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PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
ENERGY DIVISION  
ITEM# 7 I.D.#6623  
RESOLUTION E-4093  
June 7, 2007

**R E S O L U T I O N**

Resolution E-4093. Pacific Gas and Electric Company requests authority to establish a Market Redesign and Technology Upgrade (MRTU) Memorandum Account to record its incremental costs associated with the California Independent System Operator's MRTU initiative. Approved with modifications.

By PG&E Advice Letter 2981-E-A filed on April 13, 2007, which supersedes entirely Advice Letter 2981-E filed on February 9, 2007.

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**SUMMARY**

**This Resolution approves the request by Pacific Gas and Electric Company (PG&E) to establish a Market Redesign and Technology Upgrade (MRTU) Memorandum Account to record its incremental costs associated with the California Independent System Operator's (CAISO) MRTU initiative. PG&E shall submit to Energy Division periodic cost estimates of the amounts it expects to record in the account prior to each MRTU release.**

The MRTU Memorandum Account (MRTUMA) will record PG&E's incremental capital-related revenue requirement as well as incremental operations and maintenance (O&M) expenses associated with implementing the CAISO's MRTU initiative. The CAISO has targeted MRTU Release 1 by February 2008 and MRTU Release 2 in 2009. PG&E shall seek recovery of amounts recorded in the MRTUMA in Energy Resource Recovery Account (ERRA) reasonableness proceedings. PG&E shall submit to the Energy Division 30 days prior to each MRTU release, its best estimate of the amounts it expects to record in the MRTUMA.

There were no protests to PG&E Advice Letter (AL) 2981-E or its Supplement AL 2981-E-A.

## **BACKGROUND**

**Since it was created in 1996, the CAISO has experienced several flaws in its management of the electricity market and transmission systems within its control that will be corrected by the MRTU initiative.**

Over the past several years, the CAISO began to design an overhaul of its approach to managing transmission congestion with a redesign of its market structure in order to gain economic and technical efficiencies. The MRTU design, which involves a comprehensive overhaul of the electricity markets administered by the CAISO, would adopt a new full network model that will more accurately reflect the operations of the CAISO controlled grid.

In June 2004, the CAISO Board of Governors approved two parallel programs, the Market Redesign program and the Technology Upgrade program, managed as one CAISO MRTU initiative. The Market Redesign program would provide improvements to assure grid reliability and more efficient and cost effective use of energy resources. The Technology Upgrade program would strengthen the entire CAISO computer backbone it needs to successfully manage and operate the grid.

The Market Redesign program would:

- Create a new Day-Ahead market for energy. By starting the resource scheduling process in the day-ahead time frame, according to the CAISO there would be less reliance on the more volatile hour-ahead or real-time markets, which are the only ones that currently exist.
- Provide a more precise full network model of the grid, which would allow the CAISO to better predict how energy scheduled a day ahead of time will flow in real time.
- Introduce new market rules for energy dispatch and penalties to prevent market manipulation.
- Introduce local prices that would eliminate the distinction between inter- and intra-zonal congestion. Locational Marginal Pricing (LMP) shows the cost of producing power as well as the cost of delivery that would give the CAISO and market participants a clearer picture of the true cost of getting power from one area to another.

The Technology Upgrade program would:

- Provide updated computer technology and software to better manage loads and resources available and scheduled on the grid.
- Provide new computer systems to replace the CAISO's aging infrastructure and hardware.

**In February 2006 the CAISO filed its MRTU Tariff with the Federal Energy Regulatory Commission (FERC), which was approved by FERC in September 2006.**

On February 9, 2006, the CAISO filed its MRTU Tariff with the FERC. The MRTU Tariff filed was the result of lengthy studies by the CAISO and market participants, stakeholder meetings, and input from various government and regulatory agencies. FERC approved the Tariff in September 2006.

Market participants, including PG&E, are required to comply with the FERC-approved MRTU Tariff as part of FERC regulations, and with agreements with the CAISO.

