

**ATTACHMENT F**



# Memorandum

To: ISO Board of Governors  
From: Donald L. Fuller, Director Client Relations  
CC: ISO Officers  
Date: March 7, 2001  
**Re: Summer 2001 Preparedness Update and Demand Response Programs**

---

***This memo requires Board action to approve the Discretionary Load Curtailment Program in order to issue Request for Proposal (RFP).***

## EXECUTIVE SUMMARY

This memo provides an update on the comprehensive preparations for Summer 2001. Implementation activities are underway for the Demand Relief Program participants approved by the Board on February 21. As directed by the Board, Management is pursuing additional participation in the Demand Relief Program, which is summarized below. The Discretionary Load Curtailment Program has been modified to coordinate with the new program initiatives proposed in the California Public Utility Commission (CPUC) Interruptible Rulemaking process. A summary of the program is included as Attachment 1 to this memo.

In connection with overall summer preparedness, the ISO continues to pursue several parallel initiatives related to Demand Response, Transmission and Generation. Attachment 2 to this memo provides Update #7 to the ISO Action Plan to Accelerate Generation, Transmission, and Demand Response in California, submitted to the Governor's Office August 10, 2000.

**Demand Relief Program:** The ISO Governing Board approved on February 21 the procurement of 596 MW in the Demand Relief Program (DRP). Successful respondents have been notified and work is underway to complete contract execution by April 15. To facilitate a smooth implementation, the ISO is hosting an implementation workshop for participants on March 22, 2001.

In the Board resolution and discussion during the February 21 meeting, the Board directed Management to pursue additional participation in this program, including further actions regarding the 800+ MW of bids submitted that were not in compliance with the Request for Bids (RFB) or were not recommended by Management. Management has begun discussions with the unsuccessful respondents and on March 15, Management will outline the progress of these discussions to the Board. Further, as noted below Management recommends issuance of a second RFB to gain additional participation.

**Discretionary Load Curtailment Program:** The ISO has finalized details of the Discretionary Load Curtailment Program, the intent of which is to attract significant additional participation by entities willing to curtail load to help mitigate emergency conditions. This program will be paid strictly on curtailment performance and will not involve a reservation or capacity payment. The ISO will work through aggregators to attract loads into this program. The

approval of this program was deferred at the February 21 Board meeting to allow for additional time to coordinate with the various proposals under consideration in the CPUC interruptible rulemaking and proposed legislation.

**CPUC Interruptible Rulemaking and Legislative Activity:** The CPUC released its Preliminary Decision (PD) on March 7, 2001, addressing the interruptible tariffs, modifications to the rotating blackout procedures, and demand programs to be operated by the Utility Distribution Companies (UDCs). The ISO attended a technical seminar hosted by the CPUC on February 15, 2001, and provided comments in the CPUC proceeding on this matter on February 22 and February 26. Several bills under consideration by the legislature contemplate these same issues. Senator Bowen's Energy and Communications Subcommittee held a hearing on February 28 to hear testimony from the ISO and CPUC on these same topics. While the final outcome of the CPUC/legislative process is not yet known, the ISO has made some assumptions noted below to proceed with implementation of a Discretionary Load Curtailment Program consistent with several of the current proposals in order to be prepared for June operation of the programs. A final order will likely not be issued by the CPUC until at least early April. Management is concerned that the timing of the final CPUC order, possibly complicated by funding issues for potential participants, may be too late for optimum Summer 2001 participation.

**Management Recommendation:**

Management recommends Board approval of the Discretionary Load Curtailment Program in order to issue the Request for Proposals and proceed with implementation.

**RESOLUTION**

***MOVED, that the Board authorize Management to issue a Request for Proposals for the Discretionary Load Curtailment Program and, in Management's judgement, to pursue agreements based on the Pro Forma Discretionary Load Curtailment Agreement attached to the RFP and containing such other terms as Management deems appropriate.***

**DEMAND RELIEF PROGRAM**

Following Board approval of the Demand Relief Program procurement of 596 MW on February 21, Management has initiated work to implement full operation of this program, including contract execution. The ISO will host a technical implementation workshop on March 22 for loads and aggregators participating in the Demand Relief Program. Based on Board direction, Management has pursued additional participation.

