

Memorandum

To: ISO Board of GovernorsFrom: Steve Berberich, Vice President, Corporate Services

Date: December 8, 2008

Re: Decision on Payment Acceleration

This memorandum requires Board action.

EXECUTIVE SUMMARY

All market participants using transmission services provided by the California Independent System Operator (ISO) are exposed to credit risk associated with possible default by other market participants. The ISO mitigates this risk by requiring market participants to meet credit requirements described in the tariff. The ISO considered various options to lower the overall market's credit exposure and is recommending, as a critical first step, changes to shorten the settlement schedule.

Under current processes, the time between the trade date and initial settlement statement is 38 business days, and the average cash clearing schedule totals over 80 calendar days. Cash clearing occurs when the market transactions are settled, invoiced and cash is exchanged for service provided. This time delay exposes market participants to undue credit risk, which may reduce resource availability from out-of-state resources and make credit management more difficult for the ISO. Management recommends tariff changes to accelerate the settlement schedule under MRTU from 38 to seven business days and decrease the average cash clearing schedule from approximately 80 to 25 calendar days.

Motion:

Moved, that the ISO Board of Governors approves the proposal to accelerate the settlement schedule, as detailed in the memorandum dated December 8, 2008, and

Moved, that the ISO Board of Governors directs Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission on or before April 1, 2009.

KEY ISSUES

Management recognizes that the current payment calendar takes too long between trade dates and market clearing. This time delay presents undue credit risk to market participation. This increased risk may hinder resource availability from out-of-state resources, challenges credit management, and exposes market participants to additional risk in the event of defaults or bankruptcies. Mitigating this risk is a priority of the ISO, as discussed in the ISO's *Five-Year Strategic Plan 2008-2012*.

The ISO began the stakeholder process by publishing a discussion draft containing an initial payment acceleration proposal. Market participants reviewed the paper, participated in stakeholder meetings, and provided their feedback. In response to market participant feedback, the ISO published a feasibility analysis paper and held a stakeholder meeting to review and discuss related issues. After a thorough evaluation of all stakeholder feedback, comments, and proposals, the ISO published the payment acceleration straw proposal. Market participants provided feedback on the straw proposal through comments and in additional stakeholder meetings.

Management considered stakeholder feedback in the context of overall market design and implementation time and costs. A balance was sought that balanced the appropriate incentives for market behavior, possibilities for manipulation and impact on implementation Further, the process considered possible bifurcation of the day ahead and real time settlements and methodologies for estimating meter data. This final proposal is the result this process. If approved by the Board, the ISO will conduct one to two months of dry runs of the payment acceleration process before putting it into effect.

Changes in the settlement timeline

Management recommends changes to the current settlement process and related timeline as displayed below. Those changes include more frequent invoicing and quickening the process for meter data submittal and the use of estimates when meter data is not available. The final element of the timeline is allowing sufficient time to both market participants and the ISO for dispute submittal and resolution.

The following chart illustrates the critical process changes and resulting reduced timeframes.

Current and Revised Settlement Timeline

(Based on tariff timelines)

		Curr	ent t	imeli	ine																										
		Prop	ose	d tim	eline	•																									
															А	pr-()8														
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Γ
Bus Days	1	2	3			4	5	6	7	8			9	10	11	12	13			16	17	18	19	20			21	22	23	24	Γ
Cal Days	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
	Day 1 trade date							April 1 estimated meter data		April 1 initial settlement stmt														April semi-monthly & invoice							

	May 2008																														
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Bus Days	25			26	27	28	29	30			31	32	33	34	35			36	37	38	39	40			Η	41	42	43	44		
Cal Days	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61
											Second semi-monthly & invoice	····		· · · .	· · · .		•••••	******		******	April 1 initial settlement stmt										

															Jun	le 2	800	}				·	···								
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Bus Days	45	46	47	48	49			50	51	52	53	54			55	56	57	58	58			60	61	59	63	64			65	66	
Cal Days	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90		
																								April monthly & invoice							

As shown above, the ISO will publish invoices on a semi-monthly basis. Initial statements will be invoiced twice per month and appear on the invoice as billing periods (" $1^{st}-15^{th}$ " or " $16^{th}-31^{st}$ "). True-up invoices will remain as monthly (e.g., 10/1 - 10/31) and will be reported on one of the semi-monthly invoices along with the initial invoice. Monthly charge codes will always be invoiced on the 1^{st} semi-monthly invoice and include charges from the previous month. Grid management charges and Federal Energy Regulatory Commission (FERC) fee charges will not be on a separate invoice, but included with all other charge codes similar to the MRTU design. Invoicing date will be 'floating' and occur on the

calendar day that trade dates 15th and 31st are calculated. Following current standards, payment of all invoices will be due within five business days after the invoice publishes.

