

# Memorandum

**To:** ISO Board of Governors  
**From:** Charles A. King, Vice President, Market Development and Program Management  
**Date:** July 9, 2007  
**Re:** *Decision on CRR Load Migration Process*

---

*This memorandum requires Board action.*

## EXECUTIVE SUMMARY

Under the Market Redesign and Technology Upgrade (“MRTU”) tariff, load-serving entities (LSEs) pay congestion costs associated with moving power from its source to its sink, or point of use. Because retail customers pay for the transmission system in rates, their load-serving entity has rights to congestion-related revenues that protect them from congestion cost volatility. They receive the rights in the form of Congestion Revenue Rights (“CRRs”) allocated by the ISO. The original MRTU tariff created an obligation for LSEs to transfer some of their allocated CRRs when customers move from one LSE to another, but did not specify an ISO role in performing such transfers. In response to broad stakeholder demand, the ISO’s January 29, 2007 compliance filing to implement Long Term CRRs included a proposal to expand the ISO’s role to include transferring CRRs to reflect such load migration.<sup>1</sup>

However, the January 29<sup>th</sup> proposal to FERC did not include the detailed rules and procedures for executing such transfers. This proposal specifies those rules and procedures and includes provisions to address related issues. It is important to file the proposed changes with FERC as soon as possible because the ISO expects to perform an initial round of CRR transfers to reflect likely load migration prior to start-up. Board approval and prompt filing of this proposal will therefore enable LSEs to have clear expectations regarding how their allocated CRR holdings may be modified for such load migration. Management’s proposal contains the following:

1. A mechanism for executing the transfers that has no impact on other CRRs;
2. Provisions providing for proportionate transfers of all CRRs allocated to the load-losing LSE;
3. Rules allowing load-gaining LSEs to nominate the transferred CRRs for renewal the next year through the existing priority nomination process; and

---

<sup>1</sup> On July 6, 2007 FERC ruled on the ISO’s January 29<sup>th</sup> proposal and directed the ISO to perform load-migration related transfers of CRRs.

4. Credit management policies for load-migration related CRR defaults consistent with other ISO credit management policies.

Management developed the proposal through a stakeholder process conducted during May and June. Later in this memorandum is a summary of salient stakeholder views and recommendations as well as the rationale for Management's recommendation. Management believes the present proposal balances the diverse needs of stakeholders to manage congestion costs in a manner that is fully compatible with the MRTU market design and consistent with policy previously approved by the Board and FERC. Management therefore recommends the following motion:

***Moved, that the ISO Board of Governors approve the proposal for transferring CRRs between LSEs to reflect load migration as described in the memorandum dated July 9, 2007, and authorize Management to make all the necessary and appropriate filings with the Federal Energy Regulatory Commission to implement this proposal.***

## ISSUE STATEMENT

The ISO developed the CRR provisions included in the original MRTU tariff proposal through a stakeholder process that extended over most of 2005. The original design included the policy and associated rules for both the allocation of CRRs to LSEs and the transfer of allocated CRRs between LSEs to reflect decisions by end-use customers to change their preferred retail electricity provider.

The original MRTU tariff proposal did not, however specify any role for the ISO in such transfers beyond maintaining the Secondary Registration System ("SRS") in which CRR transfers must be registered. In response to broad stakeholder demand and in recognition of the benefits of more centralized management of such transfers, in January 2007 the ISO proposed to FERC that it assume the responsibility to perform transfers of allocated CRRs between LSEs to reflect load migration. The ISO did not develop all the detailed rules and procedures at that time, however, because the more immediate requirement was to complete and file the ISO's Long Term CRR proposal to comply with FERC's January 29 deadline. The challenge now at hand, then, is to specify the process and the rules whereby the ISO will perform load-migration related CRR transfers.<sup>2</sup>

## OPTIONS TO ADDRESS THE PROBLEM

The ISO had to address four elements in designing a solution for transferring CRRs to reflect load migration.<sup>3</sup> Those four elements, along with the options the ISO considered for addressing each one, are:

1. Mechanism by which the ISO will perform the CRR transfer:

*Options considered:*

- a. (Proposed) Create two new "equal and opposite" sets of CRRs, and give the "positive" set to the load-gaining LSE and the "counterflow" set to the load-losing LSE. Because these two sets of CRRs are equal in MW value and opposite in direction of flow, their creation serves purely to

<sup>2</sup> As part of the May-June stakeholder process that led to the proposal put forth in this memorandum, the ISO also addressed three other matters related to CRRs that do not require Board action.

