
Testimony of The Utility Consumers' Action Network on San Diego Gas and Electric's Test Year 2008 General Rate Case

**Prepared Testimony of
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**on behalf of
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California Public Utilities Commission
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I. Introduction

This testimony is presented on behalf of the Utility Consumers' Action Network (UCAN) by Jeffrey A. Nahigian, Senior Economist with JBS Energy Inc. Mr. Nahigian has over 20 years experience working on energy related issues and has appeared before this Commission on numerous occasions. His qualifications are included in Attachment A to this testimony.

In this testimony, UCAN provides its recommendations for SDG&E's funding request for customer services operations and maintenance (O&M) expenses and capital expenditures as well as some associated requests for funding information technology (IT) expenses also associated with SDG&E's customer service functions. With regard to SDG&E's proposed funding of customer services O&M expenses, UCAN recommends reductions in the following categories:

- SDG&E requests incremental funding for many activities that will no longer be necessary once its approved advanced metering project is fully deployed (2008-2010) and were not consistently considered in SDG&E's AMI business case analysis.
- One-time costs that should be excluded from the forecast because they will not recur over the rate case cycle.
- One-time costs that occur in 2008 that should be amortized over the rate case cycle (for illustration here we used DRA's proposed five-year rate case cycle).
- Incremental costs associated with SDG&E's meter reading workforce that will be eliminated with the deployment of AMI (not included as a benefit in the AMI business case analysis).
- Costs associated with lifting the current moratorium on direct access; and
- Costs associated with accommodating future participants in the Community Choice Aggregation program.

The following table provides a summary of UCAN's proposed TY 2008 forecast of Customer Accounts and Customer Services and Information expenses and capital spending for SDG&E.

Table 1
UCAN Recommended TY 2008 Expenses
(-000 \$)

FERC #	SDG&E	UCAN	Difference
586.1	\$ 1,767	\$ 751	\$ (1,016)
586.2	\$ 1,889	\$ 509	\$ (1,380)
586.4	\$ 3,635	\$ 3,618	\$ (17)
586.6	\$ 914	\$ 366	\$ (548)
586.7	\$ 309	\$ 124	\$ (185)
597.0	\$ 354	\$ 206	\$ (148)
902.2	\$ 794	\$ 317	\$ (477)
902.3	\$ 622	\$ 213	\$ (409)
902.4	\$ 40	\$ 15	\$ (25)
902.6	\$ 1,459	\$ 252	\$ (1,207)
878.1	\$ 1,113	\$ 728	\$ (385)
902.0	\$ 8,992	\$ 8,474	\$ (518)
903.1	\$ 14,716	\$ 13,906	\$ (810)
903.3	\$ 3,879	\$ 3,533	\$ (346)
903.5	\$ 3,789	\$ 3,481	\$ (308)
908.0	\$ 13,355	\$ 7,578	\$ (5,777)
Total	\$ 57,627	\$ 44,071	\$(13,556)

UCAN Recommended 2008 Capital Budget
(-000 \$)

Budget Item	SDG&E	UCAN	Difference
#2259	\$ 1,119	\$ -	\$ (1,119)
#811.3	\$ 600	\$ -	\$ (600)
#811.2	\$ 1,120	\$ -	\$ (1,120)
#831.2	\$ 895	\$ -	\$ (895)
Total	\$ 3,734	\$ -	\$(3,734)

II. Customer Services O&M Expenses

A. *The Affects of SDG&E's Advanced Metering Project on SDG&E's Current General Rate Case Request*

The CPUC's authorization (Dec. 07-04-03) of SDG&E's Advanced Metering Infrastructure Project (AMI) has a direct and large influence on

SDG&E' current request for general rate case relief. SDG&E states that when it estimated expenses for its test year 2008 Customer Service Operations (CSO) it based those estimates on the continuation of its customer service operations without deployment of its AMI project – which begins deployment in test year 2008 and ends in 2010 – so it could provide an “apples to apples” comparison to recorded 2005 costs (SDG&E-9, p. 3). It states that any cost savings associated with AMI during this period (i.e., meter reading, billing, customer services field, credit and collections, and customer contact center; see SDG&E-9, p. 3, fn 1)) would be credited back to ratepayers on a formulaic basis as proposed by SDG&E in its AMI proceeding (SDG&E Supplemental Testimony in A. 05-03-015, Chapter 14, March 28, 2006).

While this may sound reasonable on its face, a more thorough examination of SDG&E's (CSO) expense forecast for test year 2008 reveals that there are many costs being requested in this GRC that will be avoided by AMI that have not been considered by SDG&E in its AMI filing and thus, will not be credited back to ratepayers as SDG&E claims. SDG&E is requesting incremental costs in TY 2008 – such as additional meter reading training, counseling and safety seminars – that will be entirely avoided once SDG&E's AMI system is fully deployed by end-of-year 2010. These costs were not considered in SDG&E's AMI filing and therefore are not included in the benefits formula (to be credited back to ratepayers). However, these costs will be avoided when SDG&E's AMI deployment is completed.

For example, SDG&E requests costs in TY 2008 for O&M associated with maintaining its current inventory of automated meter reading (AMR or AMO) system that currently serves its large commercial and industrial customers and remotely reads 4,000 meters in “hard to read” areas of its service territory. All of these meters will be changed out as part of SDG&E's AMI project. The ongoing O&M expenses associated with those meters by the Commission is already

authorized in Dec. 07-04-043 and SDG&E's formulaic benefits proposal will not properly credit ratepayers for the future avoidance of those costs – unless the Commission adjusts SDG&E's TY 2008 request accordingly.

Other costs requested in the GRC appear to be inconsistent with avoided costs calculated in SDG&E's AMI filing and if authorized in this GRC could go straight into SDG&E's shareholder pockets. For instance, SDG&E's AMI filing forecasts total meter reading savings in 2011¹ of \$8.2 mm (SDG&E Workpapers to Chapter 3 in A. 05-03-015, March 28, 2006) while its TY 2008 forecast for FERC Account #902.0 (adjusted by 2% year beyond 2008) is \$9.5 mm and for all FERC #902 subaccounts amounts to \$12.6 mm – which implies that somewhere between \$1.4 mm and \$4.5 mm in 2011 meter reading expenses may not be passed back to ratepayers through SDG&E's AMI benefits formula.

The Commission needs to evaluate SDG&E's TY 2008 funding request with an eye towards understanding the nature of the actual costs contained in this filing that will be avoided by AMI, and whether those avoided costs have been properly and consistently considered in any benefits formula proposed by SDG&E. It is vitally important that the Commission “connect the dots” between SDG&E's current GRC request and its authorized AMI. Otherwise the benefits associated with SDG&E's AMI project may flow into shareholders pockets instead of where they should flow – into ratepayers' pockets.

SDG&E's AMI project – regardless of the scenarios considered--has always been short on operational benefits. However, while the Commission has expressed “concern” over the lack of operational benefits, it has also made it very clear to all parties, (not least of which is SDG&E) that some form of AMI will be authorized by the Commission for all the utilities as expressed in California's

¹ Meter reading savings from AMI are prorated during the deployment years (2008-2010). Full meter reading savings from full deployment; therefore, being in 2011.

