

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>California Municipal Utilities</b>	)	
<b>Association; Cities of Anaheim,</b>	)	
<b>Azusa, Banning, Colton, Pasadena,</b>	)	
<b>and Riverside, California; City and</b>	)	
<b>County of San Francisco; Northern</b>	)	
<b>California Power Agency;</b>	)	
<b>Sacramento Municipal Utility District;</b>	)	
<b>Modesto Irrigation District; and</b>	)	
<b>Transmission Agency of Northern</b>	)	
<b>California,</b>	)	
<b>Complainants,</b>	)	
	)	
<b>v.</b>	)	<b>Docket No. EL09-38-000</b>
	)	
<b>California Independent System</b>	)	
<b>Operator Corporation,</b>	)	
<b>Respondent.</b>	)	

**ANSWER OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR  
CORPORATION TO COMPLAINT**

Pursuant to Rules 206(f) and 213 of the Commission’s Rules of Practice and Procedure<sup>1</sup> and the Notice of Complaint issued in this proceeding on March 6, 2009, the California Independent System Operator Corporation (“ISO”) hereby submits its answer (“Answer”) to the complaint (“Complaint”) filed in this proceeding by the above-listed entities (collectively, “Municipals”).<sup>2</sup> For the reasons explained below, the Commission should deny the Complaint.

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<sup>1</sup> 18 C.F.R. §§ 385.206(f), 385.213.

<sup>2</sup> Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff.

## I. Introduction and Summary

As the ISO prepares to implement its Market Redesign and Technology Upgrade (“MRTU”), after years of extensive Commission deliberations and numerous orders,<sup>3</sup> Municipals ask the Commission to revise the MRTU Tariff to permit Scheduling Coordinators to withhold payment of invoices if charges under MRTU exceed an arbitrary amount. Specifically, Municipals propose that, if an invoice exceeds 200% of the previous year’s invoice for the same settlement period, Market Participants need pay only 125% of the invoice, pending investigation into the validity of the charges and subject to the requirement that all CAISO Creditors at a minimum be paid their Default Energy Bid prices or Transmission Revenue Requirements.

The Commission should deny the Complaint. As discussed in detail below, there is no legal or factual basis to justify implementation of Municipals’ proposal. First, Municipals have failed to meet their burdens of proof under Section 206 of the Federal Power Act, whereby a complainant bears the burden both of proving with substantial evidence, not merely unsubstantiated allegations and speculation, that the existing tariff provisions are unjust and unreasonable and of proving that the complainant’s own proposal is just and reasonable. Second, Municipals’ proposal is not needed because the ISO is implementing appropriate Commission-approved safeguards to ensure that prices and charges

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<sup>3</sup> See, e.g., *Cal. Indep. Sys. Operator Corp.*, 100 FERC ¶ 61,060 (2002); *Cal. Indep. Sys. Operator Corp.*, 105 FERC ¶ 61,140 (2003); *Cal. Indep. Sys. Operator Corp.*, 107 FERC ¶ 61,274 (2004); *Cal. Indep. Sys. Operator Corp.*, 112 FERC ¶ 61,013, *order on reh’g*, 112 FERC ¶ 61,310, *order on reh’g and technical conference*, 113 FERC ¶ 61,151 (2005); *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006), *order on reh’g*, 119 FERC ¶ 61,076 (2007).

on settlement statements are correct. In the unlikely event that the conditions that Municipals hypothesize were to materialize after implementation of MRTU, the ISO would have redundant early warning mechanisms and more than sufficient time to take appropriate action to mitigate adverse consequences before payment of invoices was due. Third, Municipals' proposal would reverse the ISO's longstanding, Commission-approved "pay and dispute" tariff provision. Fourth, the proposal could undermine the carefully designed Market Participant scheduling and operating incentives that constitute a central objective of the Locational Marginal Price ("LMP")-based market design of MRTU.

Municipals' "evidence" consists entirely of various anomalous prices and charges that were produced in the ISO's MRTU market simulation. The ISO has explained at length how and why the market conditions and Market Participant behaviors that led to the market simulation results should not be viewed as representative of conditions that will occur in MRTU. In particular, settlement statements in market simulation were generated without the use of actual settlement quality meter data, which will be required for settlement calculations in MRTU production. Municipals offer no evidence to contradict the ISO's explanation. Their concerns about future market charges are, thus, totally speculative and unsubstantiated.

This conclusion is reinforced by Municipals' virtually complete dismissal of the actions that the ISO has taken to ensure that MRTU software is working as designed and the tools the ISO has already sought and the Commission has since approved to mitigate adverse price outcomes, which include market

monitoring and mitigation, price caps and floors, and the price correction and mechanisms for screening and blocking prices likely to be incorrect before posting. The ISO is also addressing concerns about high bills by creating a team to review Market Participants' liabilities as they accrue and a process to provide very early notice if potentially excessive liabilities are accruing prior to the normal settlement process. These safeguards are in place and are sufficient.

Municipals' failure to provide any substantive evidence – rather than speculation – that these measures are inadequate demonstrates that they have failed to meet their burden under Section 206 of the Federal Power Act.

Municipals have also failed to show that their proposal is just and reasonable. By reducing initial payments and delaying financial obligations, even when high charges are correct, the proposal would undermine Market Participants' confidence in MRTU price signals by reducing the certainty of timely settlement. The proposal would also provide an incentive for a generator to seek to increase its Default Energy Bid to reflect the risks associated with deferred settlement when Municipals' proposed payment option is exercised, thus interfering with the ISO's market power mitigation tools. If this were to occur, it would also undermine Municipals' own proposal because ISO debtors would be obligated to pay higher Default Energy Bid costs. In addition, implementing the proposal in its entirety would require a major revision of the ISO's settlements software – an expensive and time-consuming endeavor that would not be as simple and straightforward as the Complaint and the Vangelatos affidavit assert. Finally, implementation of Municipals' proposal would divert significant ISO

resources from preparation for MRTU and from the monitoring and remedial actions that will be in place after MRTU implementation to ensure that the results that Municipals fear do not occur.

These considerations, discussed at greater length below, dictate denial of the Complaint.<sup>4</sup>

## **II. Service and Communications**

All service of pleadings and documents and all communications regarding this proceeding should be addressed to the following:

Sidney M. Davies  
Assistant General Counsel  
Anna A. McKenna  
Senior Counsel  
California Independent System  
Operator Corporation  
151 Blue Ravine Road  
Folsom, CA 95630  
Tel: (916) 351-4400  
Fax: (916) 608-7296

[sdavies@caiso.com](mailto:sdavies@caiso.com)  
[amckenna@caiso.com](mailto:amckenna@caiso.com)

Sean A. Atkins  
Michael E. Ward  
Alston & Bird LLP  
The Atlantic Building  
950 F Street, NW  
Washington, DC 20004  
Tel: (202) 756-3300  
Fax: (202) 654-4875

[sean.atkins@alston.com](mailto:sean.atkins@alston.com)  
[michael.ward@alston.com](mailto:michael.ward@alston.com)

## **III. Answer**

### **A. Municipals Fail to Satisfy Their Burden of Proof Under Section 206 of the Federal Power Act.**

Under Section 206 of the Federal Power Act, a party challenging a existing rate bears the burden of proof. As the Supreme Court has stated, “He

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<sup>4</sup> The discussion below is supplemented and supported by the attached Declaration (“Declaration”) of Deborah Le Vine, Director of Market Services and MRTU Program Manager for the ISO.

who would upset the rate order under the [Federal Power] Act carries the heavy burden of making a convincing showing that it is invalid because it is unjust and unreasonable.”<sup>5</sup> It is not enough to show that another rate is just and reasonable, or even that another rate is more just and reasonable.<sup>6</sup> Rather, to meet its burden, a party must both provide substantial evidence *that the existing rate is unjust and unreasonable* and then provide substantial evidence that another rate is just and reasonable.<sup>7</sup> The Commission and the courts have long recognized that a complainant has a burden to do more than simply make unsubstantiated, speculative allegations.<sup>8</sup> Where the complaint fails to demonstrate that the filed rate is unjust and unreasonable, the complaint must be dismissed.<sup>9</sup>

In their Complaint, Municipals do not even acknowledge the burden of proof they bear. Instead, they incorrectly suggest that the ISO must show that the MRTU Tariff provisions are just and reasonable:

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<sup>5</sup> *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 602 (1944).

<sup>6</sup> *Wis. Pub. Power, Inc. v. FERC*, 493 F.3d 239, 265-267 (D.C. Cir. 2007) (“Merely because petitioners can conceive of a refund allocation method that they believe would be superior to the one FERC approved does not mean that FERC erred in concluding the latter was just and reasonable.”).

<sup>7</sup> *See, e.g., Cal. Indep. Sys. Operator Corp.*, 106 FERC ¶ 63,026, at P 42 n.19 (2004) (“In a Section 206 matter, the party seeking to change the rate, charge or classification has a dual burden – it must first provide substantial evidence that the existing rate is unjust, unreasonable or unduly discriminatory, and then demonstrate through substantial evidence that the new rate is just, reasonable and not unduly discriminatory.”). *See also PJM Interconnection L.L.C.*, 107 FERC ¶ 61,112, at P 11 (2004); *Occidental Chemical Corp. v. PJM Interconnection L.L.C.*, 102 FERC ¶ 61,275, at P 18 (2003); *Southern California Edison Co.*, 41 FERC ¶ 61,188, at 61,492 (1987).

<sup>8</sup> *See, e.g., BP West Coast Products LLC v. SFPP, L.P.*, 121 FERC ¶ 61,239, at P 35 (2007); *AES Ocean Express, LLC v. Fla. Gas Transmission Co.*, 119 FERC ¶ 61,075, at P 58 (2007); *Muni. Resale Serv. Customers Ohio Power Co.*, 63 FERC ¶ 61,336, at 63,201 (1993).

<sup>9</sup> *New England Conf. of Pub. Util. Commissioners, Inc. v. Bangor Hydro-Electric Co. et al.*, 124 FERC ¶ 61,291, at P 46 (2008).

Before the Commission can conclude that the implementation of MRTU is just and reasonable, it must order the [ISO] to include protective provisions of the type outlined in this Complaint.<sup>10</sup>

The Commission, however, has already accepted the MRTU Tariff provisions as just and reasonable and has already accepted the ISO's certification of its readiness to implement MRTU.<sup>11</sup> It is incumbent on Municipals, therefore, to demonstrate by actual evidence that the MRTU Tariff, when implemented, will not be just and reasonable and that their proposal would be. As the ISO explains below, Municipals satisfy neither of these burdens.

**B. Municipals Fail to Show that the Previously Accepted MRTU Tariff Provisions Are Unjust and Unreasonable.**

In support of their Complaint, Municipals offer nothing more than speculation that price anomalies arising from unrealistic simulation conditions in the past will continue under different, and actual, market conditions, and that the safeguards and corrective procedures adopted by the ISO will fail. The Commission has rejected reliance upon speculation, based on unrepresentative factors, in the past. In *Wisconsin Public Service Corp. v. Midwest Independent System Operator, Inc.*,<sup>12</sup> the complainants relied upon cost studies of a single dispatch system to demonstrate that the implementation of a joint and common market by the Midwest Independent Transmission System Operator and PJM Interconnection (together, "RTOs") without single system dispatch was excessively costly and unjust and unreasonable. The Commission noted that the

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<sup>10</sup> Complaint at 5.

<sup>11</sup> *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,221 (2009) ("Readiness Certification Order"). That Order was issued after the Complaint was filed. The implementation of MRTU is also known as go-live or start-up, and is sometimes referred to by those phrases in this Answer. MRTU go-live is currently scheduled for March 31, 2009, that being the implementation date applicable to the Day-Ahead Market for Trading Day April 1, 2009.

<sup>12</sup> 118 FERC ¶ 61,089 (2007).

study was based on market data that included early operation of the market and periods prior to the implementation of many market initiatives. It also pointed out that the study ignored additional initiatives that the RTOs had committed to implementing in the future, some of which were intended to address concerns raised by the complainants.<sup>13</sup> The Commission noted that a lack of price convergence, one of the concerns, was normal, expected, and intended, and that the RTOs were studying initiatives to improve convergence.<sup>14</sup> The Commission stated that the RTOs would continue to evaluate the effectiveness of their current programs and will propose new initiatives, with stakeholder input.<sup>15</sup> The Commission concluded:

Therefore, we will not direct the RTOs to create immediately a single system dispatch based on benefits that are speculative and that might be achieved in simpler, less-costly ways. [The complainants] have not met their burden to show that the [RTOs'] existing tariff structure, including their existing collaborative process to evaluate and implement joint and common market initiatives, is unjust and unreasonable.<sup>16</sup>

Similar reasoning is applicable here.