To solicit additional participation in this program, Management proposes to issue a new RFB for the Demand Relief Program. This RFB would be issued no later than March 16 with a bid requirement in April that would allow Board approval of the final procurement at its April 26 meeting. Loads approved for participation on this date likely would not be able to participate until July 1. It is anticipated that the new RFB could attract:

- Load respondents to the initial RFB that were not successful.
- Back-up generator (BUG) respondents to the initial RFB that can accommodate the new program structure, with approval of their Air Quality Management District (AQMD).
- Load participation from military facilities that indicated interest but could not respond in time for the February 6 bid deadline.
- Other new participation, including additional participation by parties that were successful in the first RFB.
- PG&E interruptible tariff customers that have fulfilled their 2001 commitment.

- A new interval meter program if approved at the state level.

In addition, since there is a cap of six 4-hour curtailments in this Demand Relief Program, the ISO has been asked how it would address a possible scenario where all of the curtailments had been fulfilled before the end of a particular month - i.e. there was interest as to how the ISO can easily and efficiently secure additional participation if Load would be willing to add additional hours in a month. A possible approach would be to let the Loads participate in the Discretionary Load Curtailment Program for the rest of that month. However switching between programs within the month would cause confusion. To accommodate this, the ISO will incorporate a modification to the DRP agreement, allowing for a discretionary or voluntary participation by DRP Loads after they have fulfilled their six 4-hour curtailments during the month. Additional participation would be voluntary and would be compensated at the performance rate (Energy only) in effect for the "day-of" portion of the Discretionary Load Curtailment Program.

### **ISO DISCRETIONARY LOAD CURTAILMENT PROGRAM**

The ISO has finalized details of the Discretionary Load Curtailment Program, the intent of which is to attract significant voluntary curtailments before we enter emergency conditions. In addition to attracting Loads that want control or discretion over their curtailments, this program is aimed at attracting smaller Loads, i.e. commercial lighting and air conditioning Load that hasn't historically participated in a Demand response program. Entities elsewhere have initiated programs successfully that depend on the "voluntary" or "discretionary" nature of curtailment. Market Participants and several potential aggregators have reviewed early drafts of this program with favorable support and constructive feedback that has been incorporated into the program summary included in Attachment 1 to this memo. This program provides an Energy-only payment and gives Loads the control that some require to feel comfortable participating in a Demand response program. While giving Loads this discretion, the program has been designed to also provide the ISO operators a known curtailment commitment.

A key factor in the ISO evaluation of Program operation and pricing has been a review of the proposals discussed in the CPUC Energy Division report and a proposal submitted by the "joint parties" consisting of PG&E, SCE, SDG&E, California Manufacturers & Technology Association, California Large Energy Consumers Association, and the California Industrial Users Association. The joint parties propose a Day Ahead segment priced at \$500/MWhr and a Day Of segment priced at \$750/MWhr. In addition to the support from the joint parties, TURN has supported these price levels, if only for the summer of 2001. The ISO is working on proper trigger mechanisms that would occur between 4:00 and 6:00 PM the Day Ahead and between 8:00 and 9:00 AM the Day Of. The program will be triggered based on available forecast of Load, resources, and temperatures.

To simplify program structure for both the UDCs and non-UDC aggregators, the ISO will structure an umbrella program, which will trigger both groups in the same way. In the case where the UDC is providing aggregation of its bundled customers, the interface between the ISO and the UDCs will deal primarily with triggering of the curtailment request by the ISO, communication by the UDC of availability, dispatch confirmations by the ISO and follow-up performance reports from the UDCs to the ISO. Settlements of the performance will be completed by the UDCs through their tariffs or through other mechanisms proposed by the joint parties. For other aggregators, the same trigger and notifications would operate, but for non-UDC aggregators the ISO would pay for the program performance costs through its market mechanisms. The same Day Ahead and Day Of prices would apply to all aggregators, whether UDC or non-UDC.