Energy Action Plan. Given this message, it should come as little surprise that a utility would present an AMI business case analysis with fewer operational benefits – knowing it can then pass any unrecognized operational benefits back to shareholders while also understanding that there is little risk that it's AMI project will NOT be authorized by the Commission.

In the course of evaluating SDG&E's GRC filing, UCAN has found numerous costs in this filing that will be avoided by AMI – yet were either a) not considered as AMI benefits or b) are greater than the benefits assumed in the AMI business case, implying fewer operational benefits associated with SDG&E's AMI project than were considered and authorized by the Commission.

SDG&E's AMI filing proposed that AMI benefits and costs would be recorded in a balancing account for the years 2007-2011 (A. 05-03-015, SDG&E July 14, 2006 Amended Testimony, Chapter 14, p. 8) based on the illustrative benefits and costs calculations contained in that exhibit (Attachment 14-5). Those tables do not appear to contain all of the benefits that should accrue to AMI deployment because they do not reflect the incremental costs increases requested by SDG&E in this filing – and those incremental cost (e.g. increased meter reader safety training, etc.) increases should be avoided by AMI deployment.

A further complication exists because SDG&E's AMI filing envisioned that post-2011 expenses would be reviewed in its test year 2012 general rate case which again is inconsistent with SDG&E's proposal in this proceeding to extend the general rate case cycle to 6 years. Thus, it is not only important to identify those costs here and adjust them appropriately, but it is equally as important to evaluate these costs and benefits during the post test year period, to prohibit the utility from inappropriately passing them onto its shareholders.

B. Costs Associated with SDG&E's Advanced Metering Operations Expenses

In 2008, SDG&E requests \$6.151 million for activities associated with the function “advanced metering operations” (AMO or AMR). These costs are contained in FERC Accounts #586.1, #586.2, #586.4, #586.6, #586.7, #597, #902.2, #902.3, and #902.4 and are reported in workpapers supporting SDG&E-9 (p. 12). SDG&E describes these costs as costs necessary to support the interval data meters (IDR) installed for its commercial and industrial customers with loads larger than 200 kW and for supporting costs associated with the 4,000 remotely read meters in the Borrego Springs area. This is a separate function from SDG&E's proposed advanced metering infrastructure (AMI) project approved in Dec. 07-04-043.

“AMR is defined as a system which provides daily consumption data used for monthly billing, typically a 1 way communication from the meter to the utility, and usually entails retrofitting existing electromechanical meters to improve meter “reading” efficiencies via “drive-by” radio frequency communications. In addition, this group supports the legacy communications systems (wired and wireless telephone network) that is used for the current large commercial and industrial, load research and demand response program meters.

IT costs charged to AMR include activities performed by the AMR Communications group. This group is responsible for maintaining the performance of the approximately 4,000 AMR devices currently deployed within SDG&E's high cost to read territory (Borrego Springs and nearby area) and the large C&I customer interval meters requiring telephone communications. (UCAN #26-7(a)).

It is inappropriate to include these costs in the current general rate case, because they a) will no longer be necessary when SDG&E fully deploys its CPUC-approved AMI project and b) are already funded through SDG&E's AMI project. All of these meters – both for the large commercial and industrial customers as well as the 4,000 meters in Borrego Springs--will be replaced as part of SDG&E's AMI project – and SDG&E's AMI filing did provide the avoidance of these costs as a benefit. Thus, it is inappropriate to authorize these costs in this

proceeding, because a) the ongoing operation and maintenance costs associated with SDG&E's AMO functions are contained in SDG&E's AMI funding and b) these costs will not be passed back as AMI benefits because they were not considered as such in SDG&E's AMI business case.

In addition to adjusting this account to appropriately provide ratepayers the operational benefits associated with SDG&E's AMI project, a number of the accounts listed as "advanced metering operations" (AMO) need individual adjustments to exclude either one-time costs (nonrecurring) costs or inappropriate costs. The following sections of this testimony describe those adjustments before UCAN provides its universal adjustment to AMO expenses to properly account for AMI benefits.

1. FERC Account #586.1 – Meter Expenses – Relocations

This FERC subaccount contains the expenses charged for labor and non-labor for changing, relocating, disconnecting, reconnecting, removing and reinstalling electric meters. SDG&E forecasts that it will add a single-phase meter tester classification during 2008 at a cost of \$175,000. UCAN recommends adjusting 2008 TY expenses downward by this amount because it is unreasonable for SDG&E to add a new single-phase meter testing classification to this account given that in 2008 SDG&E will begin to phase-out all of its single-phase electromechanical meters in the course of its AMI deployment over the 2008-2010 period. This reduces SDG&E's 2008 TY request for #586.1 from \$1.767 million to \$1.592 million in 2008.

2. FERC Account #586.2 – Meter Expenses – Testing

The expenses charged to this account include labor and non-labor costs for inspecting, relocating, and testing electric meters in the field as well as the shop and also includes the Electric Meter Tester Apprentice Program training costs.

UCAN's main adjustments to this sub-account exclude SDG&E's forecast for a new apprentice class in 2007 (\$92,000) and an adjustment to pay scale for

that class in 2008 (\$220,000). UCAN made this adjustment because it is unjustifiable for SDG&E to claim that it will spend ratepayer money on new apprentice meter tester classes for testing meters that will begin to become obsolete in TY 2008 – and will be entirely obsolete by the end of 2010--once SDG&E's AMI project is fully deployed.

UCAN begins its forecast of TY 2008 expenses for this account by using recorded 2006 adjusted costs for #586.2 of \$1.218 million that is \$257,000 less than SDG&E's forecast for 2006. For 2007, UCAN adds back in \$30,000 associated with an increase to pay for the 2005 Apprentice Meter Tester Program and an additional \$24,000 in 2008 for another tiered pay scale increase for the Apprentice class of 2003 (Workpapers to SDG&E-9, p. 38, lines 17 and 22). This results in a final UCAN forecast for TY 2008 #586.2 expenses of \$1.272 million compared to SDG&E's forecast of \$1.889 million – or a reduction of \$617,000 from SDG&E's forecast.

3. FERC Account #902.2 – Meter Reading and Data Measurement Operations

This FERC sub-account contains expenses for accurately reading and recording customers' electric meter reads and primarily covers remote meter reading activities. UCAN proposes two adjustments to this account. The first is a \$5,000 reduction in the 2007 forecast associated with additional software maintenance due to growth in IDR (interval data recorder) meters. In 2008, we propose a reduction of \$23,000 also forecast necessary by SDG&E due to increased IDR meter growth. As previously stated, these IDR meters will be entirely phased out and replaced by SDG&E in its AMI project and it is; therefore, unreasonable to approve incremental funding for these meters. This reduces SDG&E's TY 2008 forecast from \$794,000 to \$766,000 – and adjustment of \$28,000.