Introducing semi-monthly invoicing will require changes to the existing process and procedures. However, the mixing of invoice types (i.e. Initial, 1st true-up, etc.) on the same invoice is already being introduced in MRTU and will not impact current accounting procedures. In addition, this practice is consistent with the majority of other ISO's invoicing policies. Ultimately, the ISO would like to move to a weekly invoicing process.

Possible bifurcation of day-ahead and real-time settlements

As part of the stakeholder process, much consideration was given to the option of separating the day ahead and real time settlement timelines on the premise that the day ahead market would be much easier to settle on a reduced timeframe. Nonetheless, management recommends maintaining settlement of the day-ahead and real-time markets on the same schedule. This is because bifurcation could create incentives for market participants to adjust their bidding and scheduling strategy, which could impact market prices and market performance. Further complications could arise in required changes to settlement software.

A methodology for establishing estimated meter data

Having timely meter data is essential to accelerating settlements. Management addressed this issue by requiring accelerated submittal of estimated settlement quality meter data and development of a meter data substitution methodology to create meter data values when estimated settlement quality meter data is not available. Management recommends an interest payment mechanism to ensure that there are no financial incentives to submit unreasonable meter data estimates of load or generation.

Estimated metered demand that is not submitted by an scheduling coordinator, contrary to the requirement to submit this meter data at T+5B, will be estimated by the ISO using the value of that scheduling coordinator's scheduled demand, the MW of energy of demand cleared through the integrated forward market and set in the day-ahead scheduled for the next trading day, by *load aggregation point* and/or *custom load aggregation point*. This value will be increased by 15% if the total actual system demand in real-time, as determined by the ISO each hour, is greater than 15% of the total estimated meter demand (TEMD) at T+5B. TEMD will equal the value of scheduling coordinator submitted metered demand + ISO polled estimated Settlement quality metered demand + Scheduled Demand for un-submitted metered demand, available at T+5B.

Management proposes to apply interest charges to any deviations through the second true-up invoice. Management is proposing that, initially, interest stop after the second true-up invoice and not carry on into subsequent invoices that could occur for the T + 18 month and T + 35 month statements. Since payment acceleration is expected to be implemented sometime between three and five months after MRTU start-up, the ISO will have time to evaluate prior to the first T + 18 month statement whether or not interest charges are necessary beyond the second true-up invoice by evaluating settlements and market data. Interest rates will be calculated in accordance with FERC regulations for the calculation of interest for refunds specified in 18 C.F.R. § 35.19a (a)(2)(iii). If the interest period spans multiple quarters, the interest rate will be prorated for the period of days in each quarter. Interest will be charged or paid through separate charge codes in the ISO Settlements system. Benefits of this accelerated meter data submission and estimation proposal are:

- Provides flexibility allowing scheduling coordinators the ability to be part of the solution;
- Recognizes technology advancement in meter data collection and estimation (i.e., advanced metering infrastructure and smart metering);
- Follows current SQMD submittal requirements and processes;
- Requires no additional submittal or compliance processes required and leverages current compliance programs and enforcement protocols; and
- Leverages current metering infrastructures and file formats.

Sunset Provision

The design calls for scheduled true-up statements eighteen (18) and thirty five (35) months after the trade date. To manage the large volumes of data associated with settlements, the design includes a sunset provision on the data after a thirty six (36) month period. After the sunset period, the settlement is considered final and is not subject to dispute unless ordered by FERC. This provision will allow the ISO to move data to lower cost storage and reduce costs for long-term maintenance of data.

POSITIONS OF THE PARTIES

A complete stakeholder process was conducted that included the following collaboration between market participants and the ISO:

- Document publication: discussion draft (white paper), feasibility analysis, meter data estimation options, straw proposal, final proposal
- Market participant proposals: *Bifurcation of DA/RT Settlements* (Calpine), *Interest Provision* (SCE)
- Stakeholder meetings: three in-person and three conference calls.
- Five rounds of market participant written comments to the ISO.

Stakeholders generally agreed on the ISO's proposal to accelerate the settlement timeline, change the process for submitting meter data and invoicing based on a meter data estimation methodology, and the sunset provision for settlement true-up.

In other cases, stakeholders did not agree:

- Interest payments main discrepancy is in regards to how far out interest should be applied. Some participants feel interest should be applied throughout all invoice cycles. They argue that since monies are being held incorrectly by the wrong party, interest is the only fair compensation mechanism.
- Deployment schedule many participants are concerned about the distraction payment acceleration may have on MRTU. They feel a longer deployment window is necessary in order to ensure MRTU stability and accuracy prior to deploying payment acceleration. Others argue the credit risk is too high to wait and an immediate deployment post MRTU is necessary.

Please refer to Attachment A for a detailed matrix of stakeholder positions.

MANAGEMENT RECOMMENDATION

Management recommends that the Board approve implementation of the payment acceleration policy as outlined in this memo.