<sup>3</sup> In addition to the four design questions listed, Management's proposal also addresses some technical implementation matters that do not require Board action and therefore are not discussed in this memorandum.

transfer the CRR revenue stream from one LSE to the other and has zero net impact on any other outstanding CRRs.

- b. (Existing MRTU Tariff) Take some allocated CRRs away from the load-losing LSE and give them to the load-gaining LSE, but as an alternative allow an equivalent financial payment between the LSEs if both LSEs agree.

2. Identification of which allocated CRRs must be transferred:

*Options considered:*

- a. (Proposed, and consistent with existing MRTU Tariff) Load-losing LSE must transfer a proportional share of all CRRs it received through allocation from the CAISO, net of those CRRs it previously lost due to load migration, but including CRRs it gained due to load migration.
- b. The load-losing LSE may retain certain ones of its allocated CRRs and exempt them from the transfer, particularly CRRs whose sources correspond to the LSE's long-term supply arrangements.

3. Creation of rules to govern the ability of the load-losing and load-gaining LSE to nominate the same CRRs for renewal the next year when CRRs are transferred due to load migration:

*Options considered:*

- a. (Proposed) The load-gaining LSE may utilize the Priority Nomination Process ("PNP") to renew CRRs transferred for load migration. The PNP is a feature of the annual CRR process that enables LSEs that were allocated CRRs in one year to nominate them for renewal for the next year, ahead of parties who want to nominate new CRRs. Under Management's proposal the LSE that loses the load and the associated CRRs also loses the ability to renew those CRRs in the PNP, whereas the LSE that gains the load and the CRRs gains the ability to renew the CRRs in the PNP.
- b. (Existing MRTU Tariff) Neither the load-losing nor the load-gaining LSE is allowed to use the PNP to renew CRRs that were transferred due to load migration, and the ISO withholds from the PNP the CRR capacity associated with the transferred CRRs to be released in the second tier of the CRR allocation process. In addition, under the existing MRTU Tariff the load-gaining LSE's tier 2 eligible quantity would be increased to reflect the net acquisition of new load.
- c. Neither the load-losing nor the load-gaining LSE is allowed to use the PNP to renew CRRs that were transferred due to load migration, and the ISO does not withhold from the PNP the CRR capacity associated with the transferred CRRs.

4. Managing credit risks associated with CRR transfers:

The main credit risk of concern is the situation where an LSE sells off its positively-valued CRRs, then loses customers and later defaults on the payments it is required to make on the negatively-valued counterflow CRRs it was required to accept due to load migration to other LSEs.

*Options considered:*

- a. (Proposed) The ISO will utilize its normal process for dealing with market participant defaults, which is to allocate the amount of the default to net creditors in the relevant settlement period in proportion to the amount of money they are owed by the ISO, and will seek to sell the relevant counterflow CRRs in the upcoming CRR auctions.
- b. Try to prevent such payment defaults from affecting the market by applying an additional credit requirement whenever an LSE sells or voluntarily transfers allocated CRRs to cover the possibility that the LSE will have to accept counterflow CRRs when some of its load migrates.
- c. Try to prevent such payment defaults from occurring by prohibiting the sale or voluntary transfer of allocated CRRs, so that LSEs must retain the allocated CRRs that would be offset by having to accept the new counterflow CRRs.

## ATTRIBUTES FOR COMPARING OPTIONS

Management identified certain guiding principles and attributes against which the alternatives needed to be evaluated.