4. Account 902.3 and 902.4 – Electric and Gas Telemetry

UCAN recommends using a two-year (2005-2006) average for the two telemetry accounts to reflect a common pattern of falling costs (2006 costs 13-15% below 2005 costs in both accounts), probably associated with lower telecommunications costs. Expenses are reduced by \$89,000.

a. Account 902.3

SDG&E's forecast for Account 902.3, for electric measurement data operations, which largely includes telephone costs, was projected to increase by 6.3% more than inflation from \$585,000 to \$648,000 in 2006 and then was projected to fall back to \$622,000 in 2008. All costs are nonlabor.

Actual 2006 expenses were \$511,000 – 21% less than the 2006 forecast and 13% less than 2005 expenses.

SDG&E's explanation for the increase to 2008 starts with a 2% forecast increase in the number of meters from 2005-2006, which should have amounted to \$12,000 on a \$585,000 base but ended up at \$36,000. There was a further forecast 1% increase in 2007 (should be \$6000, ended up being \$16,000). Finally, there was a projected increase in load profile meters in 2006 that is reversed in 2007-2008. (Workpapers to SDG&E-9, p. 240).

In other words, the maximum increase based on customer growth that SDG&E could justify would be \$18,000, but they included a \$52,000 increase. Even the \$18,000 increase for customer growth is unwarranted given the large decline in 2006.

UCAN recommends a 2008 forecast based on a two-year average of 2005-2006, or \$548,000, a reduction of \$86,000 from SDG&E's 2008 forecast.² Use of this average more than compensates for customer growth from 2007-2008.

² Costs in 2001-2004 were considerably lower, so including earlier years in the analysis would not be appropriate.

b. Account 902.4

Account 902.4 is a very small account (\$40,000 recorded in 2005 and forecast in 2008). Because we observe the same pattern of falling 2006 costs (to \$34,000), probably related to lower telecommunications costs, UCAN recommends a 7.5% (\$3,000) reduction to Account 902.4 using a two-year average consistent with Account 902.3.

5. Adjustment for Advanced Metering Operations

After making individual adjustments to these particular sub-accounts for inappropriate costs or one-time expenses, UCAN proposes an overall or general adjustment to these sub-accounts to account for the expenses forecast associated with operating and running its advanced metering operations (AMO). As discussed, this adjustment is necessary because the costs of AMO will eventually be entirely avoided when SDG&E fully deploys its AMI project 2010.

To make this general adjustment UCAN used a SDG&E response to a DRA data request asking how SDG&E would adjust certain incremental meter reading costs will be impacted by SDG&E's AMI deployment (DRA #104-5). In that response, SDG&E stated that the noted meter reading expenses (SDG&E-9, Table SDG&E-NSS-EF-30) would be reduced by 2.8% (2008), 35.0% (2009) and 62.2% (2010). Given these percentages all add up to 100% (by year-end 2010) it is then assumed these costs are entirely (100%) avoided by AMI in 2011 and subsequent years. Using this assumption, UCAN then extended these percentages out to five years (i.e., 100% in 2011 and 100% in 2012) as a proxy for the DRA's proposed five-year rate case cycle. We then took a five-year average of these percentages (i.e., 60%) as a proxy for the average annual costs that would be avoided by AMI and applied it to the AMO costs contained in SDG&E's TY 2008 forecast. The result is that UCAN then adjusted all AMO costs downward by 60% to approximate the average annual AMO expenses SDG&E would avoid over a five-year rate case cycle based on its three-year AMI deployment.

The following Table 1 shows UCAN’s recommended adjustments to FERC sub-accounts that will be avoided by SDG&E’s AMI deployment.

Table 2

UCAN Adjustment for AMO Costs
('000 \$ for TY 2008)

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
FERC #	SDG&E Forecast	UCAN Reduce	UCAN Adjusted	SDG&E AMO Costs	UCAN AMO	Non AMO Costs	Adjusted AMO Only	UCAN Final
#586.1	\$ 1,767	\$ (175)	\$ 1,592	\$ 1,401	\$ 1,401	\$ 191	\$ 560	\$ 751
#586.2	\$ 1,889	\$ (617)	\$ 1,272	\$ 1,889	\$ 1,272	\$ -	\$ 509	\$ 509
#586.4	\$ 3,635		\$ 3,635	\$ 29	\$ 29	\$ 3,606	\$ 12	\$ 3,618
#586.6	\$ 914		\$ 914	\$ 914	\$ 914	\$ -	\$ 366	\$ 366
#586.7	\$ 309		\$ 309	\$ 309	\$ 309	\$ -	\$ 124	\$ 124
#597.0	\$ 354		\$ 354	\$ 247	\$ 247	\$ 107	\$ 99	\$ 206
#902.2	\$ 794	\$ (28)	\$ 766	\$ 748	\$ 748	\$ 18	\$ 299	\$ 317
#902.3	\$ 622	\$ (89)	\$ 533	\$ 563	\$ 533	\$ -	\$ 213	\$ 213
#902.4	\$ 40	\$ (3)	\$ 37	\$ 40	\$ 37	\$ -	\$ 15	\$ 15
Total	\$ 10,324							\$ 6,118
Difference	\$ (4,206)							

UCAN began with the TY 2008 expense forecast (column a) for the sub-accounts identified by SDG&E as containing costs associated with its AMO function. The next column (b) then lists the UCAN’s recommended adjustments for specific sub-accounts as previously discussed. The next column titled “UCAN Adjusted” adjusts SDG&E’s forecasted TY 2008 expenses downward by the adjustments in the previous column. The column “SDG&E AMO Costs” (column d) then lists the costs SDG&E reports in its testimony that are associated with its AMO function (Workpapers to SDG&E-9, p. 12) and the next column then adjusts those costs downward (“UCAN AMO”) to equate to total remaining sub-account costs where UCAN’s individual adjustment results in AMO costs that are greater than the adjusted FERC sub-account account total. The next column (f) then reports residual non-AMO costs that remain in the sub-account after UCAN’s adjustments. The next column titled “Adjusted AMO Only” then adjusts UCAN’s proposed AMO costs (column e) downward by 60% to account

for AMO costs avoided by SDG&E's AMI deployment – with the final column adding UCAN's proposed AMO and non-AMO costs.

This results in UCAN's recommended 2008 TY expense forecast for these sub-accounts. UCAN recommends total expenses of \$3.919 million versus SDG&E's proposed forecast of \$10.236 million – a reduction of \$6.317 million in TY 2008.

6. FERC Account #902.6 – Meter Reading Expenses – Information Technology Expenses

UCAN reviewed the DRA draft testimony on Information Technology (IT) as part of case coordination. DRA bases its forecast of SDG&E IT expenses for both shared services and non-shared services on recorded 2006 expenses (which were far below the 2006 forecast) plus customer growth.

