California Consumers Alliance (CCA) appreciates the opportunity to provide comments on the CAISO's 2012/2013 transmission planning preliminary results shared at the December 11-12, 2012 stakeholder meeting. In general, the transmission planning process used for the CAISO's 2012/2013 transmission plan appears to be similar to the studies the CAISO has done in previous years. The process follows the same approach of looking at local reliability areas under stressed conditions, identifying reliability standard violations and recommending mitigation solutions for each violation.

It is evident in all three types of transmission planning studies performed by the CAISO: reliability, meeting RPS goals, and interconnecting generators, that the CAISO has failed to identify and vet a reasonable range of feasible alternatives, including operational solutions. If the reason for not considering all viable solutions is a lack of resources to conduct the necessary studies, the CAISO should consider hiring consulting services to allow a deeper and broader evaluation of feasible alternatives for mitigating identified reliability standard violations. Consideration of a broader range of wires- and non-wires alternatives is necessary in order to determine which mitigation option is least cost for consumers. Spending a little more money upfront on the evaluation process can save a lot of money down the road in terms of identifying the lowest cost solution. These solutions may be transmission expansion projects or they may be non-wires approaches such as pre-contingency generator redispatch.

The CAISO is reminded that the CAISO's own tariff obligates it to consider alternatives for all proposed transmission upgrades, including "reliability" projects. These obligations are set forth in the CAISO tariff:

24.2 The Transmission Planning Process shall, at a minimum:(a) Coordinate and consolidate in a single plan the transmission needs of the CAISO Balancing Authority Area for into a single plan, which will be assessed on the basis of maintaining the reliability of the CAISO Controlled Grid in accordance with Applicable Reliability Criteria and CAISO Planning Standards, in a manner that promotes the economic efficiency of the CAISO Controlled Grid. [emphasis added]

24.3.1 (j) Generation and other non-transmission projects that are proposed for inclusion in long-term planning studies **as alternatives to transmission additions or upgrades**; [emphasis added]

24.4.6.2 Reliability Driven Projects

The CAISO, in coordination with each Participating TO with a PTO Service Territory will, as part of the Transmission Planning Process and consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. In making this determination, the CAISO, in

coordination with each Participating TO with a PTO Service Territory and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads, storage facilities or reactive support..." [emphasis added]

In nearly all instances where a reliability standard violation is identified, the CAISO should assess whether pre-contingency generation redispatch would avoid the thermal overloads or unacceptable voltage deviations that would otherwise occur under the posited contingency event. If it is determined that pre-contingency generator dispatch would avoid the reliability standard violation, the CAISO would then need to estimate the costs of such generation redispatch and compare this cost to the cost of other mitigating solutions (such as expanding the transmission grid). Pre-contingency generator dispatch has the advantage that it minimizes the need to trip generation for contingencies.

Finally, tripping generation should be a potential solution that is considered for nearly all contingency events. Generation tripping is generally low cost and, considering the infrequency of transmission contingencies, will not occur often. For example, the cost of tripping renewable generation and replacing this generation with additional purchases of renewable energy to reach the required 33%, should be examined against the cost of building additional network upgrades that would avoid having to trip any renewable generation under the contingency event.

Renewable developers generally support building more transmission because they want to minimize the risk of losing Resource Adequacy (RA) deliverability. However, the CAISO should compare the economic value of RA deliverability against the cost of the network upgrades that provide such deliverability. At some point consumers will be better off if the network upgrade is not built and RA deliverability is secured from generators located at points on the grid where RA deliverability is not at risk. The CAISO's current deliverability study process uses extreme and, in most cases unrealistic, assumptions as regards generation dispatch patterns, both in the area around the generator under study as well as elsewhere on the WECC grid. For example, it is illogical to assume gas-fired generation in the area around the generator under study is running at full output while gas-fired generation of similar variable cost characteristics in other locations is off-line or running at less than full output.

Building network expansion to assure full deliverability of any generation located any place resembles building freeways anywhere housing developers decide to build. This transmission expansion approach removes the last semblance of locational price signals since customers are now going to pay for the network expansion to provide full deliverability for the 33% RPS goal. A market design based on the will of a segment of the participants at the expense of others, and not based on any sound economic methodology, is bound to cause problems and eventually fail.

This is evident from the first ten years of the CAISO's operation with a zonal market design, as well as issues with the CAISO's generation interconnection process.

The deliverability methodology and its connection to the RA counting and payment is the main push behind full deliverability at any cost to the customers and needs to be reexamined. We urge the CAISO to promptly begin a new stakeholder process to reevaluate their deliverability assessment methodology given its significant impact on generation and transmission resource development in the future.

From the CAISO's study results it is not clear if the addition of Distributed Generation (DG) helps to mitigate thermal overloads or low voltages that, if the DG were not added, would otherwise be present under contingency conditions. The CAISO has not performed any studies for the High DG case under peak load conditions. The High DG case has only been studied for off-peak load conditions. Therefore it is not clear if the High DG case removes or improves any problems in the peak hours, such as low voltage problems identified in the CAISO other studies of peak load conditions.

The amount of DG in the High DG case examined by the CAISO seems conservative as compared to the amounts of DG in the filings of many parties in the LTPP and other proceedings. It is recommended that CAISO study one High DG sensitivity that includes a much larger amount of behind-the-load meter DG. This sensitivity would reflect a lower level of net load at the transmission substation level. It will provide an opportunity to examine the impact of High DG on the reliability of the system and on each of the 33% RPS portfolio cases. If the High DG sensitivity is pursued then, according to the least regret principal, it may be preferable to defer or eliminate certain proposed transmission expansion projects, thereby reducing the risk of stranded investment.