BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking Regarding Policies and Protocols for Demand Response Load Impact Estimates, Cost-Effectiveness Methodologies, Megawatt Goals and Alignment with California Independent System Operator Market Design Protocols	Rulemaking 07-01-041 (January 25, 2007)

JOINT COMMMENTS OF CALIFORNIA LARGE ENERGY CONSUMERS ASSOCIATION, COMVERGE, INC., DIVISION OF RATEPAYER ADVOCATES, ENERGYCONNECT, INC., ENERNOC, INC., ICE ENERGY, INC., PACIFIC GAS AND ELECTRIC COMPANY (U 39-M), SAN DIEGO GAS & ELECTRIC COMPANY (U 902-E), SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) AND THE UTILITY REFORM NETWORK RECOMMENDING A DEMAND RESPONSE COST EFFECTIVENESS EVALUATION FRAMEWORK

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Dated: November 19, 2007

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I.

INTRODUCTION

Pursuant to Administrative Law Judge Hecht's October 15, 2007 Ruling (October 15 Ruling) Setting Additional Comment Period on Cost Effectiveness Issues, and to ALJ Hecht's November 6, 2007 email ruling granting a 10-day extension of time to file initial comments on the October 15 Ruling,[1] California Large Energy Consumers Association (CLECA), Comverge, Inc., Division Of Ratepayer Advocates (DRA), EnergyConnect, Inc., EnerNOC, Inc., Ice Energy, Inc., Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), and The Utility Reform Network (TURN) (collectively, the "Consensus Parties") file these joint comments recommending a Demand Response Cost Effectiveness Evaluation Framework approach, as allowed by the Ruling.

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[1] *See* ALJ Hecht's November 9 Ruling, confirming the extension.

In the October 15 Ruling, ALJ Hecht denied requests for evidentiary hearings on the Demand Response (DR) Cost Effectiveness issues, but provided parties with an opportunity to further develop the record during a supplemental comment period focused on specific issues. The Ruling set forth 18 questions drawn from the requests for hearings and from staff recommendations that deal with issues for which more information would be helpful in developing a final cost effectiveness methodology. Parties were provided an opportunity to file comments on those questions. In addition, the Ruling stated that "parties should not merely . . . describe alleged problems with existing proposals, but should also recommend and fully describe alternative approaches" in their initial comments.[2] In accordance with that directive, the utilities reached out to all active parties in Phase 1 of this proceeding to begin discussions on an approach to DR Cost Effectiveness Methodology that would represent a consensus of the parties on the issues. All but one active party agreed to participate in the discussions.

The participants held a series of meetings (both in person and via conference call) in an attempt to reach agreement on an approach to DR Cost Effectiveness. These efforts were successful, and resulted in the "DR Cost Effectiveness Evaluation Framework" attached hereto as Attachment A. The DR Cost Effectiveness Evaluation Framework represents the consensus positions of all the participants in these discussions (the Consensus Parties) on the DR Cost Effectiveness issues. It was reached after each party had an opportunity to ask questions, discuss and consider the strengths and weaknesses of the other parties' positions, and after numerous discussions on the merits of the issues.

The DR Cost Effectiveness Evaluation Framework addresses all of the DR Cost Effectiveness issues within the scope of Phase 1 of this proceeding that were identified in ALJ Hecht's April 18, 2007 Scoping Memo. The DR Cost Effectiveness Evaluation Framework also covers all of the issues raised in Questions 1 – 18 of the October 15 Ruling.

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[2] *See* Ruling at p. 6.

In summary, the Consensus Parties recommend that the Commission adopt the DR Cost Effectiveness Evaluation Framework because it represents a resolution of all of the DR Cost Effectiveness issues that is supported by an overwhelming majority of active parties.

II.

THE DR COST EFFECTIVENESS EVALUATION FRAMEWORK REASONABLY RESOLVES ALL OF THE DR COST EFFECTIVENESS ISSUES IN PHASE 1 OF THIS PROCEEDING

Phase 1 of this proceeding seeks to achieve two goals: (i) establish a comprehensive set of protocols for estimating the load impacts of DR programs; and (ii) establish methodologies to determine the cost effectiveness of DR programs.[3] The first goal is progressing on a separate, concurrent track, and Joint Staff has already articulated its positions on the proposed Load Impact Estimation Protocols.[4]

With respect to the second goal, the ALJ and Assigned Commissioner determined that the scope of the issues included:

- addressing the broad variety of DR approaches, including current and anticipated future activities;
- identifying all relevant quantitative and qualitative inputs (other than load impacts) that are important for determining the cost effectiveness of DR;
- either recommending values for the inputs, or recommending methodologies for determining input values, that address the broad variety of DR approaches, including current and anticipated future activities; and
- determining a useable overall framework and methodology for evaluating the cost effectiveness of each of the different types of DR activities, with the key task of suggesting the relevant perspectives and cost effectiveness tests.[5]

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[3] *See* Scoping Memo at p. 5 - 7.

