Item 6

Design Principles for a Demand Responsive Electric Grid

For discussion at the August 26th Policy Group meeting
(prepared by CEC Staff; 8/25/02)

A. The Policy Group should consider adopting the following principles:

Principle 1 - Ideally the design of a dynamic tariff system must:

a) provide for the free flow of price information to customers that desire it
b) return on-site power demand data to system providers if desired, and
c) provide customers with the ability to purchase (or finance) "controls" equipment, which can respond automatically to price information to help customers manage their electricity bills.

Principle 2 - Customers should be given a choice of dynamic rate structures, empowering them to:

a) closely manage their own bills based on price signals,
b) delegate this function to an onsite management system, or
c) delegate this management function to third party providers who specialize in this business.

Principle 3 - Rate structures should reflect the reality of the underlying costs of providing and distributing energy to customers, and provide customers with the opportunity to purchase hedges against future price increases.

Principle 4 – The installation of advanced meters and control systems in new buildings should be fully explored by the working groups since these applications are likely to be considerably more cost-effective than retrofits of the same systems to existing buildings.

B. Potential Guidance to the Working Groups

1. The working groups should explore the possibility of pre-wiring energy management control systems in new buildings that could deliver a 5% to 20% reduction in connected electricity load automatically in an emergency situation (stage 3) to ensure local or system reliability.

2. Experimental tariffs or rate designs should in most cases be designed to be revenue neutral with respect to the existing tariffs to ensure load serving entities (LSE's) do not assume the financial risks of under-collection in addition to the operations risk of introducing a new tariff.

3. – Parties or the working groups should propose pilot tests for specific tariffs or designs only when they are sure that the information, experience or data available from similar tariffs in different jurisdictions is not likely to be useful in a California setting.

4. – The large customer working group should place a high priority on developing dynamic or time sensitive tariffs for customers with demands in excess of 200 kW who have recently installed interval metering and communication systems