1. The CRRs transferred for load migration should reflect a proportional share of the financial value of the CRRs allocated to the load-losing LSE. In principle, the ISO allocates CRRs for the benefit of the end-use customers, so when end-use customers switch retail providers the LSE that was allocated CRRs for those customers must transfer a proportional share of the allocated CRRs to the other LSE that acquired the customers. Although CRRs are denominated in MW, different CRR source-sink combinations will have different financial values per MW. Because CRRs are purely financial instruments – that is, their only attribute is to provide a stream of payments and or charges to their holders – what should be transferred between LSEs is a proportional share of the financial value of the allocated CRRs, which is typically not the same as a proportional share of the MW-denominated quantity of the allocated CRRs.
2. The process should be fair to all LSEs. That is, the process should not advantage or disadvantage either the load-gaining or load-losing LSE. Moreover, if LSEs have the option of transferring actual CRR instruments or an equivalent financial payment, neither LSE should be forced to accept an undesirable option.
3. The proposal should appropriately manage any credit risks associated with the CRR transfer. In particular, an LSE receiving CRRs must either qualify as a Candidate CRR Holder or already be a CRR Holder.
4. The process should not create disincentives for investment in new generation.
5. The process must be feasible to implement for the startup of the MRTU markets.
6. The process must be compatible with the comprehensive MRTU market design, and should not create adverse unintended consequences.

In addition to the six ISO-identified principles and attributes, some stakeholders advocated two more. It should be noted that not all stakeholders were in agreement on the next two, and moreover Management had reservations about adopting them because of the potential to conflict with the ones listed above. These conflicts are explained below in the discussion of the pros and cons of the options that were considered.

7. An LSE may desire to retain certain of its allocated Long Term CRRs that are associated with the supply portfolio they will continue to rely on even after the load migrates to another LSE (e.g., generating plants owned by the load-losing LSE). As discussed below, this principle was problematic because it was not conducive to an objective and accurate way to maintain principle 1 above, specifically, to ensure that the appropriate value of allocated CRRs is transferred, not just a share of the MW-denominated quantity.
8. There should be fair access to recover the CRRs that an LSE had to transfer to another LSE.

## PROS AND CONS OF THE OPTIONS

The pros and cons of the options are discussed for each of the four main design elements identified above.

### 1. Mechanism by which the ISO will perform the CRR transfer:

Proposed alternative (a) is clearly superior to alternative (b) with respect to attributes 1, 2, 5 and 6. The two alternatives are equivalent with respect to attributes 3, and 4. Alternative (b), which is the existing MRTU tariff approach, was originally developed under the assumption that the transfer of CRRs would be a requirement on the LSEs without any role for the ISO. In that context alternative (a) would not be possible because only the ISO can create the appropriate CRRs. Once it was decided that the ISO would assume this role, alternative (a) addresses some of the shortcomings of (b) in an effective and elegant manner. In particular, alternative (a) provides an objective and accurate way to transfer the appropriate share of the financial value of the load-losing LSE's allocated CRR portfolio, without the need for the equivalent financial payment option in the original MRTU tariff language, even in instances where the load-losing LSE may have previously sold or traded some of the allocated CRRs.

### 2. Identification of which allocated CRRs must be transferred:

Proposed alternative (a) is superior to (b) with respect to attributes 1, 2, 5 and 6. The two alternatives are equivalent with respect to attribute 3. With respect to attribute 4 Management believes the case is arguable and not readily resolvable, though those stakeholders who advocate (b) argue that it is superior with respect to attribute 4. The difference between (a) and (b) is rooted in the conflict between principles 1 and 7. The proponents of (b) point out that they do not transfer shares of their generation portfolios when load migrates, which is generally true, but they go on to argue that this justifies the ability to select some of their allocated CRRs associated with their retained supply resources and exempt them from load-migration related CRR transfers. In order to support this argument the proponents must rely on principle 7, which says that a "fair" share of CRRs to transfer should be measured in MW quantities rather than financial value as principle 1 requires. Management does not believe that it possible to allow a load-losing LSE to retain some of its CRRs and in their place transfer an equivalent MW quantity of other CRRs, and still ensure that load-migration related CRR transfers result in a fair transfer of value between the LSEs. Management believes moreover that principle 1 should be retained because it is a fundamental principle of CRR allocation. Because CRRs are purely financial instruments, each LSE's non-discriminatory access to the transmission system to deliver energy to its load is in no way affected by whether or not the LSE holds specific CRRs or any CRRs at all.

