD and EW Pilot Programs in the Emmett Valley again during the summer of 2006. A report detailing the results of the programs was filed with the IPUC on February 28, 2007. While EW, a critical peak, time-variant pricing program, provided a statistically significant change in customer usage patterns, the TOD program did not. IPC is currently evaluating the potential benefits available through the EW Program.

5. Conclusions and Future AMI Implementation

Resolution of the technology issues discussed in the Phase One report is critical for success of AMI and was required before further implementation can occur. IPC has been very active improving upon the AMI system installed in Phase One. As a result of these efforts, all outstanding issues described in the December 2005 report have been resolved with the exception of the issue regarding meter compatibility with variable speed drives (VSD). IPC does not see this issue as a barrier to expanding AMI since relatively few VSD installation affect our metering equipment and the vendor has delivered a solution that IPC is currently testing.

IPC is in the process of updating its in-depth financial analysis. This analysis will include several deployment scenarios as well as revised product pricing and benefit valuation. IPC will submit to the Commission no later than September 1, 2007, a supplement to this report detailing its assessment of how it will proceed with AMI deployment.