## ISO PARTICIPATING ANCILLARY SERVICES LOAD PROGRAM

The Participating A/S Load Program allows loads to participate as price-responsive demand in the ISO Ancillary Services (A/S) and Supplemental Energy markets. The ISO has extended this program indefinitely as part of the semi-annual filing to FERC contained in Amendment 35 to the ISO Tariff (Feb.,2001). Also, recently the ISO relaxed the telemetry requirement on the loads bidding into the Supplemental Energy market. Loads bidding Non-Spinning Reserve and Replacement Reserve will still require telemetry. Management has reviewed the impact of the pricing breakpoint implemented by Amendment 33 to the ISO Tariff and the December 15 FERC Order, and recommends maintaining the same bid and award parameters that apply to Generators.

## SUMMER RELIABILITY GENERATION

The contracted amount for the Summer Reliability Generation Program stands at 30 projects by 10 generation developers for a total of 1324.1 MW. Some project schedules have changed. The latest monthly projection of operational dates, based on phone calls to each of the SRA participants on March 5 and 6 and validation checks with the PTOs, is as follows:

	PG&E	SCE	SDGE	Totals
June	0	30	44	74 MW
July	88.6	0	87	175.6 MW
August	188.5	168	43	399.5 MW
September	393	0	196	589 MW
October	0	43	43	86 MW
<b>Totals</b>	<b>670.1</b>	<b>241</b>	<b>413</b>	<b>1324.1 MW</b>

This table shows considerable change from the last Board update. Developers are reluctant to predict actual in-service dates, citing the uncertainties surrounding developing generation projects in California. As these uncertainties, such as financing, siting, and permitting, are addressed, developers will furnish more reliable in-service dates. Most developers are cautiously optimistic about meeting the in-service dates summarized above. As siting and permitting issues are resolved, some projects may move to different sites and have new in-service dates.

As of March 6, 2000, three developers for a total of 7 projects and 279.2 MW have indicated that they have agreed to terms for (but have not yet signed) new contracts with CDWR to replace the existing ISO Summer Reliability Agreements (SRA). The remaining developers are still negotiating with CDWR. Most of the remaining developers have indicated to the ISO that they do not find the terms offered by CDWR attractive and may elect to keep their existing SRA already executed with the ISO. The ISO continues to make developers aware that the ISO's ability to make the SRA payments depends on the ISO's ability to collect those moneys from the market - an ability called into serious question by recent defaults on payments to the ISO.

## **ACTION PLAN UPDATE**

Attachment 2 to this memo provides Update #7 to the ISO Action Plan to Accelerate Generation, Transmission, and Demand Response in California, dated August 10, 2000. In addition to this monthly update we are sending weekly updates to the Electricity Oversight Board to assist them in broader communication activities within the state. Also the EOB is invited to attend the Summer 2001 Preparedness Steering Committee meetings.

## Attachment 1

### **DISCRETIONARY LOAD CURTAILMENT PROGRAM**

The California Independent System Operator (ISO) has created the Discretionary Load Curtailment Program (DLCP) to provide additional resources to the grid for the management of potential system emergency conditions. This program provides an energy-only payment and gives Loads total control over their curtailments, the control that many need to feel comfortable participating in a demand response program.

#### **The DLCP consists of two parts:**

- a Day Ahead Request, and
- a Day Of Request for curtailment.

The ISO will pay Load Aggregators \$500/MWh for Demand they offer and curtail in the Day Ahead portion, and \$750/MWh for Demand they offer and curtail on the Day Of portion.

This program will act as an umbrella for certain UDCs' programs under Assembly Bill AB31x and also attracts any other aggregator that can bid load curtailments into the program. A Load Aggregator (LA) can be any company who enters into a DLCP Agreement with the ISO. Because AB31x provides payments for the bundled customers that are aggregated by the UDCs, an alternate agreement will be made with them regarding procedures of operation. Non-UDC Load Aggregators will receive the performance payments from the ISO through their elected Scheduling Coordinator.

The DLCP will operate year-round during the hours of 7:00AM until 8:00PM from now until December 31, 2001. The need for this program will be evaluated throughout 2001 and implemented for 2002 if needed. Some provisions including trigger mechanisms and payments may be re-evaluated and changed based on Summer 2001 experience.

The ISO is accepting proposals from those interested in being a Load Aggregator, starting on March 19, 2001 and continuing until the end of this program. For more information and a copy of the Request for Proposals, please visit our web site ([www.caiso.com/clientsev/load](http://www.caiso.com/clientsev/load)) (this will be posted after the DLCP is approved).