UCAN agrees with this method as a general rule, but makes a further adjustment beyond DRA's recommendation in one sub-account – FERC Account 902.6. This account involves IT support for meter reading. The costs in this account are likely to be subsumed under Advanced Metering Infrastructure (not funded by this rate case) in the near future. As previously discussed, the AMO (Advanced Metering Operations) function at SDG&E deals with two sets of meters – interval meters installed for large industrial customers, and meters that allow for automatic meter reading (AMR). Both of these meter types will be replaced in the course of AMI deployment. This fact means that as the on-line date for AMI approaches, we should expect costs for additional programming and support expenses for these meters to decline and for staff to be reassigned to the AMI project (funded outside the GRC). It is unjustifiable for SDG&E to add costs in this rate case allegedly to send people to tech shows for an obsolete technology when a new one is being implemented.

We already see the decline in this account, with 2006 spending that is 16% (\$181,000) below SDG&E's forecast. The increases to 2008 are not credible, and

we would expect to see additional staff redeployment from these functions to AMI functions.

UCAN therefore recommends a 2008 starting point that is one-third below the recorded 2006 level (\$569,000 labor, \$61,000 non-labor) reflecting the reduced need to provide IT support for obsolete meters that are being phased out.

We then apply the same 60% reduction for AMO costs that are phased out due to AMI but where benefits have not been provided to customers in the AMI balancing account. Our net recommendation is \$228,000 labor and \$24,000 nonlabor over a five-year rate case cycle.

SDG&E's request is \$1,459,000. DRA recommends \$1,040,000. UCAN's total recommendation of \$252,000 (taking into account both reduced staffing and the phasing out of this type of cost) is \$1,207,000 less than SDG&E's request and \$788,000 less than DRA's recommendation.

7. FERC Account #878.1 – Meter Records Office Expense

This account contains the costs of labor, materials used, and expenses incurred to change-out gas meters and gas regulators. SDG&E forecasts TY 2008 expenses of \$1.113 million – that is a 336% increase above 2005 recorded expenses of \$336,000. UCAN primarily supports the DRA's recommended TY 2008 forecast of \$340,000. In the alternative, if the Commission does not accept DRA's recommendation for #878.1, UCAN recommends capping the TY 2008 forecast for this account at recorded 2006 levels of \$728,000. SDG&E has failed to provide a reasonable forecast for this account. As importantly, the costs for this account should also be impacted by SDG&E's AMI project where the costs for similar functions have already been authorized (with no benefits provided back to ratepayers).

SDG&E forecasts that it will now remove 18,000 meters per year beginning in 2006 when historically it has removed 3,000 meters per year

(SDG&E-9, p. 374) – a challenging goal. However, when evaluated on a cost per meter basis SDG&E’s forecast makes little sense.³ Dividing recorded costs for 2005 (\$336,000) by 3,000 meters yields an average cost per change-out of \$112/meter. Applying this figure to 2006 recorded costs results in a budget for approximate 6,500 meters being changed out versus the 18,000 meters SDG&E claims it would change during 2006. Indeed, SDG&E’s 2008 TY forecast (\$1.133 million) that it will only change out a little over 10,000 meters per year, yet the utility claims it needs to change out 18,000. Thus, SDG&E has not provided a consistent and reasonable evaluation to the Commission to justify the significant increase to this account.

In addition, SDG&E’s AMI deployment should also affect SDG&E’s policies on changing out gas meters. First, between the years 2008-2010, every single gas meter SDG&E owns will be retrofit with some type of AMI module – which provides the opportunity to also change out gas meters without an additional separate visit by a technician. In addition, SDG&E’s AMI project already includes costs associated with changing out 3% of SDG&E’s gas meter population. Thus, SDG&E’s AMI project already provides a) an opportunity to increase efficiencies and reduce costs and b) funding for SDG&E to replace 3% of its gas meters (A. 05-03-015, SDG&E Chapter 12, p. 1, March 2006), and c) a balancing account if more gas meters need to be changed out.

Finally, SDG&E has provided the avoidance of gas meter change-outs as a benefit of its AMI project. Unfortunately the calculation of those AMI benefits is not consistent with the costs SDG&E requests in account #878.1. In its AMI filing, SDG&E calculates a per meter change-out labor benefit of \$26.66 per meter that it proposes to provide back to ratepayers that is grossly inconsistent with the costs

³ While UCAN is aware there are variations in the costs of meter change-outs. However, evaluating costs on this average cost per meter basis provides an intuitive and reasonable understanding of the ramifications of SDG&E’s forecast.

it proposes to charge ratepayers in account #878.1. Given this, UCAN recommends that the Commission adopt the DRA's TY 2008 forecast for this account and in the alternative cap 2008 expenses for account #878.1 at recorded 2006 costs.

8. FERC Account #586.4 – Meter Expenses – Turn On and Shut Off

The activities charged to this account include establishing and terminating service to electric meters. SDG&E forecasts that TY 2008 expenses for this account will amount to \$3.635 million.

Similar to the accounts discussed above, there is great likelihood that SDG&E may avoid – either in large part or in total--costs contained in this account after its AMI project is deployed.

As part of the settlement authorizing SDG&E's AMI project in Dec. 07-04-043, SDG&E was required to issue a new request for proposals (RFP) to vendors. The settling parties agreed that SDG&E would include an addendum to its AMI RFP to provide a separate pricing proposal to SDG&E for providing electric remote disconnect/connect technology – that would allow SDG&E to remotely connect or disconnect electric service to any residential electric meter.

The remote connect/disconnect function was not a part of SDG&E's original March 2006 AMI filing – so that consideration of operational costs or benefits associated with this function were never a part of SDG&E's original business case analysis. This means that if SDG&E's AMI project does finally include this function, there is no existing method for calculating what those benefits would be and how they would be allocated back to ratepayers.

While UCAN believes this alone should justify some adjustment to this particular sub-account, we make no such recommendation at this time, due to the uncertainty over whether SDG&E will receive a favorable vendor bid for providing an electric remote connect/disconnect function. However, if SDG&E

does receive a favorable bid for this function and includes it in its AMI project deployment, the Commission will need to re-evaluate this AMI function within the context of post-test year ratemaking to ensure that ratepayers receive the operational benefits associated with reduced connect/disconnect costs.

9. FERC Account #902.0 – Meter Reading Expenses

a. AMI Benefits of Avoided Meter Reading Expenses and SDG&E's Current TY 2008 Forecast for Account #902.0

In evaluating SDG&E's forecast for Account #902.0, UCAN compared the TY 2008 forecast with SDG&E's forecast of avoided meter reading benefits caused by SDG&E's impending AMI project deployment. SDG&E's forecast of meter reading benefits was developed in workpapers to its AMI application (A. 05-03-015, Chapter 3) and UCAN includes two sets of those workpapers that calculate meter reading benefits as Attachment B to this testimony (Attachment B includes two worksheets from SDG&E, one for gas and one for electric meter reading benefits).