**1. The Charges on Settlement Statements Following MRTU Start-Up Should Be Just and Reasonable.**

**a. Different Prices and Settlement Charges Do Not Equate to Unjust or Unreasonable Prices.**

The approved MRTU market design, including the numerous measures available to the ISO to address any anomalous market results discussed below,<sup>17</sup>

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<sup>13</sup> *Id.* at P 37.

<sup>14</sup> *Id.* at PP 40-41.

<sup>15</sup> *Id.* at P 44.

<sup>16</sup> *Id.* at P 45.

<sup>17</sup> The Commission listed a number of such measures in accepting the ISO's MRTU readiness certification. Readiness Certification Order at P 76 ("In addition, the CAISO has market

provides strong evidence that, following the implementation of MRTU, the net charges reflected on settlement statements pursuant to the previously approved MRTU Tariff provisions will be just and reasonable. It is important to recognize, however, that whether the charges are just and reasonable cannot be evaluated by simply comparing MRTU prices with current prices, or MRTU invoices with historical invoices under the current market structure, as Municipals' proposal presumes. Prices and invoices following MRTU implementation may well be more or less than those under the current market structure; different market designs by definition produce different pricing. This difference does not, however, equate to a lack of just and reasonable pricing.

As Ms. Le Vine explains in greater detail,<sup>18</sup> because of the particular features of MRTU, net charges under MRTU may differ from current net charges not because they are excessive, but because they reflect the differences in market design, most notably the use of LMP at the nodal level in contrast to today's zonal pricing of energy and the introduction of a day-ahead energy market. For example, under MRTU, if a Scheduling Coordinator self-schedules the same amount of generation and load in the Integrated Forward Market as it schedules in today's day-ahead market, the net settlement for this transaction under MRTU will reflect the cost of congestion and losses between the nodal generation location and the Default or Custom Load Aggregation Point load

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monitoring and mitigation, price cap and floor, and the Exceptional Dispatch mechanism available to it and will establish a rapid response team to address any issues arising after MRTU launch. As such, we accept the CAISO's informational filing on MRTU readiness and the [ISO's] commitments to achieve the milestones and satisfactorily resolve the issues it has identified in the readiness certification.”).

<sup>18</sup> Le Vine Declaration at PP 5-9, 12-14.

location. In contrast, in today's day-ahead market this transaction would incur congestion costs only if it crosses a congested inter-zonal interface, and there would be no charges for losses. Depending on the location of the generation and the load, the Scheduling Coordinator could receive net charges for the MRTU day-ahead schedule that are either greater or less than the net charges for a balanced schedule under the current market design. Any such differences, however, would be due to the nature of the LMP-based market design, which the Commission has found to produce just and reasonable prices.<sup>19</sup> The very purpose of the LMP paradigm that is central to the MRTU market design is to bring prices and settlement charges into alignment with the principles of transparency and cost causation. Specifically, the LMP basis of MRTU will make transparent the full and accurate costs of delivering energy from any potential supply source to any potential load location and will settle the transactions of grid users in accordance with the impacts of their transactions on grid conditions and market prices. Thus, the LMP design, rather than causing unjust or unreasonable prices, enables the ISO to allocate grid and supply resources most efficiently and provides incentives for Scheduling Coordinators to make scheduling and operating decisions that align with reliability and efficient grid use.

To continue the above example, consider the previously mentioned Scheduling Coordinator who in today's day-ahead market schedules a particular

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<sup>19</sup> Thus, while the ISO stated in its MRTU readiness certification that, as a general matter, overall charges to Scheduling Coordinators should not be materially different under MRTU as compared to today's market, this statement was not intended to disregard the fact that MRTU represents a shift to a new market paradigm that provides different economic incentives and potentially different financial outcomes to individual Market Participants depending on their bids and schedules. For example, the transition to LMP pricing is likely to result in different net charges in specific circumstances, and a Scheduling Coordinator's bidding strategy and portfolio choices can significantly affect the degree of such differences and their net financial position.

quantity of energy from a particular generating resource to serve an equal quantity of load. Although the Scheduling Coordinator can submit an analogous transaction in the MRTU Integrated Forward Market by self-scheduling the generating resource and load, such a self-schedule would make that Scheduling Coordinator a price taker with respect to the associated LMP congestion and losses charges. The Scheduling Coordinator may better manage its exposure to those charges by submitting economic bids rather than a self-schedule for its generating resource, thus buying energy from the Integrated Forward Market if that is cheaper than running its generating unit. This would increase the energy portion of the Scheduling Coordinator's settlement statement in comparison to the self-schedule because more energy would be purchased through the ISO's markets, but the net costs to the Scheduling Coordinator would be reduced by avoiding the operating costs of the Scheduling Coordinator's generating resource and the congestion and losses components of the LMP at the resource's location. This example illustrates the point that it is not meaningful to compare MRTU-based settlement charges with today's settlement charges for what may appear to be the same schedules. Neither is it reasonable for participants to expect to use the grid in exactly the same manner as they do today and to expect to receive the same net settlement charges. Prices and costs will change under MRTU, but any such changes will reflect the improved market efficiency, transparency, and cost causation inherent in the LMP design and will, in conjunction with the safeguards the Commission has already approved, be just and reasonable.

**b. Recent Evidence Supports a Conclusion that the Charges on Settlement Statements Following MRTU Start-Up Should Be Just and Reasonable.**

In January, the ISO's Department of Market Monitoring ("DMM") published an in-depth report on the results of the structured operational pricing test that the ISO conducted in December in order to determine how MRTU performs under a few scenarios reflecting relatively normal conditions.<sup>20</sup> Municipals fail to even mention the DMM Report, which undercuts many of their contentions. As explained in filings the ISO submitted in the Commission proceeding regarding certification of readiness to implement MRTU, in December the ISO's MRTU program team, in consultation with the DMM, developed and performed a structured operational pricing test for the Day-Ahead and Real-Time Markets (including evaluation of anomalous positive and negative LMPs, price differentials at Load Aggregation Points, evaluation of Residual Unit Commitment outcomes, and price convergence issues), based on relatively normal conditions.<sup>21</sup> The DMM Report provided an in-depth assessment of the results of the structured operational pricing test, and was provided as Attachment 9 to the Readiness Certification. Among other things, the DMM found that the vast majority of prices were reasonable; the Residual Unit Commitment prices paid to non-resource adequacy capacity were generally moderate and high Load

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<sup>20</sup> "Review of California ISO MRTU Structured Market Simulation Results Trade Days – December 9-12, 2008," Department of Market Monitoring (Jan. 16, 2009) ("DMM Report").

<sup>21</sup> MRTU Readiness Certification, Docket No. ER06-615-038 (Jan. 16, 2009), at 8-9 ("Readiness Certification"); Answer to Comments, Motion to File Answer, and Answer to Protests, of the California Independent System Operator Corporation, Docket No. ER06-615-038 (Feb. 18, 2009), at 11-13 ("Readiness Answer");

Aggregation Point prices were limited to just a few 5-minute intervals.<sup>22</sup> The DMM concluded that no changes to the Residual Unit Commitment design are warranted at this time. The DMM Report also indicated that the local market power mitigation procedures are effective and working as intended, but that the real-time local market power mitigation procedures are not working approximately five percent of the time. The DMM recommended price correction procedures to address the latter issue, which the ISO has now established. The DMM did not find any performance issues that would warrant a delay in MRTU implementation.<sup>23</sup> As the ISO noted in its March 2009 status report filed with the Commission, the MRTU price validation and correction process is now fully implemented to the extent possible within the accelerated settlement timeline under market simulation and the ISO has implemented a price-blocking process to prevent the premature publication of, and allow the correction of, potentially erroneous excessive prices.<sup>24</sup> The price validation and correction and blocking processes are ready for full implementation upon go-live.<sup>25</sup>

Further, as explained in the March MRTU Status Report, all known issues with MRTU implementation have been resolved.<sup>26</sup> Simultaneously with this Answer, the ISO is filing with the Commission a supplemental MRTU status report that confirms their resolution. Municipals assert that protective measures are necessary because Municipals cannot verify that the solutions to the known

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<sup>22</sup> DMM Report at 2, 14, 17.

<sup>23</sup> *Id.* at 1.

<sup>24</sup> MRTU Status Report, March 5, 2009 (Docket No. ER06-615-000), at 3 (“March MRTU Status Report”).

<sup>25</sup> Le Vine Declaration at PP 35, 47. Ms. Levine discusses further the price validation, correction, and blocking processes at paragraphs 35-47 of her Declaration.

<sup>26</sup> March MRTU Status Report at 14-16.

issues will be effective.<sup>27</sup> Inasmuch as it was the ISO that identified an issue the ISO is in the best position to determine whether that issue has been resolved. The ISO has confirmed the resolution of these issues to Market Participants and the Commission. Municipals offer no factual basis for casting doubt on the ISO's conclusion or on the effectiveness of the solution. As discussed above, Section 206 of the Federal Power Act imposes an evidentiary burden on complainants. That burden cannot be met by mere pronouncements of unsubstantiated speculation.

**2. The Estimated Charge Amounts that Municipals Cite Are Merely the Result of Certain Features of the Market Simulation Environment and Do Not Reflect the Conditions that Will Prevail After Go-Live.**

Municipals argue that the estimated charges produced in market simulation have greatly exceeded the charges for historical periods. In support of their argument, they provide affidavits on the high simulated charges that some Municipals have seen on their market simulation settlement statements.<sup>28</sup>

The existence of high simulated charges on settlement statements in market simulation, however, is old news that should give the Commission no pause. The ISO has discussed these conditions at length in its monthly MRTU status reports and MRTU readiness certification filings.<sup>29</sup> More importantly, the ISO has explained in detail the reasons *why* Market Participants have seen high estimated charges in market simulation. Those reasons relate solely to particular

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<sup>27</sup> Complaint at 29.

<sup>28</sup> See *id.* at 21-23 and affidavits cited therein.

<sup>29</sup> See MRTU Status Report, Docket No. ER06-615-000 (Nov. 7, 2008), at 4; MRTU Status Report, Docket No. ER06-615-000 (Dec. 8, 2008), at 2-10; MRTU Status Report, Docket No. ER06-615-000 (Feb. 2, 2009), at 2-4; Readiness Cert. at 6-14; Readiness Answer at 6-15.

features of the market simulation environment, including participant behavior, that the ISO has no reason to believe will recur in the actual operation of MRTU.

As the ISO has explained, one of the reasons for high estimated charges in market simulation was MRTU software variances. These variances caused pricing anomalies several months ago, but the ISO identified and resolved the software variances.<sup>30</sup> In addition, the parameter settings originally used for setting prices in instances where constraints are relaxed or self-schedules are adjusted have affected market prices and contributed to anomalous prices. The ISO conducted an analysis of the parameters affecting prices, determined the necessary parameter revisions to minimize the adverse impact on pricing, and received Commission approval of the tariff changes needed to revise the parameters. The revised parameters are not likely to contribute to anomalous pricing.<sup>31</sup>

Another reason for high estimated charges in market simulation involved the inputs used in the simulation. In some cases charges reflected the fact that not all Market Participants participated or fully participated in the bidding and scheduling of their resources in market simulation. For example, most Scheduling Coordinators did not submit meter data for use in market simulation, as they would be required to do for settlement purposes in actual MRTU operation. Also, Market Participants tested unrealistic market strategies in simulation, which affected both their own portfolios and the prices for the entire market, in order to examine the operation of MRTU under all conceivable

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<sup>30</sup> Readiness Certification at 8; Readiness Answer at 8; March MRTU Status Report at 4.

<sup>31</sup> Readiness Certification at 8. *See also Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,147 (2009) (order approving tariff changes needed to revise parameters).

scenarios. Market Participants are not likely to engage in such unrealistic exploratory actions and strategies following go-live.<sup>32</sup> Moreover, in order to test how well the MRTU systems would work in extreme conditions and to see where improvements need to be made, the ISO, in consultation with Market Participants, itself conducted simulation testing that deliberately “stressed” the functionality of those systems. In some scenarios, extreme conditions were simulated in order to trigger the firing of all Charge Codes. The extreme conditions under which the ISO sometimes conducted its testing should not prevail in actual MRTU operations.<sup>33</sup> Moreover, as advised by the Commission, the ISO will continue to work with Market Participants and Market Participants should do the same to ensure that unexpected settlements results observed in market simulation are not related to either extreme scenario testing or to missing or incorrect data inputs.<sup>34</sup>

Although the ISO explained these causes of high estimated charges on market simulation settlement statements in its previous filings, Municipals disregard them with no justification.<sup>35</sup> Instead, Municipals proffer that the market simulation results constitute empirical evidence that the Commission should use to assess anticipated outcomes following go-live.<sup>36</sup> Municipals offer no basis for

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<sup>32</sup> Readiness Certification at 8, 13; Readiness Answer at 8, 10; March MRTU Status Report at 4.