The DLCP is intended to provide the ISO with Demand curtailment from Loads that may not be able to participate in the ISO's Participating Load Program (Ancillary Services and Supplemental Energy) or the ISO's Summer 2001 Demand Relief Program. However, contracted DRP Loads may participate in the DLCP during months outside of the DRP period. Additionally, existing UDC interruptible customers that have met their yearly contractual obligation may participate. This new program is intended to allow end-use Loads to participate, through a Load Aggregator, in a curtailment program while giving those Loads total discretion whether to participate in any day the program is activated by the ISO.

Key Features of the Discretionary Load Curtailment Program

Feature	
DLCP Availability	<b>March XX, 2001 – March 31, 2002</b>
Minimum Load Aggregator Portfolio	<b>1MW</b>
Curtailed Energy Payment	Day Ahead: <b>\$500/MWh</b> Day Of: <b>\$750/MWh</b>
Curtailment Window	<b>7:00 AM – 8:00 PM</b>
DLCP Request	Day Ahead Request: <b>Upon ISO projecting a need for demand response (the ISO may call on this program based upon the best available temperature, load, and resource forecast information) for specified hours of the next day. The DLCP Day Ahead Request will be issued by 4:00PM</b> Day Of Request: <b>Upon ISO projecting a need for demand response (the ISO may call on this program based upon the best available temperature, load, and resource forecast information) for specific hours on that day. The DLCP Day Of Request will be issued by 8:00AM.</b>
DLCP Offer	<b>Load Aggregators shall respond to the DLCP Day Ahead Request by 6:00pm of the day of the DLCP Request.</b>  <b>Load Aggregators shall respond to the DLCP Day Of Request by 9:00AM.</b>
DLCP Confirmation	<b>The ISO will issue a DLCP Day Ahead Confirmation notice to the Load Aggregators no later than 7:00 PM of the day before the curtailment.</b> <b>The ISO will issue a DLCP Day Of Confirmation notice to the Load Aggregators no later than 9:30AM of the day of the curtailment.</b>
DLCP Curtailment	<b>The aggregator shall assure that the Load is notified and curtails in the hour(s) as per the DLCP Confirmation notice.</b>
Use of Generation	<b>Less than 1MW total behind each interval meter, with approval from AQMD.</b>
Order / Timing of Curtailment	<b>Because the DLCP Curtailment will be based on the times identified in the DLCP Confirmation notice the curtailments could occur irrespective of the Emergency Status.</b>



## Eligibility

### **DLCP Load Aggregator**

In order to be eligible for the DLCP, Load Aggregators (including UDCs):

1. Must be able to provide a portfolio that contains a net reduction in Demand of at least 1MW, either alone or when aggregated with other customers,
2. Must sign a DLCP Agreement,
3. Must have an ISO approved performance measurement process,
4. Must be capable of interacting with the ISO's DLCP infrastructure as well as communicate with the end-use Load customer,
5. Must nominate a SC for settlement transactions with the ISO.

### **DLCP End-Use Load Customer**

In order to be eligible for the DLCP, an end-use Load customer:

1. Must be able to provide a net reduction in Demand that meets the criteria of the LA, or the Local Regulatory Authority,
2. Must have an interval meter approved by the Local load aggregator Regulatory Authority, or have the appropriate measuring device(s) as required by the approved LA's performance measurement process,
3. Must be located inside the ISO Control Area (ask your aggregator, if you are not sure),
4. Must not concurrently participate in the ISO's Summer 2001 DRP, however may participate during months outside of the DRP contracted period (May 15-September 30, 2001),
5. If the end-use load is a UDC interruptible customer, the customer may participate in the DLCP as long as the customer has met all the contractual obligations of an interruptible customer,
6. Must not have a Participating Load Agreement (PLA) with the ISO for the same Load offered under the DLCP,
7. Must obtain and provide positive proof of all necessary permits of operation or approvals from the local Air Pollution Control District or Air Quality Management District for each individual Generating Unit designated for participation in the DLCP.

### **DLCP Process:**

- DLCP Request

1. DLCP Day Ahead Request:

The ISO will project the need for demand response. The ISO may call on this program based upon the best temperature, load, and resource forecast information available by 4:00PM the day ahead. The ISO will issue a DLCP Day Ahead Request by e-mail to all contracted Load Aggregators. The e-mail notice will request the curtailment amounts for two-hour blocks within the ISO specified curtailment timeframe. The ISO will provide any constraints in the notice.