### 3. Creation of rules to govern the ability of the load-losing and load-gaining LSE to nominate the same CRRs for renewal the next year when CRRs are transferred due to load migration:

Starting with the second annual CRR allocation process (conducted in 2008 to allocate CRRs that will be effective during 2009), the PNP will be the first tier of a three-tier process. As such, the PNP provides an opportunity for LSEs that were allocated CRRs in one year to nominate them for renewal for the next year, and to be allocated the renewal CRRs ahead of parties who want to nominate new CRRs, i.e., CRRs they were not allocated in the previous year. During the 2005 stakeholder process when this feature was developed, the PNP was determined to be an effective mechanism to afford LSEs a high degree of certainty that they could retain a significant portion of the same CRRs from year to year, by nominating them before they have to face competition in tiers 2 and 3 from nominations of new CRRs. The question is whether the right to renew CRRs that were transferred for load migration should carry over to the load-gaining LSE.

Management has concluded that the proposed alternative (a) best achieves principles 2, 5 and 6. All the alternatives are equivalent with respect to principles 1 and 3, and with respect to principle 4 the case is arguable but inconclusive. Management rejected alternative (b) – to maintain the filed MRTU tariff approach – early in the process due to the recognition that that approach would create a potentially severe adverse unintended consequence and thus violate principle 6. This is not to abandon the intent of the original proposal, however, which was to provide assurance that the load-gaining LSE would have a fair opportunity to receive CRRs for the transferred load in the year subsequent to the transfer, even in conditions where transmission constraints severely limit the availability of CRRs in some areas of the grid – a key aspect of principle 2 in this case. Thus the contrast between alternatives (a) and (c) is best explained in terms of principles 2, 4 and 8.

Principles 2 and 8 both deal with fairness. The proponents of alternative (c) place greater emphasis on principle 8 as a “second-best” approach to the earlier question of the load-losing LSE being able to retain some of its allocated CRRs and exempt them from load-migration related transfers. While Management understands the reason for this preference, Management does not believe that alternative (c) sufficiently satisfies principle 2, which means keeping to the intent of the originally filed proposal as stated above, and that in the context of purely financial CRRs principle 2 should not be compromised. Principle 4 deals with investment incentives, and here Management believes the case is arguable but not resolvable prior to actual market experience with the LMP market design and the use of financial CRRs to manage the associated congestion costs.

#### 4. Managing credit risks associated with CRR transfers:

Management believes that principles 3, 5 and 6 are the pivotal ones in this case, and that alternative (a) best supports them. Alternative (c) is rejected because it would violate principle 6, consistency with the comprehensive MRTU market design. Throughout the stakeholder and FERC processes on CRRs the participants and the ISO have consistently favored allowing LSEs to trade allocated CRRs bilaterally, and Management believes that the current credit issue does not warrant revisiting that principle. Alternative (b) would require adding another credit requirement and calculation to the implementation requirements for MRTU startup, in addition to those already specified in the ISO’s recent filing on CRR credit policy. Management is concerned that it would be difficult to add another credit implementation requirement at this time, and that the potential magnitude of the problem does not justify the effort. In this regard it is important to note that the potential impact of such defaults will be limited by two factors.

First, state policy limits the overall volume of load that can exercise retail choice to the status quo. Second, the most significant impact of this problem would result from the LSE selling off its allocated Long Term CRRs, but the filed tariff on Long Term CRRs prohibits LSEs from selling or bilaterally transferring those rights beyond the current year of their term. Thus, for years beyond the current year, the LSE is required to retain the positive Long Term CRRs whose payment stream will offset the charges due to the counterflow CRRs assigned for load that migrates to another LSE.

## **STAKEHOLDER PROCESS AND POSITIONS OF THE PARTIES**

Starting in 2005, the ISO and its stakeholders have collaborated to develop a set of rules and processes for creating and releasing CRRs. This ongoing collaboration led to the ISO’s original February 2006 MRTU tariff filing, the January 2007 compliance filing on Long Term CRRs, and the May 2007 filing on several refinements to the CRR allocation rules. The ISO and stakeholders also collaborated in performing a thorough CRR Dry Run market simulation and in developing the CRR Business Practices Manual which contains the details of how the CRR tariff

provisions will be implemented. The most recent process conducted during May and June of this year should be viewed as a continuation of the efforts of the past two years.