The CAISO has targeted MRTU Release 1 to be implemented by February 2008, and MRTU Release 2 in 2009 to address subsequent directives provided by the FERC in adopting MRTU.

**PG&E initially filed AL 2981-E to record its incremental MRTU costs in the Utility Generation Balancing Account (UGBA), but subsequently filed a Supplement AL 2981-E-A to record these costs in an MRTU Memorandum Account.**

On February 9, 2007, PG&E filed AL 2981-E, which requested to record its incremental MRTU costs in the UGBA. The UGBA is a revenue adjustment mechanism that allows PG&E to collect its Commission authorized non-fuel generation related revenue requirements. In the UGBA, PG&E's authorized non-fuel generation revenue requirements are compared to actual revenues collected from customers to recover those revenue requirements. Balances in the UGBA are periodically amortized in rates to ensure that PG&E collects its Commission authorized revenue requirements.

Energy Division staff advised PG&E to record the MRTU costs in a memorandum account for subsequent review by the Commission, prior to

adding these costs to PG&E's authorized revenue requirements in the UGBA. Energy Division expressed its desire for a consistent approach across the three major electric investor owned utilities on the accounting of MRTU costs. Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E) recently filed advice letters requesting to record their MRTU costs in memorandum accounts. Costs recorded by SCE and SDG&E in their respective memorandum accounts would be reviewed at a later date by the Commission prior to their recovery in rates.

PG&E subsequently filed Supplement AL 2981-E-A requesting to record its MRTU costs in a memorandum account. The supplemental advice letter supersedes AL 2981-E in its entirety.

**In its AL 2981-E-A, PG&E requests Commission authority to establish an MRTU Memorandum Account (MRTUMA) to record PG&E's incremental capital-related revenue requirement and incremental O&M expenses associated with implementing the CAISO's MRTU initiative.**

On April 13, 2007 PG&E filed AL 2981-E-A requesting authority to establish the MRTUMA. According to PG&E, the MRTUMA will record incremental capital-related revenue requirements such as depreciation, applicable taxes, and an authorized return on rate base, and incremental O&M expenses. The MRTU initiative will require the utilities to obtain new and upgraded systems and incur expenses for computer hardware, software licensing, and information technology labor to allow PG&E's continued interactions with the CAISO. Incremental in this context means that the amounts PG&E will record in the MRTUMA will be in addition to that portion of PG&E's current authorized revenue requirements for funding the CAISO's MRTU initiative.

PG&E proposes to request recovery of amounts recorded in the MRTUMA in a Commission reasonableness review. PG&E proposes that the balance in the MRTUMA would be transferred to the UGBA for rate recovery, applicable to all customer classes.

## **NOTICE**

Notice of PG&E AL 2981-E-A was made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section III-G of General Order 96-A.

## **PROTESTS**

There were no protests to PG&E Advice Letter 2981-E or its Supplement AL 2981-E-A.

## **DISCUSSION**

Energy Division has reviewed PG&E's AL 2981-E-A. Discussion of the relevant facts that lead to the approval of this advice letter, with modifications, follows.

### **The California Public Utilities Commission (CPUC) supports the CAISO's MRTU initiative.**

For about the previous five years the CPUC has provided support for the CAISO's MRTU initiative, conditional with the FERC's approval of certain elements that the FERC has accepted. The CPUC has been working with the investor owned utilities (IOUs, i.e., PG&E., SDG&E, and SCE) and the CAISO to ensure that there will be an LMP market design with consumer safeguards that will protect consumers from market manipulation as experienced during the energy crisis of 2001-2002. The CPUC recognizes that MRTU is a major project undertaking and Release 1 implementation, currently scheduled for February 2008, is just the beginning of implementing a complete MRTU.