[4] *See* the October 12, 2007 Staff Report on Load Impact Estimation Protocols.

[5] *See* Order Instituting Rulemaking 07-01-041 at Section I; *also* Assigned Commissioner and Administrative Law Judge's Scoping Memo and Ruling, issued April 18, 2007, p. 5-6.

The DR Cost Effectiveness Evaluation Framework addresses each of these issues in a manner supported by the majority of active parties.

1. The DR Cost Effectiveness Evaluation Framework addresses the broad variety of DR approaches, including current and anticipated future activities.

The DR Cost Effectiveness Evaluation Framework is intended to evaluate the cost effectiveness of (i) event-based DR programs (e.g., CPP, price responsive, reliability DR programs); and (ii) non-event-based DR programs (e.g., TOU, permanent load shifting). These two categories capture the broad variety of existing and anticipated DR programs. The framework is also intended to be used to evaluate DR portfolios, and to be a key input for evaluating third-party aggregation proposals, subject to least cost-best fit criteria and other evaluation/selection criteria.

The DR Cost Effectiveness Evaluation Framework expressly recognizes that there are a wide variety of DR programs with differing attributes, and that flexibility in the application of this evaluation framework may be necessary to fully reflect the attributes of some DR programs. The valuation of DR programs may also be affected by CPUC and CAISO decisions on short-term and long-term resource adequacy and actual program design and operations. Parties should have the ability to test the appropriateness of such modifications and the particular input values chosen in the DR application process.

2. The DR Cost Effectiveness Evaluation Framework identifies all relevant quantitative and qualitative inputs (other than load impacts) that are important for determining cost effectiveness of DR

The DR Cost Effectiveness Evaluation Framework identifies the relevant quantitative and qualitative inputs for the following categories of DR program costs and benefits:

- avoided generation capacity benefit (Section C);
- avoided energy benefit (Section D);

- deferred T&D capacity investment benefit (Section E);
- other benefits (Section F);
- program costs (Section H);
- costs incurred by participants and non-participants (Section B);
- incentives received by participants (Section B); and
- discount rates (Section B).

3. The DR Cost Effectiveness Evaluation Framework recommends values for inputs that address a broad variety of DR approaches, including current and anticipated future activities

The DR Cost Effectiveness Evaluation Framework proposes that each utility will use its most recent, up-to-date estimates of the future annual market value of generation capacity, future electricity prices, as well as that utility's marginal T&D cost(s) and line loss rates. In some cases, those values may be obtained from published/litigated sources to the extent that such data are available from those sources at the required level of detail and/or aggregation, and are practical, reasonably accurate and up-to-date. A utility's general rate case marginal cost studies may provide CT cost and gross margin data and avoided T&D cost data. Either general rate case marginal cost studies or modeling studies which underlie that utility's long-term procurement plans may provide avoided energy cost data.

4. The DR Cost Effectiveness Evaluation Framework provides a useable overall framework and methodology for evaluating the cost effectiveness of each of the different types of DR activities, including recommendations regarding the relevant perspectives and cost effectiveness tests

The DR Cost Effectiveness Evaluation Framework employs each of the four perspectives contained in the Standard Practice Manual: the Participant Perspective, the Ratepayer Impact Measure (Non-Participant Perspective), Total Resource Cost (TRC)

Perspective and the Program Administrator Cost (PAC) Perspective. The DR Cost Effectiveness Evaluation Framework notes that the utilities intend to use the TRC perspective as the primary test of cost effectiveness for both utility and third party aggregator programs but they will include the other perspectives so that DR program distributional impacts can be identified. The DR Cost Effectiveness Evaluation Framework also notes that DRA prefers to use both the TRC and PAC perspectives together as the test of cost effectiveness.

The DR Cost Effectiveness Evaluation Framework represents the consensus positions of the Consensus Parties on the DR Cost Effectiveness issues. It was reached after each party had an opportunity to ask questions, discuss and consider the strengths and weaknesses of the other parties' positions, and after numerous discussions on the merits of the issues. Because it represents agreement by an overwhelming majority of the active parties, the Consensus Parties believe that the DR Cost Effectiveness Evaluation Framework provides a mutually acceptable outcome on the DR Cost Effectiveness issues that fairly and reasonably balances the various interests affected by this Phase 1 proceeding.