<sup>33</sup> Readiness Certification at 8; Readiness Answer at 9-10; March MRTU Status Report at 4. The reasons for high charges in market simulation, and the reasons that incorrect market results are unlikely to occur following go-live, are discussed further in Ms. Le Vine’s Declaration at paragraphs 25-31 and 34.

<sup>34</sup> Readiness Certification Order at P 78.

<sup>35</sup> Municipals make only a passing reference to the ISO’s “claims that the problems resulting in anomalous settlement statements are likely to be fixed by the time MRTU is implemented.” Complaint at 31.

<sup>36</sup> *Id.* at 30.

the conclusion that the conditions posited in the market simulation environment, which led to the high charges they describe, will also prevail in the production environment following go-live.

The ISO's extensive explanations belie Municipals' assertion that the ISO has provided a "mere expression of confidence" that the market simulation settlement statements are explainable and that conditions after go-live will be different.<sup>37</sup> The ISO has done much more than simply express confidence. It has provided complete explanations, which Municipals fail to acknowledge, let alone refute.

Municipals further argue that the Commission and the ISO cannot logically rely on the market simulation results when those results support the ISO's positions but reject them when they do not.<sup>38</sup> The ISO does not reject the market simulation results; neither does it ask the Commission to do so. Rather, the market simulation results should be recognized for what they are – the outcome of tests designed to determine how the MRTU systems operate under a wide range of conditions, including extreme stresses, so that the systems can be appropriately revised and refined. Market simulation results did establish that the software, working properly, could produce high – but correct – prices in certain circumstances. This observation led the ISO to make the price cap and parameter tuning tariff amendments. The Commission has recognized the value of market simulation in this regard in its orders.<sup>39</sup> For the many reasons

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<sup>37</sup> *Id.* at 5.

<sup>38</sup> *Id.* at 30-31.

<sup>39</sup> See, e.g., *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,147, at P 82 (2009) ("In response to claims that the [ISO] did not conduct enough analysis of the proposed parameter

discussed above, however, the simulated invoices produced in market simulation provide no factual support for Municipals' Complaint and proposal.

Finally, although Municipals' discussion in their affidavits of settlement results in the market simulation is incomplete – it ignores recalculations, corrections, and offsets that significantly affected the simulation results – the ISO acknowledges that those results revealed issues that needed to be resolved. That was the purpose of the market simulation. In some instances, Market Participants remain dissatisfied with the resolution.<sup>40</sup> Significantly, however, these issues are discrete Market Participant concerns that the ISO can and should address individually, not issues reflecting a systematic problem that requires a systematic approach such as Municipals' proposed Interim Payment Option.<sup>41</sup> The Commission should refrain from imposing upon the ISO and all Market Participants in MRTU a complex, resource-intensive modification to Settlement procedures when the issues involved are more amenable to an individualized resolution.

To support their argument that a systematic approach is required, Municipals cite statements regarding invoices that were made by the three largest investor-owned utilities in California (Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company,

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values, the Commission finds that the analysis conducted by the [ISO] is sufficient. As the [ISO] points out in its answer, market simulations have been run utilizing the proposed scheduling parameters, and have been made available to market participants.”). See *also* Transmittal Letter for Price Cap Filing (Docket No. ER09-241) at 4 (“It is important to note that the [ISO], in consultation with Market Participants, has purposefully created and tested extreme operational scenarios . . .”).)

<sup>40</sup> See, e.g., Tang Affidavit at 6:3-7 (stating that the ISO is currently investigating an issue for Azusa regarding Charge Type 6470).

<sup>41</sup> See Le Vine Declaration at PP 23-25, 32-33.

collectively “Utilities”) in response to the Readiness Certification.<sup>42</sup> Subsequent to the filing of the Complaint, however, Utilities filed comments in response to the ISO’s March MRTU Status Report stating that Utilities have concluded that, based on the activities and representations of the ISO, “with respect to the Settlements aspects of MRTU, a March 31, 2009 go-live date is viable.”<sup>43</sup> Therefore, Municipals cannot reasonably rely on statements of Utilities to support an assertion that a modification of Settlements procedures is needed.

**3. The ISO’s Price Validation and Correction Process Will Ensure that Prices Are Correct and Price Caps Will Mitigate the Impact of High – but Correct – Prices**

As discussed above, there is little reason to believe that the extreme, anomalous prices seen in market simulation and cited in the Complaint will be more than a very infrequent occurrence after go-live. Nonetheless, to the extent such prices do occur, the ISO has tariff authority to validate and correct the prices.<sup>44</sup> This price validation and correction process is ready for full implementation when MRTU goes live.<sup>45</sup> As noted above, price validation and correction will include a business process to block prices that may be incorrect or appear anomalously high until they can be reviewed.<sup>46</sup>

Even Municipals acknowledge that “[t]he price validation process could lead to identification and correction of anomalous or invalid prices in many

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<sup>42</sup> Complaint at 23.

<sup>43</sup> Motion to File Joint Comments and Joint Comments of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company on the CAISO’s March 5, 2009, MRTU Monthly Status Report, Docket No. ER06-615-038 (Mar. 13, 2009), at 8.

<sup>44</sup> See Section 35 of the MRTU Tariff.

<sup>45</sup> See Le Vine Declaration at P 47.

<sup>46</sup> Readiness Certification at 10; Readiness Answer at 13, 14; March MRTU Status Report at 3-4.

instances.”<sup>47</sup> Municipals argue, however, that the price validation and correction process would not address erroneous settlements results arising from errors relating to other inputs to the settlements processes, such as scheduled or Real-Time transaction volumes.<sup>48</sup> Such errors, however, are not likely to be problematic under MRTU. As described above, the settlement statements produced in market simulation were caused by a number of factors inherent in the simulation environment. To the extent that there were errors revealed in market simulation, the ISO corrected the errors. More importantly, however, one of the main causes for high bills was not errors *per se* but lack of meter data, which will not occur in actual MRTU production. That meter data will be available under MRTU. Moreover, as discussed below, the ISO is implementing proactive monitoring which will minimize the extent to which liabilities can accrue without Market Participants being aware of it.

Further, the high prices referenced in the Complaint would have been mitigated by the application of the interim price cap and price floor recently approved by the Commission. On January 30, the Commission approved the ISO’s use of a negative \$2,500/MWh price floor and \$2,500/MWh price cap on LMPs, Residual Unit Commitment prices, and Ancillary Services marginal prices in all MRTU markets for 12 months after start-up.<sup>49</sup> Because the ISO began using the price cap and price floor in market simulations later in January, the impact of this corrective measure is not reflected in the invoices cited in the

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<sup>47</sup> Complaint at 37.

<sup>48</sup> *Id.*

<sup>49</sup> *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,082 (2009).

complaint, which are from January and reflect December simulations.<sup>50</sup>

However, as Ms. Le Vine explains in her Declaration, the ISO applied the price floor and cap to the settlement statements for the results of the market simulation conducted in February and the first 12 days of March. Consequently, the invoices for February and the mini-invoices for the first part of March reflect the application of the price floor and cap, which has contributed to an improvement of settlement statements.<sup>51</sup>

Although Municipals assert that their Interim Payment Option “will supplement the protection afforded by the price cap and floor,”<sup>52</sup> they fail to provide any evidence that the price cap and floor will provide insufficient protection against extreme prices. The Commission certainly did not believe so when it approved the price cap and floor; it stated that those “interim price mitigation measures” are “a just and reasonable approach to limiting extreme market clearing prices.”<sup>53</sup> Municipals provide no evidence to change that conclusion.

#### **4. The ISO is Prepared to Take Action to Monitor the Market Participants’ Liabilities.**

Although all available evidence indicates that the charges on settlement statements after go-live will be just and reasonable, the ISO, as it explained in the MRTU readiness proceeding, recognizes the prudence of implementing additional measures to serve as an early warning system to help identify the

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<sup>50</sup> Complaint at 21-23 and affidavits cited therein.

<sup>51</sup> See Le Vine Declaration at P 50. Ms. Levine provides further information regarding the price floor and price cap at paragraphs 48-51 of her declaration.

<sup>52</sup> Complaint at 39.

<sup>53</sup> *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,082, at P 20.

potential adverse consequences of possible anomalous extreme charges once MRTU is implemented, and has done so.<sup>54</sup>

The ISO will engage in intensive market monitoring and other Market Participant support activities following go-live. The ISO has established a Go-Live Support Plan and Team to ensure sufficient resources to address any reliability, market, financial, or other issues that arise following MRTU implementation. The team comprises staff from many ISO departments, including the DMM, Market & Infrastructure Development, Operations (including Settlements), Information Technology, Legal, Regulatory Affairs, Communications, and Public Service. A central part of the plan is a rapid response incident management process that will examine and prioritize all reportable events. The Go-Live Support Team will be prepared around the clock to respond swiftly to any pricing or other market issues that may arise. Pursuant to the ISO's internal structure for undertaking these activities, an ISO staff member will serve as a "quarterback" for purposes of working with various ISO departments to evaluate and address any such issues. For at least 30 days after go-live, the ISO will also have a proactive support plan in place that will host multiple phone calls, will constantly monitor prices and dispatches, and will seek to identify problems before they impact the market or settlements. The ISO will identify and address any extreme, anomalous prices, and Market Participants will have constant access to ISO staff in order to inform them of any such prices. In addition, the DMM has mechanisms in place in place to monitor general market performance and specific areas of the MRTU market design, including pricing.

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<sup>54</sup> Readiness Certification at 10.

Of particular importance for the purposes of this Answer, the ISO's is implementing a Proactive Monitoring process to help Market Participants avoid unintended financial consequences for participants as they gain experience with the new market. Ms. Le Vine describes the Proactive Monitoring measures in further detail in her Declaration.<sup>55</sup>

As part of the Proactive Monitoring process, the team will review accepted bids and prepare shadow statements, based on meter estimates, on the day after the Trading Day, which will facilitate the review of financial outcomes prior to the actual publishing of the "credit run" seven days after the Trading Day. This information will be used to give Market Participants advance notice of liabilities that are accruing at an excessive rate. The ISO will also monitor the accrual of liabilities associated with neutrality adjustments and Unaccounted for Energy and make appropriate adjustments to each Market Participant's Estimated Aggregate Liabilities to reflect anticipated meter data.<sup>56</sup> Other parameters will be monitored in order to spot situations where large amounts of self-schedules occur at locations with negative prices. The ISO will also monitor, *inter alia*, whether Existing Transmission Contracts are being scheduled as expected and whether intertie schedules are tagged as expected.

In the Readiness Certification Order, the Commission accepted the ISO's "commitment to institute a monitoring process to assess, prior to any charges appearing on a settlement statement, whether a scheduling coordinator's market liabilities are accruing at a rate in excess of the rate over a comparable time

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<sup>55</sup> See Le Vine Declaration at PP 52-58.

<sup>56</sup> March MRTU Status Report at 4, 9-13.

period under the current CAISO tariff.”<sup>57</sup> The Commission also directed the ISO to provide Market Participants with information regarding the process by which the ISO will identify and address situations where a Market Participant may be incurring liabilities at an excessive rate.<sup>58</sup> The ISO will discuss these measures with Market Participants in greater detail than it has previously at the MRTU Implementation Workshop scheduled for March 18.

Municipals are incorrect in arguing that the ISO’s support team will be too busy and faced with too much settlement data to allow the rapid identification, investigation, and resolution of all anomalous or questionable charges.<sup>59</sup> As an initial matter, due to the other measures (discussed above) that the ISO will have in place to address extreme, anomalous prices, there is an extremely limited likelihood that the number of instances of such charges will be so large as to overwhelm the entire ISO monitoring and investigation process. Moreover, the support team will by no means be monitoring the markets and resolving charge issues by itself; numerous other ISO business groups will be contributing to and coordinating with that effort.

If the various ISO support activities described above do not resolve any extreme, anomalous prices that may arise after go-live, the Go-Live Support Team can quickly take action to address such prices. For example, based on the recommendations of the team, the ISO can request that the Commission grant an emergency suspension or waiver of tariff provisions (e.g., the provisions that

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<sup>57</sup> Readiness Certification Order at P 78.