**The CPUC expects the IOUs to be fully prepared for MRTU and to have the resources necessary to be able to participate in the new market design, LMP, and a day-ahead energy market. PG&E is authorized to establish the MRTUMA.**

The IOUs should be prepared with the necessary resources, tools, computer software and hardware to be able to implement MRTU Release 1, currently scheduled for February 2008, and all subsequent Releases. To meet this objective, the IOUs should be permitted to track incremental MRTU-related costs in a memorandum account. We therefore authorize PG&E to establish its MRTUMA proposed in AL 2981-E-A.

**Recovery of the amounts recorded in PG&E's MRTMUA shall be addressed in PG&E's ERRA or some other formal reasonableness review proceeding.**

PG&E states in its advice letter filing that it will record in the proposed MRTUMA its incremental capital-related revenue requirements and incremental O&M expenses associated with implementing the CAISO's MRTU initiative. PG&E states it will request recovery of amounts recorded in this MRTU Memorandum Account (MRTUMA) after reasonableness review by the Commission. PG&E indicates that the balance in the MRTUMA would then be transferred to the Utility Generation Balancing Account (UGBA) for rate recovery applicable to all customer classes.

The amounts that PG&E records in the MRTUMA shall be reviewed by the Commission in PG&E's annual ERRA reasonableness proceeding or some other formal reasonableness review proceeding. In that proceeding PG&E shall present any amounts that it has recorded in the MRTUMA that it proposes to include in rates. Before we authorize recovery in rates of any amounts recorded in the MRTUMA, PG&E will need to present sufficient information in that proceeding to justify that the amounts it has recorded are incremental and have been reasonably incurred to implement the CAISO's MRTU initiative. Additionally, before PG&E transfers any balance in the MRTUMA to the UGBA or a different balancing account for rate recovery, PG&E will require a Commission order issued in the ERRA or another formal proceeding to do so.

PG&E indicates in AL 2981-E-A that this advice letter filing will not increase any rate or charge, cause the withdrawal of service, or conflict with any other schedule or rule. Because this advice letter filing request is merely to establish an account for recording costs for possible future recovery in rates, PG&E's assertion is justified.

**PG&E expects to record revenue requirement amounts associated with a total of about \$20 million in capital and O&M costs in its MRTU Memorandum Account by February 1, 2008.**

When MRTU goes online by February 1, 2008, PG&E reported that it expects to record revenue requirement amounts associated with about \$20 million in capital and O&M costs for MRTU.

During 2008 and beyond, PG&E expects to incur additional capital costs and additional on-going labor costs for software license fees and information technology support to maintain compatibility with the CAISO's MRTU Release 1 and subsequent releases.

**Currently there is a large uncertainty in the MRTU-related costs that the IOUs will incur.**

MRTU implementation will be a multi-year process and the CAISO has not determined all of the requirements it will have for market participants. While the CAISO plans to implement MRTU Release 1 by February 2008, it also plans for a Release 2 sometime in 2009, and possibly subsequent releases.

It is expected that the IOUs will incur expenses related to software development and revisions, computer hardware, internal labor costs, and possible contractor or consultant work that would be allocated to MRTU. Since the CAISO has not designed or set out the requirements for subsequent releases, there is currently no firm cost or expense estimate.

In order for the CPUC to have a better estimate of MRTU costs and expenses, we will require PG&E to submit to Energy Division informational filings for cost estimates and amounts expected to be recorded in the MRTUMA.

**Since some MRTU-related costs have already been included in a prior rate case, provisions are in place to prevent double recovery.**

In its 2007 General Rate Case (GRC), A.05-12-002, PG&E requested \$1.8 million for the costs associated with six additional full time employees expected to support MRTU, and for new hardware and software requirements. On March 15, 2007, the CPUC adopted D.07-03-044, which approved a settlement in the GRC. Although the Commission did not adopt a specific amount of funding for the MRTU effort in D.07-12-044, PG&E states that the current authorized GRC revenue requirement for the MRTU effort is \$1.0 million based on the fact that the Commission adopted a GRC revenue requirement 46% lower than PG&E had requested.