In its comparison of SDG&E's current TY 2008 forecast for Account #902.0 and its AMI benefits calculation of avoided Account #902.0 costs resulting from AMI deployment, UCAN believes SDG&E's AMI benefits calculation only provides back non-loaded labor costs for #902.0. Put more plainly, it appears that SDG&E's AMI benefits calculation may credit ratepayers with the avoided labor (and non-labor) costs for #902.2 but it does not credit customers with the avoidance of pensions and benefits directly associated with that labor. If SDG&E's AMI benefits calculation does not include these costs in the calculation, then SDG&E's shareholders will receive the avoided costs of pensions and benefits for meter readers in Account #902.0 and not SDG&E's ratepayers. This issue has ramifications for post-test year ratemaking in this proceeding and will, therefore, be addressed in the Mr. Marcus' testimony concerning post-test year ratemaking issues.

b. UCAN Adjustments to Account #902.0

SDG&E forecasts TY 2008 expenses for FERC Account #902.0 of \$8.992 million. This account covers the labor and non-labor costs associated with reading customer meters. It also includes costs associated with safety training for meter readers. As part of the coordination process, UCAN has reviewed DRA's analysis of SDG&E's #902.0 and supports the DRA's exclusion of safety training and additional supervisors. However, UCAN proposes to make some additional adjustments to this account to reduce certain costs that appear to be one-time expenses and costs that appear unreasonable and unnecessary given SDG&E's impending AMI deployment.

First, UCAN excludes, as a non-recurring cost, \$33,000 in 2006 associated with additional compensation from a Company/Union agreement to compensate meter readers for working one of the Christmas Holidays in 2005 (Workpapers to SDG&E-9, p. 230, line 13). UCAN then excludes an incremental \$59,000 in 2006 associated with SDG&E re-establishing its meter reading Safety Event Program. Given that SDG&E will begin deploying its AMI project in 2008, it is unnecessary to spend incremental ratepayer funds on additional safety programs beyond those that already exist for SDG&E's meter readers.

For the forecast of 2007 expenses, we exclude an incremental \$75,000 associated with covering the costs of additional meter reading training, counseling, and coaching as unnecessary given the impending deployment of AMI. We also exclude \$73,000 of 2007 forecast expenses associated meter reading route adjustments because SDG&E's AMI project already includes funding of approximately \$154,000 associated with re-routing meter readers during the AMI deployment during 2008-2010 (A. 05-03-015, SDG&E March 2006 Testimony, Workpapers Supporting Chapter 3). Forecast 2007 costs are also adjusted downward by \$120,000 to exclude incremental costs for additional meter reading training, counseling and coaching for the same reasons as they are excluded in 2006. UCAN also recommends an adjustment to exclude \$94,000 in 2007

expenses associated with the warranty associated with handheld meter reading devices because this also appears to be a one-time cost in 2007. Finally, we propose to reduce the 2007 expense forecast downward by \$64,000 for additional meter reading re-routing. Taken together these adjustments reduce SDG&E's TY 2008 forecast for #902.0 by \$518,000 from \$8.992 million to \$8.474 million.

C. Customer Records and Collections

1. FERC Account #903.1 – Customer Contact and Services

SDG&E recommends a 2008 TY forecast of \$14.716 million for this account. This covers the utility's labor and non-labor costs for its Customer Contact Center (CCC) and AMI Policy and Strategy Staff.

UCAN recommends a number of adjustments to this account. First, we reduce the 2007 expense forecast by \$176,000 to eliminate SDG&E's forecast of incremental expenses for handling CARE-related calls. These costs appear to be incremental costs for handling CARE-related calls above those already contained in SDG&E's base rates. The CPUC though has stated that SDG&E's incremental costs for CARE should be recovered from public good funding (Dec. 05-04-052, p. 52-53). In that decision the Commission denied SDG&E's funding request because it was not convinced that those costs were incremental to the CARE-related costs already contained in base rates. However, in this filing, it is clear that SDG&E is requesting incremental funding for CARE-related calls and therefore these incremental costs should be funded through public good funds.

Next, UCAN proposes to exclude all incremental costs associated with the handling of direct access functions because we do not agree that the current moratorium on direct access will be lifted in 2008. SDG&E forecasts a total of \$257,910 associated with direct access-related calls and UCAN proposes to exclude this entire amount from #903.1.

SDG&E also forecasts an incremental expense increase of \$552,0921 associated with the need to deal with Community Choice Aggregation issues. While UCAN is somewhat skeptical of the level of these costs, we propose to exclude all of the costs and revenues associated with Community Choice Aggregation (CCA) from this general rate case and booking them to a memorandum account. Doing so will provide the Commission with a more thorough understanding of the costs and associated revenues associated with accommodating CCA to ensure a) that CCA participants pay their fair share of costs and are not subsidized by SDG&E's ratepayers and b) the Company's shareholders do not benefit from an inflated forecast of costs associated with CCA.

If the Commission does not adopt UCAN's position on CCA and DA, we recommend at a minimum, that TY 2008 expenses for 903.1 be reduced by \$154,000 to account for one-time costs as admitted by SDG&E (Workpapers to SDG&E-9, p. 249-250, lines #37 and #41). Taken together UCAN recommends TY 2008 forecast for #903.1 of \$13.906 million – a reduction of \$810,000 from SDG&E's proposed forecast.

2. Account 903.3

Account 903.3 is the credit and collections account for SDG&E. As SDG&E itself notes when doing its forecasting, costs in this account fluctuate over time. SDG&E itself uses a five-year average to construct part of its estimate.

It is notable that SDG&E's 2006 forecast was \$213,000 above 2006 actual spending, despite SDG&E's use of a five-year average to forecast one sub-component of the costs that caused SDG&E's forecast to be reduced by \$100,000.

Rather than providing a number of small granular adjustments for this account that are shown to be unjustified by the divergence between 2006 forecast and actual costs, UCAN recommends a 2008 forecast based on a five-year

average of 2002-2006 dollars per customer,⁴ multiplied by the forecast of 2008 customers. This ties the 2008 forecast closer to the number of customers (the cause of credit and collections) which is superior to SDG&E's budget approach that has been less accurate in forecasting 2006 expenses. Our only adjustment is for the change of department scope (moving \$156,000 for major markets collections to a SCG shared service account in 2006). To construct this average, the 2006 figures need to be adjusted upwards to add back in major markets costs included in 2002-2005 that were shifted to this shared-service area in 2006. The base for 2008 becomes this adjusted five year average, multiplied by the number of 2008 forecast customers. The transfer of major markets costs to a shared service account is then subtracted back out UCAN's forecast for 2008 is \$3,533,000, which is \$346,000 less than SDG&E's forecast.

The table below shows costs in 2001-2006 recorded as well as SDG&E's 2006-2008 forecast, in total and in dollars per customer.⁵ It also shows the derivation of UCAN's recommended forecast.

⁴ The 2001 costs are similar in total to other years, but the labor-nonlabor breakdown is not typical of later years, so 2001 was not included.

⁵ The customer figures are the sum of electric plus gas customers from UCAN DR 1-54.