<sup>58</sup> *Id.*

<sup>59</sup> Complaint at 36-37, 38, 39.

would otherwise require the timely payment of high charges). The ISO can also file an emergency tariff amendment to put any needed measures in place.<sup>60</sup>

Because payment of invoices is not due until two months after the end of the trading month, the ISO will have more than ample time to take remedial tariff measures in response to anomalous pricing before those charges must be paid.

**5. Even If High Charges Were to Materialize Under MRTU, There Is No Reason to Believe Such Charges Will Result in Reliability Issues Comparable to Those that Occurred During the 2000-2001 Energy Crisis.**

Municipals argue that high prices under MRTU may cause defaults by ISO debtors, which will make resources reluctant to bid into the ISO markets and lead to reliability issues, as happened during the 2000-2001 California energy crisis.<sup>61</sup> This argument ignores the major differences between conditions that will prevail under MRTU and those that existed in 2000 and the early months of 2001.

As an initial matter, a significant factor in the 2000-2001 energy crisis was the state requirement that public utility load-serving entities fulfill all of their energy needs through the California Power Exchange and ISO markets.<sup>62</sup> Today, in contrast, less than five percent of load is served through the ISO markets. The remaining amount is served through bilateral transactions (although subject to congestion charges that may not be reflected in today's market or are reflected in today's market through less transparent uplift charges).

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<sup>60</sup> Readiness Certification at 11, 19; Readiness Answer at 14-15; March MRTU Status Report at 11-12. The requirements for filing of an emergency tariff amendment are discussed further in Section III.C below.

<sup>61</sup> Complaint at 24-25, 27-28.

<sup>62</sup> *San Diego Gas & Electric Co.*, 97 FERC ¶ 61,275, at 62,173 (2001); Final Report on Price Manipulation in Western Markets, Docket No. PA02-2-000 (Mar. 26, 2003), at I-12.

The impact of any anomalous prices on a Market Participant's overall liabilities is thus highly diluted.

Moreover, unlike the situation in 2000-2001, the ISO will have numerous measures in place to address anomalous prices, as explained above. These measures will limit high prices before they become so prevalent as to risk affecting reliability. Further, as the Commission has recognized, a major reason that resources could command high prices during the energy crisis was the lack of an obligation to make their capacity available to the ISO's markets, other than pursuant to Reliability Must-Run contracts. The Commission's implementation of its must-offer obligation in April 2001 addressed this problem.<sup>63</sup> The Commission approved the elimination of the must-offer obligation once MRTU goes into effect for the very reason that it will be superseded by MRTU mechanisms that will ensure the availability of capacity.<sup>64</sup> Specifically, under MRTU, resources will be obligated to make capacity available through the Resource Adequacy and Interim Capacity Procurement Mechanism mechanisms, both of which entail a requirement to offer capacity into the Integrated Forward Market, and through the Residual Unit Commitment mechanism, which the ISO will conduct after the Integrated Forward Market in the Day-Ahead Market to ensure that sufficient generation is committed to meet forecasted demand. Due to these features of MRTU, the ISO will be able to ensure the availability of capacity after MRTU goes into effect. Therefore, Municipals' argument that a repeat of the 2000-2001 energy crisis may occur is groundless.

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<sup>63</sup> See *San Diego Gas & Electric Co.*, 95 FERC ¶ 61,115, at 61,355-57 (2001).

<sup>64</sup> *Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,193, at P 2 (2007).

**C. Municipals Fail to Show that Their Proposed Interim Payment Option Is Just and Reasonable.**

Because, as discussed above, Municipals fail to bear their burden of proving that the existing MRTU Tariff provisions are not just and reasonable, there is no need for the Commission to address the question of whether Municipals have satisfied their second burden of proof obligation – showing that their proposed Interim Payment Option is just and reasonable. Nevertheless, in the event that the Commission does reach the second prong of Section 206 of the Federal Power Act, the Commission should find that the proposed Interim Payment Option is not just and reasonable both substantively and because implementation would be problematic.

**1. Because the Interim Payment Option Is Inconsistent with the Commission-Approved Just and Reasonable MRTU Market Design, It Is Not Just and Reasonable.**

The Interim Payment Option would allow a Scheduling Coordinator, whether located within or outside the CAISO Balancing Authority Area, to defer payment to the ISO of charges above certain specified historical levels while a settlement dispute raised by the Scheduling Coordinator is pending before the ISO.<sup>65</sup> Implementing the Interim Payment Option would undermine the LMP-based market that will go into effect under MRTU. The Commission approved the use of an LMP-based market as a vehicle for optimizing market efficiency by producing accurate and transparent price signals. As it stated:

The Commission has repeatedly recognized that an LMP-based market design provides market participants with the information necessary to make cost-effective decisions when using the transmission system, promotes efficient trading, and provides the

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<sup>65</sup> Complaint at 32-39 and Attachment A.

market with signals on where investment in new generation and transmission are needed. . . . [O]ur acceptance of LMP for the CAISO is based on a review of the record before us in this proceeding. We continue to believe that the LMP market designs promote efficient use of the transmission grid, promote the use of the lowest-cost generation, provide for transparent price signals, and enable transmission grid operators to operate the grid more reliably.<sup>66</sup>

The Interim Payment Option is inconsistent with this purpose because it would relieve Scheduling Coordinators of the responsibility to make full, timely payment for all charges they incur, thus blocking or frustrating the MRTU price signals that would otherwise provide incentives for economically efficient decisions under MRTU. The availability of the Interim Payment Option would encourage Scheduling Coordinators to believe that they can act in the same way under MRTU as they do under the current market design without any material impact on market outcomes.

By altering MRTU price signals and thus skewing market outcomes, the Interim Payment Option could have an effect on the MRTU markets after go-live similar to the distorting effect produced in market simulation when Market Participants engage in unrealistic bidding, scheduling, and market strategies.<sup>67</sup> In market simulation, Market Participants know that they are only engaging in exercises that have no real-world financial consequences for themselves or for anyone else, and therefore engage in strategic behavior based on that knowledge. Similarly, if the Interim Payment Option were to be implemented, Market Participants' awareness that they will not be responsible for full, timely payment of all charges they incur may create an incentive for them to engage in

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<sup>66</sup> *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274, at P 63 (2006).

<sup>67</sup> See Section III.B above.

strategic behavior based on that knowledge. Such behavior should be discouraged.

One component of the Interim Payment Option is that the ISO would reduce payments to the affected CAISO Creditors for the same invoice period as necessary to reflect the reduction in payments by Net Debtors as a result of the exercise of the Interim Payment Option, provided that all Net Creditors would be paid at least their Default Energy Bids and any Transmission Revenue Requirements.<sup>68</sup> This component of the Interim Payment Option could, in and of itself, undermine the LMP-based markets. The MRTU Tariff uses Default Energy Bids only for bid mitigation in the Market Power Mitigation-Reliability Requirement Determination and for the settlement of mitigated Exceptional Dispatches.<sup>69</sup> Using the Default Energy Bids as a floor for payment amounts would create incentives for generation resources to determine their Default Energy Bids in ways that could undermine LMP markets. The ISO could potentially see more Scheduling Coordinators electing LMP-based Default Energy Bids<sup>70</sup> for their generating units and attempting to inflate the value of these Default Energy Bids by strategically bidding higher to raise the level of LMPs at their generator locations. If LMPs were pushed higher and generators were guaranteed payment of the Default Energy Bid amount pursuant to the Interim Payment Option, the increased Default Energy Bids would undermine the Market

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<sup>68</sup> Complaint at 35.

<sup>69</sup> See Section 11.5.6 of the MRTU Tariff.

<sup>70</sup> Under Section 39.7.1 of the MRTU Tariff, Scheduling Coordinators have the option of indicating their preference for the three different options for calculating Default Energy Bids (Variable Cost, LMP Option, and Negotiated Option). The LMP Option is based on a weighted average of the lowest quartile of LMPs at the Generating Unit Pricing Node in periods when the unit was dispatched during the preceding ninety days.

Power Mitigation-Reliability Requirement Determination. It would also have the effect of undermining the Interim Payment Option, which was intended to ensure that generators would recover their variable costs. Instead, Default Energy Bid payments could potentially rise well above variable costs through the incentive that the Interim Payment Option would create for Scheduling Coordinators to elect and seek to strategically raise the level of LMP-based Default Energy Bids.

Moreover, allowing a Scheduling Coordinator to defer payment of a portion of its charges would in effect overturn the longstanding requirement that a Scheduling Coordinator must make full payment of all invoices on time, potentially delaying finalization of invoices for significant periods.<sup>71</sup> The Commission approved that requirement as just and reasonable before the ISO first began operations in 1998.<sup>72</sup> The requirement is an important feature of the ISO's settlements provisions, as the Commission has recognized.<sup>73</sup> The Commission should not overturn it now.

As a result of these problems, the ISO should not be required to implement the Interim Payment Option or indeed any payment proposal that permits the deferment of payment to the ISO of charges above certain specified

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<sup>71</sup> Section 11.29.8.7 of the MRTU Tariff.

<sup>72</sup> The requirement is included in Section 11.6.2 of the currently effective (pre-MRTU) ISO tariff, which is also where it was included when the ISO first began operations.

<sup>73</sup> See *Cal. Indep. Sys. Operator Corp.*, 98 FERC ¶ 61,335, at 62,434 (2002) ("In response to DWR's assertion that the ISO's invoices include costs associated with the non-creditworthy UDCs self-supplying, we direct DWR to use the ISO Tariff Sections 11 and 13 concerning billing, settlement and dispute resolution to resolve this issue. We note, however, that Section 11.6.2 states that, 'Each Scheduling Coordinator shall pay any net debit and shall be entitled to receive any net credit shown in an invoice on the Payment Date, whether or not there is any dispute regarding the amount of the debit or credit.' Finally, we expect the ISO to enforce the tariff provisions in the event of default or delay in payments due under the ISO Tariff.").

historical levels while a settlement dispute raised by the Scheduling Coordinator is pending.<sup>74</sup>

**2. Implementation of the Interim Payment Option Would Require a Major Revision of the ISO's Settlement Software and a Significant Diversion of ISO Resources.**

Putting the Interim Payment Option into effect would not be as simple and quick as Municipals suggest.<sup>75</sup> To the contrary, as Ms. Levine explains in her Declaration, it would not be feasible for the ISO to implement the Interim Payment Option prior to MRTU implementation, and the ISO and Market Participants would need to invest significant time and effort in order to implement it afterwards, which would take critical resources away from the go-live effort both before and after MRTU implementation.<sup>76</sup> The market structure will be vastly different under MRTU than under the ISO's currently effective market design. Comparing financial exposure under those two different market structures – which implementation of the Interim Payment Option would require – would be an apples-to-oranges comparison.<sup>77</sup> Moreover, even if the ISO could make an apples-to-apples comparison between the financial exposures under the pre-MRTU and MRTU market structures, the ISO could put the Interim Payment Option into effect only by performing three levels of calculations it does not currently do.<sup>78</sup> The ISO could perform those calculations only by making

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<sup>74</sup> The ISO would be able to implement one isolated piece of Municipals' proposal: the ISO could reduce payments to the affected CAISO Creditors for the same invoice period as necessary to reflect a shortfall in payments by Net Debtors. However, the ISO doubts that Municipals would find the implementation of this one piece to be acceptable to it.

<sup>75</sup> See Complaint at 39-40.

<sup>76</sup> Le Vine Declaration at P 10.

<sup>77</sup> *Id.* at PP 5-15.

<sup>78</sup> *Id.* at PP 16-22.

changes that would include a reconfiguration of the ISO's Settlements and Market Clearing software system ("SaMC"), which is the software application the ISO uses to comply with the requirements of the MRTU Tariff concerning settlements and market clearing. It would be difficult and time-consuming for the ISO to make and test such software changes even if the ISO had months to do so. Also, in order to reconfigure SaMC, the ISO would have to divert critical personnel from MRTU-related work that they already need to attend to now and after go-live.<sup>79</sup>

Even the preparation and implementation of tariff changes that are similar to the Interim Payment Option would be problematic. If the ISO were to attempt to develop tariff changes in normal circumstances, it would have to conduct a stakeholder process in order to obtain the input of interested parties on exactly what tariff changes were needed. As Municipals recognize,<sup>80</sup> certain stakeholders have submitted comments in the MRTU readiness proceeding that indicate their opposition to generic proposals for offering relief for settlement overcharges. The ISO anticipates that other stakeholders would either oppose the concept of such a generic proposal or would seek significant modifications in how such a tariff mechanism would be structured. Thus, the ISO would expect the stakeholder process to be contentious. Even after the tariff changes were finalized, the ISO would need to obtain Commission approval and to develop and put in place the software modifications needed to implement whatever the Commission approved.