PG&E should reduce its actual recorded MRTU expenditures by any previous Commission-authorized expenditures reflected in PG&E's rate levels to ensure that PG&E does not double-recover its MRTU expenditures. As noted above, in

order to recover amounts recorded in the MRTUMA PG&E must first provide justification in a separate application, ERRA reasonableness proceedings, or in combination with the formal reasonableness review of other accounts, that its entries to the MRTUMA are incremental and have been reasonably incurred to implement the CAISO MRTU initiative. PG&E should also obtain Commission approval by order in a formal proceeding before transferring the balance in the MRTUMA to the UGBA or some other balancing account for rate recovery.

**PG&E is not requesting any cost recovery for MRTU at this time.**

This Resolution does not prejudice what costs associated with PG&E's efforts to comply with the CAISO's MRTU initiative the Commission may subsequently authorize PG&E to recover in rates.

Cost recovery associated with PG&E's MRTU expenses is subject to a future Commission order(s). This Resolution does not prejudice or determine what costs the Commission will allow PG&E to recover in rates associated with MRTU.

**PG&E shall revise its Preliminary Statement Part EP to state that recovery of the MRTUMA in a formal reasonableness proceeding and transfer to the UGBA are subject to Commission orders.**

In AL 2981-E-A, PG&E provided a Preliminary Statement for Part EP (CPUC Sheet No. 26304-E), paragraph 4.b., which states that PG&E shall maintain the MRTUMA by making "... a credit entry to transfer amounts recorded in the MRTUMA into UGBA after reasonableness review by the Commission; and."

As currently worded, this Preliminary Statement is deficient because recovery of the MRTUMA is subject to reasonableness review in PG&E's annual ERRA or other formal reasonableness proceeding. Additionally, transfer of any balance in the MRTUMA to the UGBA or some other balancing account is subject to a Commission order in a formal proceeding.

Within 14 days of Commission approval of this Resolution, PG&E shall submit to the CPUC a revised Preliminary Statement for Part EP to indicate that recovery of the MRTUMA shall be addressed in the annual ERRA or other formal reasonableness proceeding. The balance in the MRTUMA shall be transferred to

the UGBA subject to Commission order. Specific tariff changes are included in the Order Paragraphs of this Resolution.

## **COMMENTS**

Public Utilities Code section 311(g) (1) generally requires resolutions to be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g) (3) provides that this 30-day period may be reduced or waived pursuant to Commission adopted rule.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and placed on the Commission's agenda no earlier than 30 days from the date the draft resolution was issued for comment.

Timely comments were filed by PG&E on May 29, 2007.

In its comment letter, PG&E requested clarification on two issues: 1) the incremental costs to be tracked in the MRTUMA and its relationship to amounts approved in PG&E's GRC; and 2) the effective date of the MRTUMA.

**The incremental costs to be tracked in the MRTUMA are those costs incurred by PG&E related to implementing, operating, and maintaining MRTU activities that are in addition to any costs currently authorized by the CPUC in PG&E's 2007 GRC settlement.**

The Discussion Section of this Resolution has been revised to clarify that in its 2007 GRC PG&E requested \$1.8 million for the costs associated with six additional full time employees expected to support MRTU, and new hardware and software requirements. On March 15, 2007, the CPUC approved the GRC settlement that authorized a total GRC revenue requirement 46% lower than what PG&E had requested. Therefore, PG&E believes that its authorized GRC revenue requirement for the MRTU effort is \$1.0 million.

The amounts recorded by PG&E in the MRTUMA should only be those costs not currently authorized by the Commission in D.07-03-044. In the future proceeding in which PG&E requests authorization to recover amounts recorded in the MRTUMA, it will have an opportunity to provide a basis for why \$1

million should be established as the amount the Commission authorized for MRTU in D.07-03-044.