Table 3: Account 903.3, Recorded Data and UCAN and SDG&E Forecast s

	total 2005 \$ '000			customers	2005 \$/customer			
	labor	nonlabor	total		labor	nonlabor	total	
Recorded								
2001	\$2,384	\$882	\$3,266	2,032,978	\$1.173	\$0.434	\$1.607	
2002	\$2,777	\$723	\$3,500	2,066,779	\$1.344	\$0.350	\$1.693	
2003	\$2,884	\$581	\$3,465	2,096,265	\$1.376	\$0.277	\$1.653	
2004	\$3,006	\$396	\$3,402	2,130,271	\$1.411	\$0.186	\$1.597	
2005	\$3,240	\$574	\$3,814	2,161,702	\$1.499	\$0.266	\$1.764	
2006	\$3,046	\$541	\$3,587	2,192,053	\$1.390	\$0.247	\$1.636	
SDG&E Forecast								
2006	\$3,201	\$599	\$3,800	2,192,053	\$1.460	\$0.273	\$1.734	
2007	\$3,233	\$606	\$3,839	2,225,217	\$1.453	\$0.272	\$1.725	
2008	\$3,266	\$613	\$3,879	2,258,513	\$1.446	\$0.271	\$1.718	
Development of UCAN Forecast								
2006 recorded	\$3,046	\$541	\$3,587	2,192,053	\$1.390	\$0.247	\$1.636	
Add back major markets	\$149	\$7	\$156	2,192,053	\$0.068	\$0.003	\$0.071	
2006 adjusted to use in 5-year average	\$3,195	\$548	\$3,743	2,192,053	\$1.458	\$0.250	\$1.708	
5-year average with 2006 adjusted					\$1.417	\$0.266	\$1.683	
UCAN 2008 base	\$3,107	\$582	\$3,689	2,258,513	\$1.417	\$0.266	\$1.683	
Adjust out major market transfer to 2200-0354	(\$149)	(\$7)	(\$156)					
UCAN 2008 forecast	\$2,958	\$575	\$3,533	2,258,513	\$1.310	\$0.255	\$1.564	
SDG&E 2008 forecast	\$3,266	\$613	\$3,879	2,258,513	\$1.446	\$0.271	\$1.718	
SDG&E>UCAN	\$308	\$38	\$346				\$0.153	

3. Account 903.5

Spending in Account 903.5 (customer billing and records) is shown in total and on a dollar per customer basis in the table below. Recorded costs exhibit an upward trend in this account, but are still \$262,000 less than SDG&E's forecast in 2006.

UCAN recommends a 2006 base for this account (given the upward trend) and adds SDG&E's incremental spending except for two items, \$100,000 for mobile home park billing and \$22,000 for bill redesign costs. While the Commission directed the electric and gas utilities to provide billing services to owners of submetered mobilehome parks it also mandated that the park owners should pay for the costs of those billing services and not utilities' ratepayers (Dec. 04-11-033). The identified bill redesign costs of \$28,000 (a graphics consultant and a pamphlet for customers explaining the new bill format) are one-

time costs to be averaged over the rate case cycle.⁶ Recorded data, as well as UCAN's forecast, are shown in the next table. UCAN's forecast of \$3,481,000 is \$308,000 less than SDG&E's forecast of \$3,789,000.

Table 4: Account 903.5, Recorded Data and UCAN and SDG&E Forecasts

	total 2005 \$ '000			customers	2005 \$/customer		
	labor	nonlabor	total		labor	nonlabor	total
Recorded							
2001	\$2,399	\$248	\$2,647	2,032,978	\$1.180	\$0.122	\$1.302
2002	\$2,711	\$434	\$3,145	2,066,779	\$1.312	\$0.210	\$1.522
2003	\$2,578	\$277	\$2,855	2,096,265	\$1.230	\$0.132	\$1.362
2004	\$2,691	\$267	\$2,958	2,130,271	\$1.263	\$0.125	\$1.388
2005	\$2,880	\$209	\$3,089	2,161,702	\$1.332	\$0.097	\$1.429
2006	\$3,147	\$254	\$3,401	2,192,053	\$1.436	\$0.116	\$1.552
SDG&E Forecast (minus mobile home park billing in 2008)							
2006	\$3,333	\$330	\$3,663	2,192,053	\$1.520	\$0.151	\$1.671
2007	\$3,332	\$229	\$3,561	2,225,217	\$1.497	\$0.103	\$1.600
2008	\$3,428	\$261	\$3,689	2,258,513	\$1.518	\$0.116	\$1.633
Development of UCAN Forecast							
UCAN 2006 base	\$3,147	\$254	\$3,401				
2008 SDG&E increment	\$195	\$7	\$202				
less UCAN adjustments							
mobile home billing	(\$100)		(\$100)				
bill redesign averaging		(\$22)	(\$22)				
UCAN 2008 forecast	\$3,242	\$239	\$3,481	2,258,513	\$1.436	\$0.106	\$1.541
SDG&E 2008 forecast							
including mobilehome							
park billing	\$3,528	\$261	\$3,789	2,258,513	\$1.562	\$0.116	\$1.678
SDG&E>UCAN	\$286	\$22	\$308	2,258,513	\$0.126	\$0.010	\$0.136

III. Customer Services Operations Capital

As part of the directed coordination process with the DRA, UCAN supports DRA's TY 2008 capital forecast for Customer Services Operations capital spending – with the exception of the following adjustments.

⁶ We recognize SDG&E's response to DR 12-06 that claims that the costs are ongoing costs, but the nature of the costs as directly explained on the face of SDG&E's workpaper contradicts the data response. A utility doesn't need a new pamphlet explaining its new billing design every year.

A. *Replace TOU Meters (CLOCKS) – BI #2259*

SDG&E forecasts capital spending of \$1.119 million in TY 2008 to replace time-of-use (TOU) meters because their clocks and internal calendars are expiring in the next few years. It spent \$207,000 in 2005 and estimates meter capital expenses in 2006 of \$358,000 and \$1.119 million per year in 2007 and 2008. UCAN proposes a capital forecast for 2007 of \$207,000 and a zero budget in 2008 because SDG&E admits it will replace these obsolete TOU meters through its AMI deployment beginning in 2008.

“Assuming the CPUC approves SDG&E’s AMI proposal as currently fashioned, SDG&E is planning to replace the TOU meter replacements described in UCAN DR-01-33 through the course of normal AMI deployment. AMI is expecting to install these meters between September 2008 and August 2009 based on current CPUC project approval, which is expected in mid-April 2007”. (UCAN DR-12-7).

Of course that approval did arrive for SDG&E as timed, so there is little need for this capital project. Providing recorded 2005 should be sufficient funding for SDG&E to change out TOU meters that need immediate attention given that recorded 2006 costs were on pace to be less than 2005 recorded costs. Finally, the Commission should note that SDG&E did not identify this cost as an operational benefit associated with AMI – making it all that more important that the Commission adopt UCAN’s recommendation for this capital budget item.

B. *Direct Access – BI #811.3*

SDG&E forecasts \$600,000 in capital to change its customer information and billing systems to accommodate the re-instatement of direct access. UCAN recommends a TY 2008 forecast of zero for this budget item. It is speculative, at best, to assume that direct access will be re-instated by the test year. And SDG&E makes no compelling showing that its service to existing direct access customers has been inadequate nor that its existing systems cannot serve the anticipated future demands of direct access customers.