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<sup>79</sup> *Id.* at PP 59-63.

<sup>80</sup> See Complaint at 41.

In light of the extensive resources that the ISO and stakeholders are investing in preparation for go-live, it would be an unnecessary distraction to undertake a new tariff revision at this time. If in the initial period after go-live the ISO were to find that it needed to take action by revising its tariff, the ISO could do what would be needed to implement the tariff changes by July 1, which is when payment of the first MRTU invoices will be due. In the event that the ISO determined that it needed to submit an emergency tariff amendment, the ISO would either conduct an abbreviated stakeholder process or no stakeholder process, depending on how exigent the need to file the tariff amendment was. However, the ISO would still need time to develop and put in place the required software modifications.

#### **IV. Conclusion**

For the foregoing reasons, the Commission should deny the Complaint submitted in this proceeding immediately and without further procedures.

Respectfully submitted,

/s/ Michael E. Ward  
Michael E. Ward

Nancy Saracino  
General Counsel  
Sidney M. Davies  
Assistant General Counsel  
Anna A. McKenna  
Senior Counsel  
California Independent System  
Operator Corporation  
151 Blue Ravine Road  
Folsom, CA 95630  
Tel: (916) 351-4400  
Fax: (916) 608-7296

Sean A. Atkins  
Michael E. Ward  
Bradley M. Miliauskas  
Alston & Bird LLP  
The Atlantic Building  
950 F Street, NW  
Washington, DC 20004  
Tel: (202) 756-3300  
Fax: (202) 654-4875

Counsel for the  
California Independent System  
Operator Corporation

Dated: March 16, 2009

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>California Municipal Utilities Association; Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California; City and County of San Francisco; Northern California Power Agency; Sacramento Municipal Utility District; Modesto Irrigation District; and Transmission Agency of Northern California,</b>	)	
<b>Complainants,</b>	)	
<b>v.</b>	)	<b>Docket No. EL09-38-000</b>
<b>California Independent System Operator Corporation,</b>	)	
<b>Respondent.</b>	)	

**DECLARATION OF DEBORAH LE VINE ON BEHALF OF THE  
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

I, Deborah Le Vine, hereby declare as follows:

1. I am employed as Director of Market Services and MRTU Program Manager for the California Independent System Operator Corporation ("ISO"). My business address is 151 Blue Ravine Road, Folsom, California 95630. I was appointed as the Director of Market Services in July 2005, and I am responsible for the "bid-to-bill" process of the ISO's markets. In my current position, I am responsible for market operations, including support of the grid operations, evaluating market performance, reporting market status, quality review of market data, billing, settlements, and reruns. In addition to the Market Services responsibilities, I have also

just completed a two and a half year assignment as the Program Manager of the Market Redesign and Technology Upgrade (“MRTU”). As the Program Manager of MRTU, I was responsible for the overall delivery of the program based on the specified scope, schedule, and budget, including day-to-day operation of the program, which included 16 separate projects. My responsibilities also included ensuring that the internal Program Sponsor and Steering Committee, as well as the Board of Governors and stakeholders, had the necessary information to fulfill their responsibilities or otherwise meet their needs; setting overall direction for the program team; issue resolution; tracking of scope, schedule, and budget; and ensuring that an appropriate knowledge transfer between MRTU project staff and the personnel having day to day responsibility for implementing MRTU is planned and executed. As planned, with the imminent start of MRTU, we have transitioned the program functions to the business units responsible for implementing MRTU.

2. I have been employed at the ISO in various positions since January 1998. The ISO first began operations on March 31, 1998, for the April 1, 1998 Trading Day.
3. I earned a Bachelor of Science degree in Electrical Engineering from San Diego State University in San Diego, California in May 1981. In May 1987, I received a Master in Business Administration from Pepperdine University in Malibu, California. In December 2002, I completed an Executive Program in Driving Government Performance: Leadership

Strategies that Produce Results from the John F. Kennedy School of Government, Harvard University in Cambridge, Massachusetts. In August 2007, I completed an Advanced Masters Certificate program in Project Management from Villanova University in Villanova, Pennsylvania. Additionally, I am a registered Professional Electrical Engineer in the State of California.

4. This purpose of this Declaration is to provide information relevant to the Complaint filed by the California Municipal Utilities Association and other parties in this proceeding (collectively, "Municipals"). I will provide a foundational understanding of the MRTU settlements versus the existing legacy market settlements and the complexities associated with the ISO's ability to implement the Interim Payment Option proposed by Municipals. I will then discuss issues regarding the anomalous results produced in the ISO's MRTU market simulation discussed in the affidavits attached to Municipals' Complaint. I will also discuss certain mechanisms that the ISO has in place for ensuring that the ISO markets produce accurate prices and settlements following the implementation of MRTU (*i.e.*, following "go-live"). In particular, I will describe the features and status of the ISO's price validation and correction process and of the ISO's price floor and price cap. I will also discuss a proactive monitoring process the ISO will be putting in place for go-live that is intended to provide market participants with an early alert of anomalies the ISO observes. The ISO's proactive monitoring effort is not intended to absolve market participants

over their responsibility for their scheduling and bidding behavior. For the purposes of detecting unexpected financial outcomes early on, it is important to note that market participants have more accurate data – and have it available sooner – than the ISO. To benefit from MRTU to the maximum extent possible, market participants should focus on their own portfolio and conduct their own analysis and adjust their bidding and scheduling behavior in response to market signals without any reliance on the ISO's proactive monitoring effort. Finally, I will respond to the assertions by Municipals and by their affiant Christine Vangelatos that the ISO could easily implement their proposed Interim Payment Option.

#### Settlement Architecture Differences in MRTU versus the Existing Zonal Market Structure

5. The current market design is substantially altered by the implementation of MRTU. The ISO currently operates a market that procures Ancillary Services and assesses Inter-Zonal Congestion charges day-ahead. In today's hour-ahead market, Intra-Zonal Congestion charges are assessed based on the demand for transmission on identified zonal interfaces reflected in the balanced schedules submitted by Scheduling Coordinators. The ISO also procures Ancillary Services day-ahead and incremental Ancillary Services hour-ahead. Of course, the ISO also operates a real-time imbalance energy market. As noted, today's market structure is based on balanced schedules where generation, imports, and import purchases equal load, exports sales, and losses. The net energy associated with the balanced schedule in the day-ahead is zero and

therefore not financially settled through the ISO's markets, although Scheduling Coordinators can be assessed congestion charges in the day-ahead. In sum, today's day-ahead scheduling process and hour-ahead market do not settle energy, but rather only settle congestion and Ancillary Services. Scheduling Coordinators also receive charges for transmission access and the ISO's Grid Management Charges, among other charges, that they will continue to be charged under MRTU. This culminates in a settlements architecture that is reflected in that fact that today the ISO has 146 charge codes, of which only 53 are similar to those needed in MRTU and will therefore carry over to MRTU.

6. MRTU introduces a day-ahead co-optimized energy and ancillary services market that provides market participants with the ability to bid and purchase energy and Ancillary Services in the Day-Ahead Market and eliminates the balanced scheduling requirement. The Day-Ahead Market under MRTU produces locational marginal prices reflecting congestion at a nodal level along with marginal losses. Another difference between MRTU and today's market is the instrument utilized to hedge congestion charges. While today's Firm Transmission Rights ("FTRs") are auctioned, under MRTU they are replaced with Congestion Revenue Rights ("CRRs") that are allocated to Load Serving Entities, including entities like Municipals. Under MRTU, CRRs are also made available at auction on any remaining capacity. FTRs only create rights to receive revenues when there is congestion on a relevant inter-zonal interface. CRRs create

rights to receive revenues *or the obligation to pay* revenues, depending on the flow of congestion between pricing nodes designate as sources and sinks.

7. Day-ahead Bids, including Self-Schedules, will reflect supply and demand for Energy and offers to supply (or self-supply) Ancillary Services, and will replace balanced schedules and the separate day-ahead Ancillary Services market. The Day-Ahead Market includes an Integrated Forward Market that manages congestion on a Day-Ahead basis in establishing Day-Ahead Energy Schedules and Ancillary Services Awards, based on those submitted bids for demand and supply and Ancillary Services. The Day-Ahead Market also includes a Residual Unit Commitment process designed to ensure that sufficient capacity is committed on a day-ahead basis based on forecasted demand.
8. Another difference between today's zonal market and MRTU is the role of Inter-SC Trades. Today, trades occur between two Scheduling Coordinators in order to meet the balanced schedule requirement. Such trades are part of the scheduling process and are not settled through the ISO systems. Under MRTU, Inter-SC Trades are simply a settlement service intended to be utilized by parties to bilateral transactions to offset ISO settlement charges. Scheduling Coordinators need not utilize the ISO's Inter-SC Trade service – if they so choose, they can settle bilaterally – and the Inter-SC Trade service is not part of the scheduling and bidding process. Finally, under MRTU, Scheduling Coordinators will receive Bid

Cost Recovery for the Integrated Forward Market, Residual Unit Commitment, and the Real-Time Market. Today, resources only receive start-up and minimum load costs when committed by the ISO as a result of the Commission's must-offer obligation.

9. All these changes in market structure will also substantially alter the settlements architecture. When MRTU goes live, the MRTU settlement statements will start with 131 charge codes, 78 of which are for new services provided in MRTU that do not exist in the legacy zonal market. With the Commission's assistance, the ISO and market participants have worked diligently over the past several years to design, implement, and test the settlements architecture that supports the new MRTU market design.

#### Implementation of the Interim Payment Option Proposal

10. As discussed further below, the Interim Payment Option as proposed by Municipals would take significant time and effort by the ISO and market participants to implement. Moreover, the Interim Payment Option is infeasible to implement at this time.
11. Under Municipals' proposal, as I understand it, the early identification and investigation of atypical charges would require that the ISO calculate preliminary charges seven Business Days after a given Trading Day. While Municipals do not state the mechanism for this early identification and investigation, it would need to be accomplished through a "credit run" of the Settlements and Market Clearing ("SaMC"), which is the software

application the ISO uses to comply with the requirements of the MRTU Tariff concerning settlements and market clearing. The proposal goes on to state that if a parent charge group, as identified in Attachment A, for the Trading Day is greater than 150% of the charged amounts for the corresponding Trading Day for the previous year, the ISO would have to notify the Scheduling Coordinator within two Business Days and immediately investigate the reason. Because of the substantial differences in the settlements design and architecture I have described above, this comparison is not enough to provide an early warning notice and not very meaningful. Which is why, as I describe below, the ISO has decided to provide a more robust early warning system.

12. As demonstrated in Attachment A, the only parent charge group that can be directly correlated with a corresponding Trading Day for the previous year is the group that includes the Annual FERC Fee, FERC Rerun Interest, Station Power Settlement, and certain penalties. Attachment A lists the MRTU charge codes organized by parent and child charge group, MRTU charge code, charge code name, and whether the charge code is continuing from the ISO's existing legacy system.
13. There are twenty "Parent Charge Groups" listed in Attachment A. In the table below, I have summarized the top ten groups that will reflect the majority of charges for MRTU. I have also calculated and provided in the last column of the table the percentage of the MRTU charge codes consistent with legacy charges. However, because, as I have discussed

above, the market structure under MRTU is substantially different from the current zonal market, such links to legacy charge codes should not be relied upon as entailing necessarily similar charges under MRTU. For example, while there are 11 charge codes in the legacy system that can be mapped to MRTU Hour-Ahead Scheduling Process (“HASP”) charge codes, the hour-ahead market in the current zonal market is based on entirely different pricing and market clearing processes than the HASP will be under MRTU. Therefore, no expectations under MRTU should be created by virtue of the linkage to prior charge types.

Parent Group	MRTU Charge Code (“CC”)	Legacy CC	Percentage of MRTU CC Similar to Legacy CC
Ancillary Services	29	6	21%
Day-Ahead	10	1	10%
Inter-Scheduling Coordinator Trades	2	0	0%
Hour-Ahead	32	11	34%
Cost Recovery	10	2	20%
Neutrality	1	0	0%
Grid Management Charge	15	12	80%
Access Charge	8	7	87%
Enforcement Protocol Penalty	3	3	100%
Revenue Adequacy	6	0	0%
	116	42	36%

14. Consequently, a comparison to last year’s Trading Day will not necessarily provide useful information for the purposes of identifying inappropriately excessive accrual of potentially high liabilities. The comparison of a Scheduling Coordinator’s financial exposure for April 2008 to the settlement statements it will be getting from the ISO under MRTU in April

2009 is in many respects an “apples to oranges” comparison and unlikely to identify settlement outcomes that are likely to result in excessive settlement outcomes under MRTU. To get a full picture of a Scheduling Coordinator’s energy and capacity financial exposure, one would have to compare not only the Scheduling Coordinator’s ISO statement, but also all energy and capacity procurement costs outside of the ISO’s markets, e.g., through bilateral arrangements. The ISO does not have access to the information and could not constructively evaluate it. In addition, MRTU allows Scheduling Coordinators to submit economic bids in the day-ahead, which could result in procuring much more Energy from the ISO than under the previous market structure. This would result in much higher charges in the ISO’s Day-Ahead Market but potentially lower overall Energy costs to the Scheduling Coordinator. As I stated above, market participants are in the best position to take advantage of MRTU data and the ISO would not necessarily have this information.