In its comment letter PG&E also proposed to delineate the incremental cost categories. Because the amount and extent of the costs associated with software and hardware modifications, labor and consulting staff, testing, training, project management, operations, etc., in support of the MRTU initiative are unknown at this time, it is prudent not to prescribe in this Resolution what costs or categories should be included in the MRTUMA. PG&E should use the MRTUMA to record whatever costs it deems appropriate to track in this account, subject to a future reasonableness review.

**The effective date of the MRTUMA is today's date June 7, 2007.**

In its comment letter PG&E requested clarification that the effective date for establishment of the MRTUMA be March 11, 2007, which was 30 days after PG&E filed its initial Advice Letter on February 9, 2007. We deny this request.

The Commission has addressed similar issues previously. In D.03-05-076, at page 7, which addressed the issue of the effective date of memorandum accounts, the Commission stated, "Memorandum accounts were designed to allow utilities the opportunity to record costs incurred prior to the Commission's review of the costs for reasonableness. In order to carry out its ratemaking duties fairly and orderly, the Commission has decided to parallel the prohibition against retroactive ratemaking by requiring that the establishment of a memorandum account not be retroactive. That is, the memorandum account can start to record debits or credits only prospectively from the date the account is authorized. In that way, if recorded costs are subsequently approved for recovery in rates, there will be no confusion or entanglement of issues regarding retroactive ratemaking."

Moreover, approval of new memorandum accounts generally requires a Resolution to be brought before the Commission. Recent examples in addition to the MRTU Memorandum Accounts approved for SCE and SDG&E on May 24, 2007, include: Resolution E-4072 approved on May 3, 2007, for PG&E to establish a Land Conservation Plan Implementation Account, and Resolution E-3958 approved on October 27, 2005, for SDG&E to establish a memorandum account for call center costs associated with its CARE program.

The requirements for filing advice letters include a 20-day protest period in accordance with D.07-01-024 Section 7.4 and D.05-01-032 Rule 4.1, and preparation of Resolutions includes a 30-day comment period in accordance with D.07-01-024 Section 7.1, PU Code Section 311(g), and D.05-01-032 Rule 4.6,

Because of these requirements and limitations, in an ordinary case a utility should expect a Resolution recommending approval of the establishment of a newly proposed memorandum account to be brought before the Commission for a vote approximately 120 days after the filing of the advice letter.

In order to ensure that costs may be recorded to a new memorandum account in a timely manner, it is PG&E's responsibility to file an advice letter sufficiently in advance of its requested effective date, i.e., approximately 120 days at a minimum prior to the date costs are expected to be recorded in the account.

## **FINDINGS**

1. Since it was created in 1996, the CAISO has experienced several flaws in its management of the electricity market and transmission systems within its control that will be corrected by the MRTU initiative.
2. In June 2004, the CAISO Board of Governors approved two parallel programs, the Market Redesign program and the Technology Upgrade program, to be managed as one CAISO MRTU initiative.
3. The MRTU design will adopt a new full network model that will more accurately reflect the operations of the CAISO controlled grid.
4. The MRTU initiative will create a new Day-Ahead market for energy in addition to the currently existing hour-ahead and real-time markets.
5. On February 9, 2006, the CAISO filed its MRTU tariff with the FERC.
6. FERC approved the CAISO's MRTU tariff in September 2006.
7. PG&E filed AL 2981-E on February 9, 2007, and on April 13, 2007 PG&E filed AL 2981-E-A, entirely replacing AL 2981-E, to propose establishment of a MRTU Memorandum Account (MRTUMA) to record its incremental costs associated with MRTU.
8. Market participants, including PG&E, are required to comply with the FERC-approved MRTU tariff as part of FERC regulations and agreements with the CAISO.