## 2. DLCP Day Of Request:

The ISO will project the need for demand response. The ISO will base this projection upon the best temperature, load, and resource forecast information available by 8:00AM of the day of the request. The ISO will issue a DLCP Day Of Request by e-mail to all Load Aggregators. The e-mail notice will request the curtailment amounts for each two-hour block requested. The ISO will provide any constraints in the notice.

- DLCP Offer

1. By 6:00PM on the Day Ahead, the Load Aggregators will submit to the ISO, through the ISO DLCP website, their committed amounts of Load Curtailment. The ISO expects that the Load Aggregators will have contacted the End-Use Loads in their program to determine how much curtailment will be available and for which hours of the day.
2. By 9:00AM of the Day Of, the Load Aggregators will submit their committed amounts of curtailment.

- DLCP Confirmation

Once the ISO reviews submitted DLCP Offers, ISO Operations will issue an e-mail notice to both the Load Aggregators and their Scheduling Coordinators accepting specific DLCP Offers. The ISO will issue the DLCP Confirmation notice by 7:00PM on the day the Day Ahead Request was made and by 9:30AM for the Day Of Requests. These confirmation notices will request that the Load Aggregators communicate to the End-Use Loads the required curtailment amount and duration. This will be the only communication (dispatch) to the Load Aggregators detailing the curtailment.

- DLCP Performance

The effectiveness of the DLCP will be based on the performance of each End-Use Load in curtailing their confirmed curtailment amount. The ISO expects that the committed curtailment will occur based on the hours as confirmed through the DLCP Confirmation notices. An aggregator has the responsibility to produce the demand reduction it confirms. There is no set penalty, except that continued poor performance could result in revocation of the DLCP Agreement.

- Performance Measurement Guidelines

The measurement of performance for each End-Use Load will be performed by the Load Aggregators. Each Load Aggregator will have an ISO approved performance measurement plan, which will be used to calculate the DLCP performance. The performance measurement plan shall include the following:

- For interval metered End-Use Loads the Load Aggregator will calculate a baseline Load profile. DLCP performance will be measured by the difference between baseline Load profile and the meter read for the hour(s) of curtailment.
- For non-interval metered Loads, DLCP performance will be calculated by using a combination of sample measurements, historic data, process controls, use of data loggers, and any other performance measurement method approved by the ISO. Load Aggregators shall obtain ISO approval prior to offering DLCP for non-interval metered End-Use Loads. (It should be noted that the ISO favors interval meters.)

- **DLCP Settlement**

Each DLCP Offer for which a DLCP Confirmation was issued by the ISO shall be uniquely identified. Therefore, DLCP Day Ahead and DLCP Day Of offers must be separately identified. The Load Aggregators (except for the UDCs) shall submit the DLCP Performance Measurement for each confirmed offer by using the DLCP website no later than 45 days following the operating day of the DLCP Curtailment. The ISO will calculate the performance payment by simply multiplying the DLCP energy price (\$500/MWh for DLCP Day Ahead and \$750/MWh for DLCP Day Of) by the amount of DLCP (in MWs) for each hour of confirmed curtailment. For each month the performance payments will be summed up for all the confirmed curtailments and paid to the Load Aggregator's nominated Scheduling Coordinator. The payment will be made to the Scheduling Coordinator in accordance to the ISO Payment Calendar timeline. The ISO recognizes that UDCs acting as Load Aggregators will have specific rules to follow for the settlement of the dispatched curtailment. The UDCs will be responsible for following the settlement rules and regulations set forth by the CPUC for the End-Use Loads.