15. Notwithstanding the fact that the market participants themselves have more information as to their gross ISO settlements accrual and their net financial position, the ISO has developed a proactive monitoring system, which I describe more fully below, to provide a more meaningful set of parameters for identifying potential exposure to high liabilities early on. The ISO will utilize this information to help ensure that the ISO is operating consistently with the MRTU Tariff and can take appropriate corrective action if necessary. The information can also be helpful to market

participants so that they can learn how to respond to the market signals sent by MRTU. For example, based on early information, a market participant may decide to change from self-scheduling supply to submitting economic bids.

16. Even if the ISO could make an “apples to apples” comparison of the financial exposure between the legacy and MRTU charge codes, implementing the Interim Payment Option proposal would require the ISO to do three levels of calculations and make numerous changes to the settlement software. First, the ISO would need to publish initial settlement statements and monthly invoices consistent with the MRTU tariff and SaMC system. This is the first level calculation needed to determine what a Scheduling Coordinator should pay or be paid for the month. Then the ISO would need to calculate the minimum payment as a precautionary measure. Under the Interim Payment Option, the ISO would pay each CAISO Creditor a minimum of (1) its Default Energy Bid cost for energy and (2) its Transmission Revenue Requirement (“TRR”). Because this minimum payment would need to be coded through SaMC in order to actually invoice participants for these amounts, it would present a number of challenges to both the ISO and market participants.
17. The first challenge of the minimum payment calculation is that Default Energy Bid cost data is not currently transferred to the settlement system and therefore is not configured as an input to SaMC. In order to calculate this component, the integration layer for the applications would need to be

recoded to pass the data payload to SaMC and SaMC would have to be revised to include a mechanism to receive the data.

18. The second challenge is that the ISO does not pay the Transmission Revenue Requirement. The transmission Access Charge is calculated as a formula rate that incorporates the Participating Transmission Owners' ("Participating TOs") TRR and the Gross Load filed with the Commission. The approved Access Charge is assessed to demand and exports using the CAISO Controlled Grid. The revenues received for a given month are then disbursed to each Participating TOs based on the ratio of its TRR to the total TRR. I would note that Municipals are also Participating TOs and, based on the currently effective Access Charge and the transmission they have turned over to the ISO Operational Control, receive \$45,607,595 for their TRRs annually.
19. Assuming that by "TRR" Municipals are referring to the amount that would have been paid through the Access Charge revenue payment, the ISO would need to have available in advance for the monthly invoice the amount of minimum payment totaled for the month for each Scheduling Coordinator ID.
20. Once the two components are available to SaMC, a calculation of the minimum payment could be done but would require reconfiguration of the systems to add these charge codes. This calculation alone would take the ISO approximately three weeks to code and test. As discussed further

below, if the ISO changes its settlement system, participants will also need to change theirs.

21. The last level of calculation required by Municipals' proposal is the determination of the amounts the debtor withholds when they opt to withhold payment. The ISO would also have to create a mechanism to track the amounts actually paid versus the minimum of the Default Energy Bid or the TRR for each Scheduling Coordinator as recommended by Municipals.
22. The MRTU Tariff and today's ISO Tariff require that payments be made five business days after the invoice is issued. Payments are due at 10 a.m. and the ISO pays creditors at 2 p.m. If a debtor withheld payments, the ISO would not learn of it until after 10 a.m. The ISO would then be expected to calculate for each creditor a *pro rata* allocation of the shortfall and compare the proposed payment to the minimum payment that should be made. If the minimum payment were greater than the *pro rata* allocation, then the ISO presumably would be expected to short other creditors a greater amount, or decide how to allocate the shortfall to debtors if additional funds must be collected from debtors to ensure creditors recover their Default Energy Bids, all within 4 hours. Thus, while conceptually simple, the Interim Payment Option is extremely complex and requires additional convoluted calculations. This effort, if required now or even after go-live, is not feasible. Even if it were remotely feasible, it would divert essential ISO resources currently devoted to MRTU

implementation that must also be devoted to the early implementation of MRTU to ensure that any necessary actions are promptly taken so that prices and charges are consistent with the MRTU Tariff. Moreover, given the myriad tools the ISO has sought and the Commission has approved to avoid anomalous market settlement outcomes, I do not believe that these additional complications are necessary, or even advisable, at this time.

#### Anomalous Results in Market Simulation

23. The Affidavits provided by Municipals identify a number of anomalous results that occurred in the ISO's market simulation. Such anomalies arose from a number of reasons, not all of which relate to software or market performance issues. We have worked closely with market participants to address these issues and many others like them and continue to do so.
24. First, I would like to point out that the Affidavits fail to identify the recalculations and corrections that followed the anomalous results and the actions that the ISO has taken to prevent the recurrence of such results in both the simulation and production going forward.
25. The ISO recognizes that Municipals are skeptical that the ISO has resolved all the issues that they identify. The ISO continues to discuss with market participants their specific issues and is happy to continue to do so. But these market participant-specific issues do not appear to be what led Municipals to file their Complaint. Rather, their true concern appears to be with the high invoices and daily settlement statements for

some charge codes that they observed during market simulation. The ISO has now many times explained that the high charges have been driven by a combination of anomalous prices and anomalous billable quantities inherent in the market simulation environment.

26. The first major contributor to anomalous prices is the simulator, which requires integration with the Energy Management System to feed the simulation. When the simulator is initialized, there can be one or more intervals prior to full integration that do not successfully solve. Once the Energy Management System is integrated, the simulator runs fairly well.
27. A second major contributor is that imbalance energy in the simulation can be anomalous, generally because of inaccurate inerties, load forecast discrepancies, unrealistic bidding behavior (including lack of bids) on the part of market participants, and other simulated data issues.
28. A third major source of anomalies is that the ISO has been updating the parallel operation simulation with production data, including outage data. This outage data should be incorporated in the Scheduling Coordinators bid structure; however, the ISO has seen instances where a Scheduling Coordinator is bidding units in the Scheduling Infrastructure Bidding Rules application that are not available in production due to the fact that they are on an actual outage.
29. Another contributor to anomalous prices in recent weeks is the Automatic Dispatch System and the Control Area Scheduler, which is the ISO's dispatching system and e-tagging system. In parallel operations and pre-

production phase of the MRTU program, we have turned off the “auto-generation” of tags and “auto-approve” of dispatches. In these cases, the Scheduling Coordinator was asked to put in tags and approve dispatches, similar to actual operations. However, not all participants performed this function and, therefore, we saw deviations that impacted participants, along with an additional dispatch in the next Real-Time interval to make up for imports or generation that did not respond.

30. A further contributor to pricing anomalies is a lack of sufficient bids and excessive self-schedules. During the Parallel Operations in January and February, and even in Pre-Production, Scheduling Coordinators have not submitted reasonable estimated bid volumes, which results in additional procurement that the ISO is not seeing in actual operation and would not expect to see after MRTU go-live. At other times, the excessive self-schedules result in overgeneration and negative prices. This is not to say that there have been no errors on the part of the ISO. For example, in January, the ISO observed Path 15 congestion issues caused by incorrect transmission line limits on the wrong direction in simulation. This was quickly resolved and assisted in validating the system topology. All these factors have contributed to the anomalous pricing results.
31. Anomalous settlement quantities are mainly attributed to meter data. The market simulation generates meter data from the Day-Ahead Market Schedules and Awards. To ensure that all charge codes fired, including deviations, the simulation assumed generation meters at 90% of Day-

Ahead Schedules and Awards and Load meters at 110% of Day-Ahead Schedules and Awards. While participants had an opportunity to overwrite this data for settlement purposes, very few did. Thus, although the quantity included in statements was exaggerated to ensure that charge codes worked, the exaggeration also resulted in high bills that included unrealistic Uninstructed Imbalance Energy and Unaccounted for Energy. In MRTU operations this will not be an issue because participants have been providing meter data consistently, with a few minor exceptions, for the last eleven years.

32. Turning to some of the Municipal-specific issues, in his Affidavit, Hsi Bang (Bob) Tang states that the City of Azusa is experiencing problems regarding MRTU system performance with respect to the assessment of charges for transmission losses for use associated with Azusa's Mead-Adelanto Transmission Project Converted Rights, and that these problems have resulted in an apparent double-charge for the transmission losses. Mr. Tang incorrectly describes the nature of the issue, and the ISO has had subsequent conversations with Mr. Tang. At this point, the ISO does not see an obvious issue. The original issue was that the incremental losses external to the ISO Balancing Authority Area for Mead-Adelanto were not being factored into the Marginal Loss Component. There was a reporting issue in the software that resulted in incorrect reporting of the losses at Adelanto due to the fact there is no resource located there. This issue has been fixed in the software and the losses on the Adelanto tie

point look like they are following expected behavior based on their relative location to other points of entry to the ISO Balancing Authority Area.

33. In his affidavit, Mr. Tang's issue now appears to be that if the ISO is charging Real-Time Marginal Losses for transmission within the ISO Balancing Authority Area, the ISO should not also be charging contract losses for transmission outside the ISO Balancing Authority Area. The ISO believes that Mr. Tang concern reflects more of a philosophical disagreement on responsibility for losses rather than a problem with MRTU software. Accordingly, this issue does not suggest any need for an Interim Payment Option.
34. It is my opinion, based on the actions that the ISO has taken, the different circumstances that will prevail under MRTU operation, the information available to me in my position, and the software and business processes the ISO has in place, that incorrect market results are not likely to occur following go-live. I do recognize, however, that it is still unknown what participant bidding strategies will be, and there may be issues that arise after go-live. I do emphasize, however, that it is precisely for this reason that the ISO has gone to great lengths to put in place a number of processes outlined below to diminish the impact to participants of anomalous results.

#### The ISO's Price Screening Process

35. The ISO has in place a procedure, pursuant to Section 35 of the MRTU Tariff, as accepted by the Commission, by which it will block the initial

publishing of Real-Time prices to the CAISO Market Results Interface and OASIS to allow the ISO to conduct an initial preliminary validation and correction process of prices for all MRTU market intervals. As described in Section 35, the ISO has up to eight calendar days to complete the full validation and correction process.

36. The ISO will validate all Real-Time Market prices after the fact. Automated warning messages are sent to ISO staff at anytime the price screen is triggered. This process is designed to quickly address the root cause of price anomalies in order to minimize the number of affected markets.
37. Once a price is blocked, the ISO has committed to analyze the price and unblock the price within 48 hours. However, although the price is unblocked, it may still be corrected as discussed further below pursuant to the ISO's authority under Section 35 of the MRTU Tariff.
38. The ISO will continually evaluate the screens and may apply more screens or revise the threshold levels depending on the market results and volume of blocked prices.
39. These price screens will reduce the incidence of the posting of erroneous prices.

#### The ISO's Price Validation and Correction Process

40. The ISO has in place a procedure, pursuant to Section 35 of the MRTU Tariff, as accepted by the Commission, by which it will validate and correct prices for all MRTU market intervals.

41. In the price validation and correction process, the ISO will conduct market testing of the Full Network Model, including daily validation testing three and two days ahead of each Trading Day. At that time, the ISO will take into account preliminary market solutions, considering congestion, unit commitments, and outage topology.
42. Prior to the Day-Ahead Market completion, the ISO will validate data. The ISO will also validate the initial run of the Integrated Forward Market, rerunning it as necessary to eliminate any invalid results. Once the Integrated Forward Market results are approved by Grid Operations and Market Services as having produced correct results under the tariff, the Residual Unit Commitment will be run and be similarly approved by the two departments.
43. The ISO will correct Day-Ahead, HASP, and Real-Time invalid prices through isolated price corrections, market reruns, or replication of prices from validated market solutions, as circumstances require. To the extent possible, the correction will replicate the prices that would have conformed to the MRTU tariff. When this is not possible, the ISO will correct prices to be as close as reasonably possible to what should have resulted under the tariff.
44. Consistent with Section 35.2 of the MRTU Tariff, the price correction process allows the ISO until 1700 hours on the eighth calendar day after the Trading Day to correct the price. In addition, a weekly summary of all

price corrections that occur are in a weekly report that is posted by the seventh day of the following week.