C. Community Choice Aggregation – BI #811.2

SDG&E forecast capital spending of \$1.12 million in 2008 to make changes to its customer information and billing systems to accommodate Community Choice Aggregation (CCA). SDG&E offers no showing that CCA is being actively pursued by any San Diego municipal entities. Other than Chula Vista, UCAN is unaware of any other San Diego municipalities that have an interest in CCA. Given Chula Vista's waning interest, it seems imprudent for SDG&E to make this investment until a serious expression of interest develops. UCAN makes the same recommendation for this capital budget item as it does for other costs and revenues associated with CCA. Exclude them from this general rate case and subject them to memorandum account treatment, as previously discussed.

D. Meter Reading Routing – BI #831.2

SDG&E included \$895,000 in 2008 capital spending to automate its meter reading rerouting tasks. It states that if is AMI project is authorized by the Commission it will not make this capital expenditure. Accordingly, UCAN recommends a reduction from SDG&E's TY 2008 capital spending forecast by \$895,000.

IV. Customer Services and Information Expenses

A. FERC Account #908.0 – Customer Services and Outreach

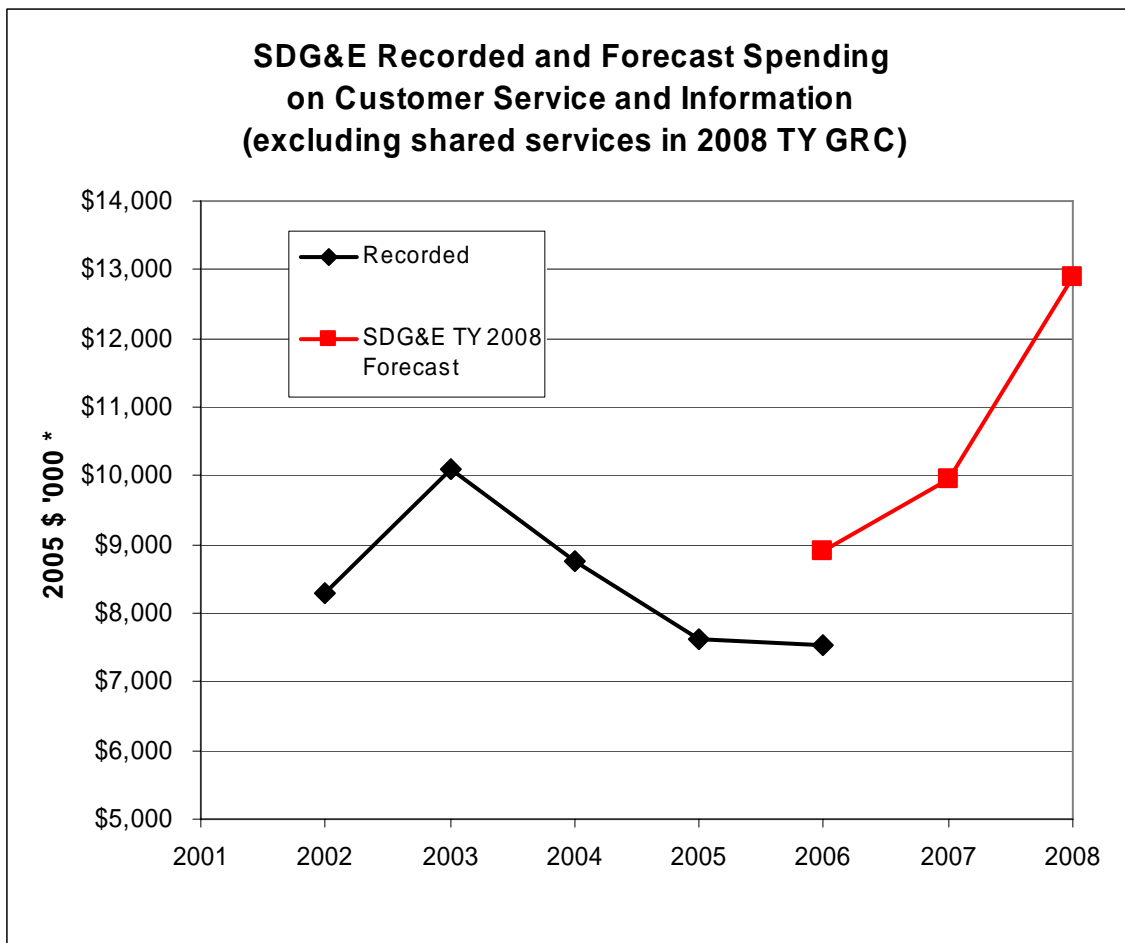
FERC Account #908 contains costs associated with customer outreach programs and information services to customers. SDG&E forecasts TY 2008 expenses for this account of \$13.355 million – and increase of \$5.742 million above recorded 2005 costs of \$7.613 million. UCAN supports DRA's recommended forecast of expenses for this account.

DRA recommends a TY 2008 forecast for Account #908.0 that is an average of 2005-2006 recorded costs. Recorded costs for 2006 are \$7.542 million

and the average of this and 2005 recorded costs (\$7.613 million) equals \$7.578 million. As demonstrated by the recorded 2003-2006 data provided by DRA in its testimony, SDG&E's spending for account #908 has consistently trended downwards over the last number of years with it hovering in the area of \$7.5 million for 2005-2006. Thus, UCAN finds DRA's recommendation for this account to be reasonable and the Commission should adopt the DRA's recommended expense level for 2008 for this account.

To provide additional evidence to the Commission demonstrating SDG&E's consistent practice of over-forecasting actual CS&I spending, UCAN provides the following figure on recorded and forecast spending for CS&I activities.

Figure 1



Attachment A: Qualifications of Jeff Nahigian, Senior Economist, JBS Energy, Inc.

Jeffrey A. Nahigian

Senior Economist, JBS Energy, Inc.

Jeffrey Nahigian, a Senior Economist, has over 18 years experience analyzing utility operations and rate design issues.

He received a B.S. in Environmental Policy Analysis and Planning from the University of California, Davis, in 1986. He also holds a B.Mus. degree from the San Francisco Conservatory of Music. In 1986, Mr. Nahigian joined JBS Energy.

Mr. Nahigian has analyzed cost-of-service and rate design issues in California, Nevada, Arkansas and Alberta including review of marginal and embedded electric and gas distribution and customer costs, residential baseline rates, customer charges and time-of-use rates, and interruptible electric rate design. He was a member of the rate unbundling working group for California electric restructuring.

He has 12 years' experience with the analysis of line extension rules in several jurisdictions and of energy and water utility issues affecting mobilehome park tenants.

He has reviewed conservation programs of utilities in Georgia, Texas, and the District of Columbia for prudence in implementation and cost-effectiveness. He wrote a white paper analyzing conservation strategies for targeting large industrial users of natural gas. He has also reviewed the energy efficiency programs of California's four major gas and electric investor owned utilities and evaluated third-party bids for local efficiency programs. He is currently involved in the evaluation of advanced meter deployment in California and has been a featured speaker on this topic for various national and international utility and metering conferences.