**How to enroll in the DLCP:**

**Load Aggregator**

1. For a Load Aggregator, contact the ISO. The DLCP Request for Proposal (RFP) and Agreement are posted on the ISO website: [www.caiso.com/clienterv/load](http://www.caiso.com/clienterv/load),
2. Contact the ISO. The ISO contact for the DLCP is:

**Glen Perez, Manager Data Quality  
California ISO  
Gperez@caios.com**

3. Submit a proposal and enter into a DLCP Agreement. Responses to the RFP should be submitted to:

**California Independent System Operator**  
151 Blue Ravine Road  
Folsom, CA 95630

**Attention: John Council, Contracts**

**End-Use Customers**

1. Contact a Load Aggregator. A list of approved Load Aggregators will be posted on the ISO website": [www.caiso.com/clienterv/load](http://www.caiso.com/clienterv/load),
2. Contact your UDC. They may have an enrollment process to be followed.
3. Any questions contact the ISO. The ISO contact for the DLCP is:

**Glen Perez, Manager Data Quality  
California ISO  
gperez@caiso.com  
Attachment 2**

## Attachment 2

### **CALIFORNIA ISO ACTION PLAN TO ACCELERATE GENERATION, TRANSMISSION, AND DEMAND RESPONSE IN CALIFORNIA - Update #7**

**March 15, 2001**

The following is an incremental update of progress made since the last Action Plan report on February 21<sup>st</sup>.

#### **Demand Response**

##### *D6 - Expand ISO and Other Demand Responsive Products*

**All of the bid winners for the ISO Demand Relief Program have been notified. We are in the process of verifying their Air Quality Permits and establishing formal demand relief agreements. A technical workshop to review implementation details is being planned for March 22<sup>nd</sup>.**

All parties, whose bids were rejected, have been notified. We are further investigating the possibility of channeling these bids into other more appropriate programs, for example the ISO Discretionary Load Curtailment Program or local UDC load management program.

A revised specification for the ISO Discretionary Load Curtailment Program (DLCP) is posted on the CAISO web site. We are requesting review and comments from potential bidders. Enhancements were made to the original design to accommodate various proposals made by the Energy Division and the joint party proposal that are contained in AB31x, as well as providing a vehicle for other load aggregators to bid load curtailment capacity for demand relief.

The ISO filed with the CPUC, comments (2/22) and reply comments (2/26) to the Energy Division report (2/9) regarding the interruptible load rule making. The ISO provided testimony on Wednesday 2/28 to Senator Bowen's subcommittee on Energy and Communications. The discussion centered on interruptibles and demand response programs.

We are planning to open a second DRP bid opportunity; exact timing is yet to be determined. The objective is to increase available demand response by expanding participation in the following areas:

- Work with loads that were rejected in the original DRP bid, to enable them to satisfy the program prerequisite requirements.
- Work with BUG loads that were rejected in the original DRP bid to resubmit a load only bid.
- Military bases that were not able to meet the original bid deadline.
- PG&E interruptible customers that have satisfied their 2001 curtailment obligations.
- City and County facilities that were not able to meet the original bid deadline.
- New load participants, and facilities with new interval metering installation.

## **Generation**

### **Summer Reliability Generation (SRG)**

The ISO has requested CDWR assure payment of the SRG contracts to ensure the projects will be built. We understand CDWR is renegotiating these contracts without ISO involvement. Consequently, we are uncertain of the legal relationships between ISO, CDWR, and the counterparties to the Summer Reliability Agreements and are concerned about the potential impact these negotiations may have upon respective project schedules.

## **Transmission**

We continue to monitor the PG&E transmission projects. A recent report from PG&E indicates their primary concerns are material and equipment availability and coordination of inter-project dependencies. The project teams are closely monitoring these issues and there are no schedule impacts at this time. The following projects are reported on schedule and have no major issues:

### **T7 - San Francisco Bay Area Improvement**

- PG&E T558 or T669 Tesla 500/230kV Transformer Bank
- PG&E T670 Re-rate Newark 230/115 kV Banks 7, 9 & 11
- PG&E T670 Telsa-Newark Transmission Reinforcement
- PG&E T498 Ravenswood-Ames Capacity Upgrade
- PG&E T498 Re-rate Ravenswood 230/115kV Bank 1
- T647 PG&E Metcalf-Monta Vista 230 kV Line #3 & #4 Separation
- PG&E T519 Metcalf 500kV Shunt Capacitor Bank
- Re-rate Jefferson 230/60kV Bank 1

### **T-8 - San Francisco and Northern San Francisco Peninsula Transmission**

- Lakewood Area 115kV Transmission Reinforcement
- Re-rate Moss Landing 500/230kV Bank 9
- Mountain View / Whisman 115kV Loop