45. On January 14, 2009, the ISO implemented on a going-forward basis the initial price validation and correction process in MRTU market simulation, to the extent possible within the accelerated settlement timeline under market simulation, starting with the settlement statements for the results of market testing conducted in January 2009. In addition, a similar level of price corrections was in place for the December 11 through 31 recalculation settlement statements.
46. Implementing the price validation and correction during the market simulation was challenging in terms of both timing and resources. For Parallel Operations and initial Pre-Production, settlement statements are being produced nine business days after the applicable Trading Day, whereas in MRTU operation this process will be completed thirty-eight business days after the applicable Trading Day. Thus, to allow all the processes to run correctly, although expedited, and to allow for some validation and corrections, the ISO has had to finalize the price correction period and accept the prices no later than five calendar days after the Trading Day, as opposed to the permitted eight days under MRTU operations. This expedited process, plus the price anomalies seen in simulation, have not allowed for the in-depth analysis the ISO team will be able to do after go-live. Nonetheless, the ISO has not encountered any problems with the implementation of the price validation and correction

process in market simulation, but just a high volume of prices that needed to be assessed as a result of the simulation anomalies discussed previously. Therefore, the ISO wants to emphasize that the prices used for settlements purposes during market simulation did not initially benefit from the price validation and correction processes that are now effective and will continue to be in effect after MRTU go-live. Moreover, the in-depth analysis will evolve over time as the ISO gains experience.

47. Currently, all necessary software is in place, and all necessary steps have been taken, for the implementation of the validation and correction process at go-live. The ISO has augmented staff with additional contractors to assist in analysis and established a multi-department team to evaluate prices and anomalies that includes Market Design & Regulatory Policy and the Department of Market Monitoring. The ISO expects to be able to address all issues that arise with this business process in place after implementation.

#### The ISO's Price Floor and Price Cap

48. The ISO has authority pursuant to Section 27.1.3 of the MRTU Tariff to apply a price floor and a price cap to Locational Marginal Prices, Residual Unit Commitment prices, and Ancillary Services marginal prices in all MRTU markets. The level of the price floor is negative \$2,500/MWh and the level of the price cap is \$2,500/MWh.
49. All prices exceeding the price floor and price cap are modified for posting and settlements purposes pursuant to the price correction process set

forth in Section 35 of the MRTU Tariff. The prices are initially blocked through the screening process and corrected to the price cap level, as necessary. The ISO will publish in its weekly price report a list of nodes where prices were above or below the cap, and then do a more in depth economic analysis of the market outcomes in the quarterly post-implementation report.

50. The ISO implemented the price floor and price cap in MRTU market simulation on January 29, 2009, and applied the price floor and cap to the settlement statements for the results of the market simulation conducted in February 2009 through March 12th. Consequently, invoices for February and for the March “mini-month” reflect the implementation of price caps. The implementation of the price cap has contributed to an improvement of these settlement statements.
51. The ISO will continue to employ those measures after MRTU go-live.

#### The Proactive Monitoring Process

52. Given the concerns raised by participants regarding the “big bill”, the ISO is implementing a Proactive Monitoring (“PAM”) process that will be in place for go-live. While it is a challenge to “monitor outcomes involving thousands of charges for more than 200 Scheduling Coordinator IDs for each Trade Day,” the ISO is already implementing an early warning mechanism to detect the accrual of potentially high liabilities prior to the issuance of a settlement statement. The process will continue through the

April invoicing process that occurs in late June. At that time, the need for such proactive monitoring will be re-evaluated.

53. While Scheduling Coordinators have more information and probably more automated tools in place to estimate their own aggregated liability, the PAM process will allow the ISO to evaluate Scheduling Coordinators behavior and facilitate an early warning system between the ISO and Scheduling Coordinators regarding data and results. After go-live, the ISO will be able to extract Schedules and Awards one calendar day after the applicable Trading Day for all markets. The ISO also has available directly polled meter data one calendar day after the applicable Trading Day, but participant submitted meter data will not available to the ISO until forty-three calendar days after the applicable Trading Day. The ISO will be able to estimate the market exposure early on based on the available Schedules and Awards and the polled meter data. Price correction is finalized eight calendar days after prices are initially posted (or withheld from posting if subject to the price screen discussed above). The credit statement to establish Estimated Aggregated Liability is generated seven business days after the applicable Trading Day. While this data is not perfect, based on this information, the ISO may be able to anticipate potentially high unanticipated outcomes ahead of the publication of the initial statement thirty-eight business days after the applicable Trading Day.

54. Through the PAM process, the ISO will be able to share its observations with participants based on the limited data the ISO has as described above. Therefore, as early as the evening of the first calendar day after the Trading Day, the ISO will be reviewing data and a shadow settlement run. It is important to note that this shadow run is not at all intended to change the ISO's settlement processes. Rather, this shadow run is just a preliminary run of the settlement system with whatever data is available at the time of the run.
55. As discussed above a comparison of prior settlements amounts from legacy to those estimated under MRTU is of dubious value. However, the ISO will evaluate certain charge codes that continue from legacy based on historical patterns. The new MRTU charge codes will initially be evaluated based on observations prior to go-live, and once we have a few days of data from MRTU operations, results of prior Trading Days can be used. As a rule of thumb, the ISO will flag for initial discussion any accruing financial outcomes that are 120% over the relevant benchmark anticipated amount.
56. The data that will be incorporated in the shadow settlement analysis is likely to be Congestion Revenue Right allocation and auction, market results, intertie data, initial price filling, price cap data, direct polled meter data, and estimated meter data based on market results. The specific data included in the analysis may vary over time as the ISO gains more experience.

57. In addition to evaluating settlement data, the ISO also intends to monitor bids and self-schedules submitted, as well as market outcomes as they are available. The data that the ISO currently intends to review are: (1) whether Scheduling Coordinators are submitting Residual Unit Commitment Availability Bids consistent with Resource Adequacy obligations; (2) whether Existing Transmission Contract and Transmission Owner Rights holders that have schedules in the Day-Ahead Market are explicitly scheduling those amounts in the Real-Time Market; (3) whether resources are submitting Real-Time Market bids for capacity not scheduled in the Day-Ahead Market; (4) whether Scheduling Coordinators with load and exports are self-providing Ancillary Services versus procuring through the market; (5) whether Scheduling Coordinators are importing when the ISO is in an overgeneration condition; (6) whether, after the Day-Ahead Schedules and Awards are published, sufficient Day-Ahead Schedules and Awards are tagged for the following day; (7) whether, after the HASP publishes, sufficient HASP Schedules are tagged for the trade hour; and (8) whether there is a significant amount of Self-Schedules at nodes where negative prices are produced.
58. The ISO will contact those Scheduling Coordinators that the ISO has identified as accruing potentially high outcomes to alert them to the ISO's observations. While this process can not replace any obligation the Scheduling Coordinator has with respect to the MRTU Tariff, the ISO hopes that this extra process can put multiple sets of eyes on the

consequences of MRTU and alert participants so there are no unforeseen outcomes.

The ISO's Ability to Implement the Interim Payment Option

59. In her Affidavit, Christine Vangelatos states that, in her opinion, Municipals' proposed Interim Payment Option would be practical to implement and could be implemented in time to meet the planned March 31, 2009 MRTU go-live date. She asserts that the ISO's system or business processes would be able, with some adjustments, to implement the Interim Payment Option. Ms. Vangelatos states that she is comfortable in addressing these matters based in part on her professional experience at the ISO, where she worked until October 2006.
60. Since Ms. Vangelatos left the ISO two and a half years ago, the original design and plan for the implementation of SaMC has significantly changed. The ISO has actually since expended more than 60,000 person-hours redesigning SaMC. The ability to commingle settlements, market clearing and shortfalls is not as flexible as Ms. Vangelatos asserts.
61. For the reasons discussed above and based on my experience, I attest that, contrary to Ms. Vangelatos' assertions, the ISO would have great difficulty in implementing the Interim Payment Option even if the ISO had months to do so, and that in any event the Interim Payment Option certainly could not be implemented by March 31. The only way the ISO could put the Interim Payment Option into effect would be by undertaking the difficult and time-consuming task of reconfiguring the SaMC and

implementing a three-tiered calculation for debtors' short payments that I have discussed above. The ISO has learned through its prior experience with designing and testing SaMC that developing software changes is painstaking work.

62. Moreover, if the ISO were to reconfigure or add charge types in order to implement the Interim Payment, all Scheduling Coordinators with shadow settlement systems would also need to reconfigure, or have their vendor reconfigure, and test the new charge types. This certainly can not be done in two weeks. Participants in the past have explained in significant detail the processes needed, timing of the ISO product deliverables, and the testing requirement. Scheduling Coordinators have requested numerous times that the ISO allow 2 months for this process.
63. After March 31, when MRTU goes live, any efforts to reconfigure SaMC to allow implementation of the Interim Payment Option would necessarily be protracted because the ISO would have to design and test SaMC to maximize the chances that no errors would occur when the reconfiguration went into effect. Then the ISO would need to allow participants time to test the Interim Payment Method prior to putting it into production. Unlike the current market simulation environment, in which there is greater room for trial and error due to the lack of real-world financial consequences, after MRTU go-live the ISO must test any changes to SaMC in the settlement and market clearing processes of the actual MRTU environment, which narrows the acceptable margin for error. Also, in

order to reconfigure SaMC, the ISO would have to divert critical personnel from MRTU-related work that they already need to attend to now and after go-live.

I hereby certify under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge, information, and belief:

Executed on: March 16, 2009

/s/ Deborah A. Le Vine  
Deborah A. Le Vine

BPM for Settlements Billing

Summary of Attachment B - Charge Group and Parent Charge Group

Parent Charge Group	Charge Group	Charge Code Number	Charge Code Name	Status
Access Charge	CRR Prepayment	6722	CRR Prepayment Settlement	Continue
Access Charge	CRR Remainder Allocation	6727	CRR Prepayment Remainder Allocation	New - MRTU
Access Charge	High Voltage Access Charge	372	High Voltage Access Charge Allocation	Continue
Access Charge	High Voltage Access Charge	374	High Voltage Access Revenue Payment	Continue
Access Charge	High Voltage Wheeling	382	High Voltage Wheeling Allocation	Continue
Access Charge	High Voltage Wheeling	384	High Voltage Wheeling Revenue Payment	Continue
Access Charge	Low Voltage Wheeling	383	Low Voltage Wheeling Allocation	Continue
Access Charge	Low Voltage Wheeling	385	Low Voltage Wheeling Revenue Payment	Continue
Ancillary Services	Ancillary Services Regulation Down	6624	Non Compliance Regulation Down Settlement	New - MRTU (Replaced)
Ancillary Services	Ancillary Services Regulation Down	6600	Day Ahead Regulation Down Capacity Settlement	New - MRTU (Replaced)
Ancillary Services	Ancillary Services Regulation Down	6670	Real Time Regulation Down Capacity Settlement	New - MRTU
Ancillary Services	Ancillary Services Regulation Down	6694	Regulation Down Obligation Settlement	New - MRTU (Replaced)
Ancillary Services	Ancillary Services Regulation Down	6696	Regulation Down Neutrality Allocation	New - MRTU
Ancillary Services	Black Start Capability	1101	Black Start Capability Allocation	Continue
Ancillary Services	Black Start Capability	3101	Black Start Capability Settlement	Continue
Ancillary Services	Supplemental Reactive Energy	1303	Supplemental Reactive Energy Allocation	Continue
Ancillary Services	Supplemental Reactive Energy	3303	Supplement Reactive Energy Settlement	Continue
Ancillary Services	Upward Ancillary Services	6090	Ancillary Service Upward Neutrality Allocation	New - MRTU
Ancillary Services	Upward Ancillary Services	6100	Day Ahead Spinning Reserve Capacity Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6124	No Pay Spinning Reserve Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6150	HASP Spinning Reserve Capacity Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6170	Real Time Spinning Reserve Capacity Settlement	New - MRTU
Ancillary Services	Upward Ancillary Services	6194	Spinning Reserve Obligation Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6196	Spinning Reserve Neutrality Allocation	New - MRTU
Ancillary Services	Upward Ancillary Services	6200	Day Ahead Non-Spinning Reserve Capacity Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6224	No Pay Non-Spinning Reserve Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6250	HASP Non-Spinning Reserve Capacity Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6270	Real Time Non-Spinning Reserve Capacity Settlement	New - MRTU
Ancillary Services	Upward Ancillary Services	6294	Non-Spinning Reserve Obligation Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6296	Non-Spinning Reserve Neutrality Allocation	New - MRTU
Ancillary Services	Upward Ancillary Services	6500	Day Ahead Regulation Up Capacity Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6524	Non Compliance Regulation Up Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6570	Real Time Regulation Up Capacity Settlement	New - MRTU
Ancillary Services	Upward Ancillary Services	6594	Regulation Up Obligation Settlement	New - MRTU (Replaced)
Ancillary Services	Upward Ancillary Services	6596	Regulation Up Neutrality Allocation	New - MRTU
Ancillary Services	Voltage Support	302	Long Term Voltage Support Settlement	Continue
Ancillary Services	Voltage Support	1302	Long Term Voltage Support Allocation	Continue
Annual FERC Fee	FERC Fee Due Annually	551	FERC Fee Settlement due Annually	New - MRTU
Cost Recovery	Bid Cost Recovery	6620	Bid Cost Recovery Settlement	New - MRTU
Cost Recovery	Bid Cost Recovery	6636	IFM Bid Cost Recovery Tier 1 Allocation	New - MRTU
Cost Recovery	Bid Cost Recovery	6637	IFM Bid Cost Recovery Tier 2 Allocation	New - MRTU
Cost Recovery	Bid Cost Recovery	6678	Real Time Bid Cost Recovery Allocation	New - MRTU
Cost Recovery	Bid Cost Recovery	6800	Day Ahead Residual Unit Commitment (RUC) Availability Settlement	New - MRTU