He has reviewed avoided cost methodology and policies for several clients, calculated emissions and emissions values from utility power plants, and reviewed nuclear power plant performance and costs. Mr. Nahigian was the lead analyst for a comparative study of the costs of San Diego Gas and Electric (SDG&E) and other California utilities. He served on an advisory committee to the California Energy Commission on transmission policy under Senate Bill 2431.

Mr. Nahigian was manager of two projects analyzing the Rancho Seco nuclear plant and alternatives to it. He was an alternate member of the SMUD Rate Advisory Committee in 1990-91.

Mr. Nahigian has testified at the California Energy Commission on conservation policy and technical issues, nuclear plant performance, forecasts of future Qualifying Facility (QF) projects, municipal utility demand conformance, and the economics of returning mothballed fossil plants to service. He has filed testimony and formal comments at the California Public Utilities Commission on electric and gas cost of service and rate design; line extension issues, adjustments of gas load forecasts for energy efficiency; utility distribution capital spending; water rates for mobilehome parks, and SDG&E's fuel budget. He provided expert testimony before the Los Angeles County Superior Court on electric rates for mobilehome parks and before the Alberta Energy and Utilities Board on line extension policy.

Before joining JBS, Mr. Nahigian was a staff analyst for the California Independent Energy Producers Association in 1986.

Attachment B: Meter Reading Benefits for Gas and Electricity

Assumptions based on SAP Fleet Vehicle Report for Meter Reading Vehicles

Assumptions based on BOTH gas & electric meters changed simultaneously

Assumes the Fleet Program will be the last vehicles given up (rentals first); Assumes cost of a Fleet Vehicle is 50% higher than leased vehicles

Assumes manual meter reading costs diminish on a per meter rate as AMI is implemented; benefits lagged 2 months to allow turnover, meter comm issues resolution.

GAS AMI penetration schedule by year - Full Scale Deployment Scena

Year	Annual Meters	Cumulative Meters	Labor Savings	Emp. Expense Savings	Material Savings	Service Savings	Fleet Savings	FTE Benefit
2006	0	0	\$0	\$0	\$0	\$0	\$0	0.0
2007	0	0	\$0	\$0	\$0	\$0	\$0	0.0
2008	201188	201188	-\$117,224	-\$687	-\$2,121	-\$7,056	\$0	-14.7
2009	344894	344894	-\$1,055,018	-\$6,185	-\$19,088	-\$64,914	-\$1,665	-35.3
2010	344894	344894	-\$2,260,752	-\$13,255	-\$40,904	-\$132,649	-\$6,485	-35.3
2011	14264	14264	-\$2,840,392	-\$16,653	-\$51,391	-\$165,213	-\$8,507	-1.5
2012	14495	14495	-\$2,890,695	-\$16,948	-\$52,301	-\$168,039	-\$8,683	-1.5
2013	14729	14729	-\$2,941,812	-\$17,248	-\$53,226	-\$170,910	-\$8,861	-1.5
2014	14967	14967	-\$2,993,755	-\$17,552	-\$54,166	-\$173,828	-\$9,042	-1.5
2015	15209	15209	-\$3,046,537	-\$17,862	-\$55,121	-\$176,793	-\$9,226	-1.6
2016	15454	15454	-\$3,100,171	-\$18,176	-\$56,091	-\$179,806	-\$9,413	-1.6
2017	15704	15704	-\$3,154,671	-\$18,496	-\$57,077	-\$182,868	-\$9,604	-1.6
2018	15958	15958	-\$3,210,053	-\$18,820	-\$58,079	-\$185,979	-\$9,797	-1.6
2019	16216	16216	-\$3,266,330	-\$19,150	-\$59,097	-\$189,141	-\$9,993	-1.7
2020	16478	16478	-\$3,323,516	-\$19,486	-\$60,132	-\$192,354	-\$10,193	-1.7
2021	16744	16744	-\$3,381,626	-\$19,826	-\$61,183	-\$195,618	-\$10,395	-1.7
2022	17015	17015	-\$3,440,676	-\$20,172	-\$62,252	-\$198,935	-\$10,601	-1.7
TOTAL: (Years 2006 - 2021)			-\$37,582,554	-\$240,516	-\$742,229	-\$2,384,104	-\$122,465	-102.9

Assumptions based on SAP Fleet Vehicle Report for Meter Reading Vehicles
 Assumes cost of a Fleet Vehicle is 50% higher than leased vehicles
 Assumes the Fleet Program will be the last vehicles given up (43 vehicles)
 Assumes manual meter reading costs diminish on a per meter rate as AMI is implemented
 Assumes new meters (growth) will be AMI
 Assumptions based on BOTH gas & electric meters changed simultaneously

Electric AMI penetration schedule by year - Full Scale Deployment Scenario

Year	Annual Meters	Cumulative Meters	Labor Savings	Emp. Expense Savings	Material Savings	Service Savings	Fleet Savings	FTE Benefit
2006	0	0	\$0	\$0	\$0	\$0	\$0	0.0
2007	0	0	\$0	\$0	\$0	\$0	\$0	0.0
2008	321223	321223	-\$200,532	-\$1,176	-\$3,628	-\$11,266	\$0	0.0
2009	550667	550667	-\$1,844,897	-\$10,816	-\$33,380	-\$103,643	-\$2,734	-23.5
2010	550667	550667	-\$3,770,005	-\$22,103	-\$68,210	-\$211,792	-\$10,648	-56.4
2011	20453	20453	-\$4,691,077	-\$27,503	-\$84,875	-\$263,536	-\$13,825	-56.4
2012	20758	20758	-\$4,763,158	-\$27,926	-\$86,179	-\$267,585	-\$13,847	-2.1
2013	21067	21067	-\$4,836,312	-\$28,355	-\$87,503	-\$271,695	-\$13,869	-2.2
2014	21382	21382	-\$4,910,558	-\$28,790	-\$88,846	-\$275,866	-\$13,891	-2.2
2015	21701	21701	-\$4,985,912	-\$29,232	-\$90,210	-\$280,099	-\$13,913	-2.2
2016	22025	22025	-\$5,062,392	-\$29,680	-\$91,593	-\$284,396	-\$13,936	-2.3
2017	22354	22354	-\$5,140,013	-\$30,136	-\$92,998	-\$288,756	-\$13,960	-2.3
2018	22688	22688	-\$5,218,794	-\$30,597	-\$94,423	-\$293,182	-\$13,983	-2.3
2019	23027	23027	-\$5,298,753	-\$31,066	-\$95,870	-\$297,674	-\$14,007	-2.4
2020	23372	23372	-\$5,379,907	-\$31,542	-\$97,338	-\$302,233	-\$14,031	-2.4
2021	23721	23721	-\$5,462,276	-\$32,025	-\$98,828	-\$306,860	-\$14,056	-2.4
2022	24077	24077	-\$5,545,877	-\$32,515	-\$100,341	-\$311,557	-\$14,081	-2.5
TOTAL: (Years 2006 - 2022)			-\$67,110,465	-\$393,464	-\$1,214,223	-\$3,770,140	-\$180,781	-161.6

0