III.

THE DR COST EFFECTIVENESS EVALUATION FRAMEWORK ADDRESSES ALL OF THE QUESTIONS POSED BY THE OCTOBER 15 RULING

The DR Cost Effectiveness Evaluation Framework also addresses all of the issues identified in ALJ Hecht's October 15 Ruling to more fully develop the record in this proceeding. Specifically, as shown in Attachment B hereto, the DR Cost Effectiveness Evaluation Framework covers each of the issues raised in Questions 1 – 18 of the October 15 Ruling. As such, the DR Cost Effectiveness Evaluation Framework should provide ALJ Hecht with a fully developed record from which to proceed to a proposed decision. The Consensus Parties urge ALJ Hecht to adopt the DR Cost Effectiveness Evaluation Framework because it represents a

resolution of all of the DR Cost Effectiveness issues that is supported by an overwhelming majority of the active parties.

IV.

CONCLUSION

The Consensus Parties appreciate the opportunity to submit these joint comments. For the reasons set forth above, the Consensus Parties recommend the adoption of the DR Cost Effectiveness Evaluation Framework attached hereto as Attachment A.

Respectfully submitted,

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On behalf of California Large Energy Consumers Association, Comverge, Inc., Division Of Ratepayer Advocates, EnergyConnect, Inc., EnerNOC, Inc., Ice Energy, Inc., Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, and The Utility Reform Network

November 19, 2007

ATTACHMENT A

DR Cost Effectiveness Evaluation Framework

November 19, 2007
Demand Response Cost Effectiveness Evaluation Framework Proposal

A. Purpose

1. This evaluation framework is intended for ex ante evaluations of event-based and non-event-based demand response (DR) programs which provide long-term resource value, including both those programs which "count" for resource adequacy purposes and those programs which reduce the need for capacity by producing consistent and dependable reductions in system peak loads.

2. This evaluation framework will be used for determining the cost effectiveness of utility proposed DR programs (and a utility's overall DR portfolio) in the 2009-2011 and subsequent DR program cycles. It will also be used for evaluations associated with approval of individual DR programs. Finally, this evaluation framework will also be a key input to evaluating third-party aggregation proposals, subject to least cost-best fit criteria and other evaluation/selection criteria such as measures of vendor capability and adequacy of credit/collateral and insurance.

3. Utilities will provide accurate and up-to-date measurement of DR program benefits and costs in any program approval submissions. Thus, while the utilities agree that the guidance contained in this proposal is reasonable at present, they may update or modify methods or values in future cost effectiveness evaluations, as necessary to provide accurate results (e.g., should there be a need to evaluate DR programs which do not contribute to meeting the Commission's resource adequacy requirements). Any such modifications will be clearly described and justified.

4. Utilities recognize that there are a wide variety of DR programs with differing attributes (e.g., event and non-event based programs, pricing programs, permanent load shift programs, and so forth.). Therefore, flexibility in the application of this evaluation framework may be necessary to fully reflect the attributes of some DR programs. The valuation of DR programs may also be affected by CPUC and CAISO decisions on short-term and long-term resource adequacy and actual program design and operations. Parties will have the ability to test the appropriateness of such modifications and the particular input values chosen in the DR application process.

B. Analytical Approach

1. Cost effectiveness will be evaluated based on a perspective in which DR programs reduce the need for supply-side resources, and are assigned value based on their ability to meet resource adequacy requirements or their ability to reduce system peak loads, and provide the other benefits listed in Sections E and F. As noted previously, there will also be the opportunity to determine appropriate

criteria to evaluate DR programs, which do not contribute to meeting the Commission's resource adequacy requirements. DR program cost effectiveness evaluation will be based on expected load impacts as measured using the approved load impact protocols.

2. Utility DR programs will be evaluated using the four perspectives contained in the Standard Practice Manual: the Participant Perspective, the Ratepayer Impact Measure (Non-Participant Perspective), Total Resource Cost (TRC) Perspective and the Program Administrator Cost (PAC) Perspective. Utilities intend to use the TRC perspective as the primary test of cost effectiveness for both utility and third party aggregator programs, but will include the other perspectives so that DR program distributional impacts can be identified.[1] DRA prefers to use both the TRC and PAC perspectives together as the test of cost effectiveness.

3. For DR programs where participation is voluntary and it is difficult to reliably measure participating customers' costs, the incentive received by the participating customer will be treated as offsetting the costs incurred by the participating customer, including any loss in business earnings or personal inconvenience (value of service loss).[2] This will result in treating customer incentives in the same manner for both utility and third-party DR programs. For DR programs where participation is mandatory, it will be necessary to quantify the participating customer's costs, including the value of service loss. Further research on participating customers' costs under voluntary and mandatory DR programs would be helpful.

