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## Utilities with Limited Resources Get Boost from Hosted Systems

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Investor-owned utilities (IOUs) are rapidly adopting meter data management systems (MDMS) to manage, process, and distribute usage information collected by advanced metering infrastructure (AMI). Most IOUs are large operations, serving millions of customers, and have the staffing resources necessary to deploy as well as support the complex hardware and software requirements required by MDMS.

Smaller, resource-constrained utilities and cooperatives are being driven by the same business requirements and regulatory mandates that prompt IOUs to invest in AMI. However, these companies don't always have the money and personnel necessary to employ a full-fledged MDMS to handle their volumes of AMI-produced usage data. As a result, many smaller utilities cannot effectively extract the full value available from AMI.

A hosted MDMS service may provide a solution for smaller, resource-constrained utilities and cooperatives. Hosted systems offer a lower cost and lower risk approach to receiving the same benefits available from enterprise-class MDMS. They not only can make AMI data understandable to utility customers, but also enable a number of operational benefits to the utility.

### Reduced Cost and Maintenance

Hosted MDMS can significantly lower costs for utilities. In a hosted system, a third party maintains and manages usage and associated data for several different utilities, an arrangement that allows smaller utilities to fully leverage their existing AMI systems without having to administer an MDMS implementation. The hosted solution allows the utility to avoid expenses by treating MDMS as a service.

For example, utilities using hosted MDMS do not have to worry about paying upfront licensing costs for the software and on-going maintenance fees, which are assessed each year. When a utility deploys a hosted MDMS, it buys the right to use the application for a certain number of meters serviced by the utility. The approach allows the utility to use the software without paying the total costs associated with the software. Many smaller utilities would be challenged to pay these charges.

What's more, complex MDMS systems must be installed and maintained by certified IT professionals. Smaller utilities and cooperatives may not have the in-house staff necessary to maintain an MDMS. Even if utilities are willing to invest in staff to handle MDMS, the highly trained personnel required may not be available. Hosted MDMS reduces the burden of maintaining in-house IT resources and eliminates all concerns about keeping the MDMS software updated and up and running. With the rapidly evolving features of MDMS applications, having the service provider responsible for upgrades allows smaller utilities to get the new features quickly without the risks of managing the upgrade process.

Data storage and management may also be a challenge for small or cooperative utilities that are not used to handling the volumes of data associated with MDMS. The efficient management of this mission-critical usage repository requires specialized database administration skills, which using the hosted model can be allocated to support multiple utilities. A hosted solution also ensures the usage and associated utility information is partitioned off separately from the data of other utilities to maintain security. Securing each utility's data is so

important that some utilities employ third-party auditors to ensure their systems are properly protected.

All MDMS data should be maintained in redundant, failover systems for backup that guarantee data reliability and continuity in case the primary repository fails. Installing a secure and redundant repository for metering data is expensive and requires special expertise. Again, the typical or cooperative utility may be unable to afford the measures necessary to properly secure data in an in-house MDMS.

With hosted MDMS services, utilities do not have to worry about up-front costs of implementation and data storage, or long-term support and maintenance. The fees associated with hosted MDMS can be budgeted against the utility's recurring revenue stream. MDMS costs go up only when the number of installed meters increases. Hosted solutions are cost-effective because the host company amortizes its costs across all participating companies, lowering actual costs for individual utilities.

### **Additional Benefits**

Not only do MDMS solutions offer lower up-front and maintenance costs, they are extremely flexible and easier to implement because the host company has done the hard work of setting up the software. For example, hosted MDMS can be preconfigured to pull data in from any AMI system. In addition, they can be used to aggregate and analyze data from existing engineering and analysis, outage management, and customer information systems – ultimately processing this data so it can be presented to utility employees and their customers.

Plus, MDMS providers focused on servicing small and cooperative utilities with hosted solutions will most likely have established relationships with leading application providers to smaller utilities – like the data cooperatives. Thus, hosted-service providers have a strong interest and responsibility to develop and maintain the adapters required to interface their MDMS systems with the latest versions of applications that complement MDMS. This can also alleviate the resources and risks of keeping the MDMS interfaces current.

### **Planning for Hosted MDMS**

How does a small or cooperative utility plan for hosted MDMS? First, the utility must define clear-cut objectives and outline requirements. The utility should ascertain whether it plans to use a hosted MDMS as an interim solution, as in a pricing pilot, or as a long-term solution for utility-wide meter data management, for example.

The utility also should identify its business priorities for using the MDMS. This will allow the utility to initiate the highest priority functions first. The utility should also look at the standard options provided by the MDMS provider so a gap analysis can be done to determine to what extent the product can be used out-of-the-box. If the primary business drivers for MDMS map into the following core areas, then you are likely to find few gaps with a standard hosted offering:

- Data validation, editing, and estimation,
- Billing determinant calculations and support for time-based rates
- Online usage presentation for customers
- Peak-day transformer load analysis

Hosted MDMS solutions provide an excellent way for small and cooperative utilities to take advantage of the data produced by AMI systems while keeping down the total cost of ownership of MDMS. The traditional model of MDMS, with up-front software, hardware, and database licensing costs and a significant investment in IT resources might make sense for large IOUs, but utilities with resource constraints should take the time to consider a hosted MDMS model as a solution for maximizing the rewards of AMI.