BPM for Settlements Billing

Summary of Attachment B - Charge Group and Parent Charge Group

Parent Charge Group	Charge Group	Charge Code Number	Charge Code Name	Status
Cost Recovery	Bid Cost Recovery	6806	Day Ahead Residual Unit Commitment (RUC) Tier 1 Allocation	New - MRTU
Cost Recovery	Bid Cost Recovery	6807	Day Ahead Residual Unit Commitment (RUC) Tier 2 Allocation	New - MRTU
Cost Recovery	Bid Cost Recovery	6824	No Pay Residual Unit Commitment (RUC) Settlement	New - MRTU
Cost Recovery	Emissions	591	Emissions Cost Recovery	Continue
Cost Recovery	Emissions	691	Emissions Cost Payment	Continue
DA Energy-Congestion-Losses	CRR Auction	6798	CRR Auction Transaction Settlement	Continue
DA Energy-Congestion-Losses	CRR Day Ahead Settlement	6700	CRR Hourly Settlement	New - MRTU
DA Energy-Congestion-Losses	CRR Day Ahead Settlement	6710	Day Ahead Congestion - AS Spinning Reserve Import Settlement	New - MRTU
DA Energy-Congestion-Losses	CRR Day Ahead Settlement	6720	Day Ahead Congestion - AS Non-Spinning Reserve Import Settlement	New - MRTU
DA Energy-Congestion-Losses	CRR Day Ahead Settlement	6750	Day Ahead Congestion - AS Regulation Up Import Settlement	New - MRTU
DA Energy-Congestion-Losses	CRR Day Ahead Settlement	6760	Day Ahead Congestion - AS Regulation Down Export Settlement	New - MRTU
DA Energy-Congestion-Losses	CRR Monthly Settlement	6728	CRR Monthly Clearing	New - MRTU
DA Energy-Congestion-Losses	CRR Monthly Settlement	6790	CRR Balancing Account	New - MRTU
DA Energy-Congestion-Losses	DA Energy and Marginal Loss	6011	Day Ahead Energy, Congestion, Loss Settlement	New - MRTU
DA Energy-Congestion-Losses	DA Energy and Marginal Loss	6947	IFM Marginal Losses Surplus Credit Allocation	New - MRTU
Enforcement Protocol Penalty	EP Penalty	1591	EP Penalty Charge due CAISO Trustee	Continue
Enforcement Protocol Penalty	EP Penalty	1592	EP Penalty Allocation Payment	Continue
Enforcement Protocol Penalty	EP Penalty Adjustment	1593	EP Penalty Charge/Allocation for Under or Over Reported Load/Generation	Continue
FERC Fee	FERC Fee Due Monthly	550	FERC Fee Settlement due Monthly	Continue
FERC Fee	FERC Fee Recovery	525	FERC Fee Over / Under Recovery	New - MRTU
FERC Rerun Interest	FERC Interest	5999	FERC Mandated Interest on Re-Runs	New - MRTU
Financial Adjustments	Interest	2999	Default Invoice Interest Payment	Continue
Financial Adjustments	Interest	3999	Default Invoice Interest Charge	Continue
Financial Adjustments	Shortfall Distribution	5900	Shortfall Receipt Distribution	New - MRTU
GMC	Grid Management Charge	4501	GMC - Core Reliability Services Non-Coincident Peak	Continue
GMC	Grid Management Charge	4502	GMC - Core Reliability Services Non-Coincident Off Peak	Continue
GMC	Grid Management Charge	4503	GMC - Core Reliability Services Export Energy	Continue
GMC	Grid Management Charge	4505	GMC - Energy Transmission Services Net Energy Withdrawals	Continue
GMC	Grid Management Charge	4506	GMC - Energy Transmission Services Deviations	Continue
GMC	Grid Management Charge	4508	GMC - ETS for Transmission Ownership Rights (TOR) Energy Exports	New - MRTU
GMC	Grid Management Charge	4511	GMC - Forward Scheduling	Continue
GMC	Grid Management Charge	4512	GMC - Forward Scheduling Inter-SC Trades	Continue
GMC	Grid Management Charge	4513	GMC - Forward Scheduling Inter-SC Trades-PGAB	Continue
GMC	Grid Management Charge	4534	GMC - Market Usage Ancillary Services	Continue
GMC	Grid Management Charge	4535	GMC - Market Usage Instructed Energy	Continue
GMC	Grid Management Charge	4536	GMC - Market Usage Uninstructed Energy	Continue
GMC	Grid Management Charge	4537	GMC - Market Usage Forward Energy	New - MRTU
GMC	Grid Management Charge	4546	GMC - Energy Transmission Services Uninstructed Energy and Market Usage Uninstructed Energy - PIRP	New - MRTU
GMC	Grid Management Charge	4575	GMC - Settlements Metering and Client Relations	Continue

BPM for Settlements Billing

Summary of Attachment B - Charge Group and Parent Charge Group

Parent Charge Group	Charge Group	Charge Code Number	Charge Code Name	Status
HASP-RT Settlement	Black Start Energy	1001	Black Start Energy Payment	Continue
HASP-RT Settlement	Black Start Energy	1353	Black Start Energy Allocation	Continue
HASP-RT Settlement	Emergency Energy Exchange	1487	Emergency Energy Exchange Program Neutrality Adjustment	Continue
HASP-RT Settlement	Exceptional Dispatch	6488	Exceptional Dispatch Uplift Settlement	New - MRTU
HASP-RT Settlement	Exceptional Dispatch	6489	Exceptional Dispatch Uplift Allocation	New - MRTU
HASP-RT Settlement	Excess Cost	6480	Excess Cost Neutrality Allocation	New - MRTU (Replaced)
HASP-RT Settlement	Excess Cost	6482	Real Time Excess Cost for Instructed Energy Settlement	New - MRTU (Replaced)
HASP-RT Settlement	Excess Cost	6486	Real Time Excess Cost for Instructed Energy Allocation	New - MRTU (Replaced)
HASP-RT Settlement	Imbalance Energy	6051	HASP Energy, Congestion & Loss Predispatched Settlement	New - MRTU
HASP-RT Settlement	Imbalance Energy	6470	Real Time Instructed Imbalance Energy Settlement	New - MRTU (Replaced)
HASP-RT Settlement	Imbalance Energy	6474	Real Time Unaccounted for Energy Settlement	New - MRTU (Replaced)
HASP-RT Settlement	Imbalance Energy	6475	Real Time Uninstructed Imbalance Energy Settlement	New - MRTU (Replaced)
HASP-RT Settlement	Imbalance Energy	6477	Real Time Imbalance Energy Offset	New - MRTU (Replaced)
HASP-RT Settlement	Imbalance Energy	6984	RTM Net Marginal Loss Assessment per CAISO Agreement	New - MRTU
HASP-RT Settlement	MSS Deviation Penalty	1407	MSS Positive Deviation Penalty	Continue
HASP-RT Settlement	MSS Deviation Penalty	2407	MSS Negative Deviation Penalty	Continue
HASP-RT Settlement	Participating Intermittent Resource Export Fee	741	Quarterly Participating Intermittent Resources Export Energy Process Fee	Continue
HASP-RT Settlement	Participating Intermittent Export Energy	751	Monthly Participating Intermittent Resources Export Energy Settlement	Continue
HASP-RT Settlement	Participating Intermittent Export Energy	752	Monthly Participating Intermittent Resources Export Energy Allocation	Continue
HASP-RT Settlement	Participating Intermittent Forecast	701	Forecasting Service Fee	Continue
HASP-RT Settlement	Participating Intermittent Resources	711	Intermittent Resources Net Deviation Settlement	Continue
HASP-RT Settlement	Participating Intermittent Resources	721	Intermittent Resources Net Deviation Allocation	Continue
HASP-RT Settlement	Real Time Congestion	6711	HASP Congestion - AS Spinning Reserve Import Settlement	New - MRTU
HASP-RT Settlement	Real Time Congestion	6715	Real Time Congestion - AS Spinning Reserve Import Settlement	New - MRTU
HASP-RT Settlement	Real Time Congestion	6721	HASP Congestion - AS Non-Spinning Reserve Import Settlement	New - MRTU
HASP-RT Settlement	Real Time Congestion	6725	Real Time Congestion - AS Non-Spinning Reserve Import Settlement	New - MRTU
HASP-RT Settlement	Real Time Congestion	6755	Real Time Congestion - AS Regulation Up Import Settlement	New - MRTU
HASP-RT Settlement	Real Time Congestion	6765	Real Time Congestion - AS Regulation Down Export Settlement	New - MRTU
HASP-RT Settlement	Real Time Congestion	6774	Real Time Congestion Offset	New - MRTU
HASP-RT Settlement	Real Time Congestion	6788	RTM Congestion Credit Settlement	New - MRTU
HASP-RT Settlement	Transmission Loss Obligation	6976	Transmission Loss Obligation Charge for Real Time Schedules Under Control Agreements	New - MRTU
HASP-RT Settlement	Transmission Loss Obligation	6977	Allocation of Transmission Loss Obligation Charge for Real Time Schedules Under Control Agreements	New - MRTU
Inter-SC Trades	Inter-SC Trades Settlement	6301	Day Ahead Inter-SC Trades Settlement	New - MRTU
Inter-SC Trades	Inter-SC Trades Settlement	6351	HASP Inter-SC Trades Settlement	New - MRTU
Neutrality Settlement	Neutrality	8999	Neutrality Adjustment	New - MRTU (Replaced)
Resource Adequacy	ICPM	7820	Monthly ICPM Settlement	New - MRTU
Resource Adequacy	ICPM	7829	Monthly ICPM Allocation	New - MRTU
Resource Adequacy	ICPM	7870	Monthly Significant Event ICPM Settlement	New - MRTU

**BPM for Settlements Billing**  
**Summary of Attachment B - Charge Group and Parent Charge Group**

*Attachment A*

<b>Parent Charge Group</b>	<b>Charge Group</b>	<b>Charge Code Number</b>	<b>Charge Code Name</b>	<b>Status</b>
Resource Adequacy	ICPM	7879	Monthly Significant Event ICPM Allocation	New - MRTU
Resource Adequacy	ICPM	7890	Annual ICPM Settlement	New - MRTU
Resource Adequacy	ICPM	7899	Annual ICPM Allocation	New - MRTU
RMR Invoice	Reliability Must Run	3010	RMR Invoice	Continue
Rounding Settlement	Rounding	4989	Daily Rounding Adjustment	New - MRTU
Rounding Settlement	Rounding	4999	Monthly Rounding Adjustment	New - MRTU (Replaced)
Shortfall Adjustments	Shortfall Allocation	5910	Shortfall Allocation	New - MRTU
Station Power Settlement	Station Power	6609	Station Power Fee	Continue
UDP Settlement	UDP	4470	Negative UD Penalty	Continue
UDP Settlement	UDP	4480	Positive UD Penalty	Continue
Underschedule Load Settlement	Underschedule Load	6044	Underscheduling Load Stlmt.	New - MRTU

## CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 16<sup>th</sup> day of March, 2009.

/s/ Bradley R. Miliauskas  
Bradley R. Miliauskas