The major steps in the current stakeholder process were:

- Initial consultation in March with those entities that have a direct involvement in retail load migration: Pacific Gas & Electric (PG&E), San Diego Gas & Electric (SDG&E), Southern California Edison (SCE), Alliance for Retail Energy Markets (AReM, representing non-utility LSEs), Energy Users Forum (representing large customers) and the staff of the California Public Utilities Commission (CPUC).
- Issues Identification Paper: Posted May 18, followed by a conference call on May 29 and submission of written comments by stakeholders on June 4.
- Management Straw Proposal: Posted June 7, followed by a stakeholder meeting on June 14 and submission of written comments by stakeholders on June 20.
- Management Draft Final Proposal: Posted June 25, followed by a conference call on June 28 and an opportunity to submit further written comments if parties so desired.

Five parties have submitted written comments to the Management proposals: PG&E, SCE, AReM, the CPUC staff and the State Water Project (SWP). The comments summarized below are those related to the four main design questions enumerated above. More detailed summaries of stakeholder positions are provided in a stakeholder matrix attached to this memorandum (Attachment A).

PG&E opposes the proportional transfer of all Long Term CRRs and proposes that allocated Long Term CRRs be separable into two categories: (1) Long Term CRRs subject to transfer between LSEs when load migrates, and (2) Long Term CRRs that would be ineligible for transfer, subject to verification that the load-losing LSE still requires these CRRs to manage congestion costs associated with long-term supply resources. PG&E opposes allowing the load-gaining LSE to renew transferred CRRs in the PNP, and also opposes adding an upward adjustment to the tier 2 eligible quantity for LSEs that gain net load.

Key aspects of Management's proposal for calculating the transfer of CRRs to reflect load migration are derived from proposals submitted by SCE. SCE supports Management's proposal to issue counterflow CRRs to implement load migration transfers provided that the financial implications and credit impact of assigning a counterflow CRR are the equivalent of transferring the CRR itself. SCE objects to transferred CRRs being renewable by the load-gaining LSE in the PNP because the load-losing LSE would want greater assurance of being able to renew such CRRs to serve its remaining load. SCE wants the ISO to require an LSE to provide sufficient credit to cover potential load-migration transfers before selling any CRR, to ensure that the LSE will be able to take on the credit obligation of the counterflow CRR if and when load migrates.

AReM supports Management's proposal to allocate equal and opposite CRRs as being fair and workable for credit purposes. AReM strongly supports Management's rejection of the proposal to allow some Long Term CRRs to be ineligible for load-migration transfer. AReM strongly supports Management's proposal to allow load-gaining LSEs to renew the transferred CRRs in the PNP, to provide non-discriminatory treatment to the load-gaining LSE. AReM is concerned that excessive credit requirements on LSEs would significantly chill the bilateral trading and resale market for CRRs.

The CPUC staff was concerned that load-gaining LSEs could be disadvantaged if a load-losing LSE previously sold its allocated CRRs, and believes that Management's proposal to allocate equal and opposite sets of new CRRs may effectively address this concern. The CPUC staff supports the proposed transfer of data by UDCs to the ISO but wants any data confidentiality concerns to be sufficiently resolved. The CPUC staff is concerned that a load-losing LSE may have insufficient credit to assume counterflow CRRs if it had sold a substantial portion of its CRR

portfolio, and believes that the ISO's credit and risk management staff are best situated to evaluate this problem and incorporate a solution in the ISO's overall credit and risk management plan. The CPUC staff previously supported PG&E's proposal to allow load-losing LSEs to designate CRRs that correspond to long-term contracts ineligible for load-migration transfer, but is now concerned that such a system would hinder other principles underlying the CRR and load migration proposals, such as providing load-gaining LSEs with a fair share of CRRs.

The SWP supports Management's proposal to actively track load migration, Candidate CRR Holder status, and CRR transfers and settlement streams. All market participants, regardless of whether or not their load migrates, could be potentially impacted by slow response to any LSEs' new credit requirements resulting from the required transfer. SWP proposes that the ISO should first make CRRs available in the allocation process if the load-gaining LSE cannot satisfy its credit obligation, rather than waiting to place the transferred CRRs into the CRR auctions.

## **MANAGEMENT RECOMMENDATION**

For the reasons discussed above, Management recommends option (a) in response to each of the design questions 1 through 4 itemized earlier in this memorandum.

***Moved, that the ISO Board of Governors approve the proposal for transferring CRRs between LSEs to reflect load migration as described in the memorandum dated July 9, 2007, and authorize Management to make all the necessary and appropriate filings with the Federal Energy Regulatory Commission to implement this proposal.***