9. The CAISO has targeted MRTU Release 1 to be implemented by February 2008, and MRTU Release 2 in 2009 to address subsequent directives provided by the FERC in adopting MRTU.
10. The CPUC supports the CAISO's MRTU initiative.
11. The CPUC expects the IOUs to be fully prepared for MRTU and to have the resources necessary to be able to participate in the new market design, LMP, and a day-ahead market.
12. PG&E's proposal to establish an MRTUMA is justified in order to meet the objectives of the CAISO's MRTU initiative.
13. PG&E reported it expects to record revenue requirement amounts associated with a total of about \$20 million for MRTU expenses by the start of implementation for MRTU Release 1.
14. Since some MRTU-related costs have already been included in rates, provisions are needed to prevent double recovery.
15. In its 2007 GRC, PG&E included a forecast of approximately \$1.8 million in expenses associated with an additional six full time employees and new hardware and software to support the CAISO's MRTU initiative. Of this amount, PG&E believes \$1.0 million was approved by the CPUC on March 15, 2007, in D.07-03-044, which adopted the 2007 GRC settlement.
16. PG&E should reduce its actual recorded MRTU expenditures by any previous Commission-authorized expenditures reflected in PG&E's rate levels to ensure that PG&E does not double-recover its MRTU expenditures.
17. PG&E's AL 2981-E-A filing will not create an increase in any rate or charge at this time, cause the reduction or withdrawal of service, or conflict with any other schedule or rule.
18. Cost recovery associated with the amounts recorded in PG&E's MRTU Memorandum Account is subject to a future Commission order in PG&E's ERRA reasonableness proceedings or some other formal proceeding where the reasonableness of amounts recorded in this account are reviewed.
19. Transfer of the balance in the MRTUMA to the UGBA or some other balancing account for rate recovery is subject to a Commission order in a formal proceeding.
20. PG&E should revise the Preliminary Statement for Part EP as specified herein to indicate that recovery of the MRTUMA in PG&E's annual ERRA or a formal proceeding and transfer of any balance to the UGBA are subject to Commission orders.
21. This Resolution does not prejudge what costs the Commission will allow PG&E to recover in rates associated with MRTU.

22. Currently there is a large uncertainty in the MRTU-related costs that the IOUs will incur.
23. PG&E should submit to Energy Division informational filings for cost estimates and amounts expected to be recorded in the MRTU Memorandum Account 30 days prior to each MRTU Release.
24. PG&E Advice Letter 2981-E and Supplement AL 2981-E-A were not protested.

**THEREFORE IT IS ORDERED THAT:**

1. The request of PG&E, in its Advice Letter 2981-E-A, to establish an MRTU Memorandum Account (MRTUMA) is approved with the modifications specified herein.
2. PG&E shall submit to Energy Division informational filings for cost estimates and amounts expected to be recorded in the MRTU Memorandum Account 30 days prior to each MRTU Release.
3. Cost recovery of amounts recorded in PG&E's MRTU Memorandum Account is subject to a future Commission order(s) in PG&E's ERRA reasonableness proceedings or some other formal proceeding where the reasonableness of costs recorded in this account are reviewed. This Resolution does not prejudge or determine what costs the Commission will allow PG&E to recover in rates associated with complying and participating in the CAISO's MRTU initiative. In order to recover amounts recorded in the MRTUMA, PG&E must first provide justification that its entries to the MRTUMA are incremental and have been reasonably incurred to implement the CAISO MRTU initiative. Transfer of the balance in the MRTUMA to the UGBA or some other balancing account for rate recovery is subject to a future separate Commission order in a formal proceeding.
4. Within 14 days of approval of this Resolution, PG&E shall submit a supplement to AL 2981-E-A to the CPUC with a revised Preliminary Statement Part EP.4.b., which shall read as follows:

"A credit entry to transfer amounts recorded in the MRTUMA to UGBA after Commission authorization by order in the ERRA or other formal proceeding where the Commission has completed a review of the reasonableness of those amounts; and"

The supplement to AL 2981-E-A shall replace the Preliminary Statement Part EP submitted in AL 2981-E-A with the same effective date of June 7, 2007, for the tariff changes authorized by this Order, subject to Energy Division's determining that it is in compliance with this Order.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on June 7, 2007; the following Commissioners voting favorably thereon:

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Paul Clanon  
Executive Director