4. Cost effectiveness will be performed on a lifecycle basis, comparing the net present value of benefits and costs. The lifecycle will ordinarily cover either the expected economic life of the major investment under that DR program or the period in which benefits will occur due to the costs that will be incurred during the DR program cycle. For other DR programs, it may be appropriate to perform an evaluation over a three-year program cycle, comparing the going-forward costs of maintaining the program with the benefits that occur due to the continuation of the program. The discount rate will be each utility's cost of capital, consistent with how that utility evaluates supply-side resources.[3]

C. Avoided Generation Capacity Cost

1. The generation capacity costs avoided by a DR program will be based on the annual market price ($/kW-year) of the capacity of a new combustion turbine

[1] For third party aggregator programs where participant cost information is not available to the utility, only TRC results will be reported.

[2] Any party may perform a sensitivity analysis to assess the impact of this assumption, but performing such an analysis is not a required part of this evaluation framework.

[3] PG&E currently uses a weighted average after-tax cost of capital. SCE and SDG&E currently use a weighted average before-tax cost of capital. The choice of discount rate is subject to Commission guidance.

(CT), annualized using a real economic carrying charge rate that takes into account return, income taxes, and depreciation, with O&M, ad valorem and payroll taxes, insurance, and similar incremental costs added, and reduced to reflect expected "gross margins" earned by selling energy ("CT cost"). PG&E proposes to calculate "gross margins" based on an options pricing methodology, whereas SCE proposes to calculate "gross margins" based on the results of production cost modeling exercises. While each of these methodologies is intended to reflect the uncertainty of and correlation between wholesale market electricity prices and natural gas prices, and the relationship between those prices and when energy is produced by the CT, the calculation of the "gross margin" is not a matter of agreement and is subject to litigation in the relevant CPUC proceedings. The adjusted CT cost will be further adjusted to reflect the ability (if any) of DR programs to avoid procuring CPUC-required reserve margin capacity and to reduce line losses.

2. The capacity value of DR programs without usage or availability constraints will be equivalent to the full annualized and adjusted CT cost. For DR programs with constraints on their availability and/or how often they can be used, utilities will use an hourly stochastic method that take into consideration the capacity value of these DR programs during those the highest-valued periods in which the program is available and can be used. The value of generation capacity in those periods will be determined by allocating the annual market value of generation capacity among the hours of the year in proportion to the relative need for capacity in those hours (e.g., in proportion to hourly LOLE or LOLP).

3. In general, the annualized and adjusted CT cost will not be adjusted to account for periods in which a region's capacity resources are projected to be greater than the CPUC-adopted planning reserve margin standard. This approach recognizes the position of DR in the state's loading order and the importance of maintaining participation levels in existing DR programs. For periods in which the planning reserve margin is expected to be substantially exceeded, however, it will be appropriate to reconsider this position for any new or expanded DR programs.

4. The CT cost data will take into account service-area-specific CT construction and fixed environmental costs and inter-regional differences in wholesale electricity prices, where such values materially differ from state averages.

D. Avoided Energy Costs

1. For both event-based and non-event based DR programs, the value of avoided electricity generation may be based on wholesale energy prices averaged over the highest-price hours of an hourly price forecast. The utilities may also use a stochastic method that reflects the correlation between electricity prices and the times when DR program events are expected to occur, based on the times in which the program will be available, constraints on the use of the program, and the probability distribution of and correlations between the trigger conditions under which events can be called under that program. The calculation of avoided

energy costs will take into account avoided line losses. The method that is used to estimate avoided energy costs will be consistent with the method that is used to determine the CT's "gross margins," as described in Section C.[4] The incremental cost of any additional generation resulting from a load-shifting program will be taken into consideration based on the expected electricity prices during the time that the additional electricity is used.

2. After the CAISO establishes a system of locational marginal prices (LMP) as part of MRTU, and after sufficient LMP price data have been accumulated, it will be possible to incorporate the value of DR programs in avoiding transmission congestion costs by calculating avoided energy costs on a locational basis. (This will also incorporate the local value of reducing transmission losses.) Utilities plan to incorporate any such locational value beginning with the 2012-2014 DR program cycle, presuming adequate information exists by that time.

E. Avoided Transmission and Distribution Costs

1. Utilities may defer and/or reduce transmission and/or distribution (T&D) capacity investments (and thus avoid T&D costs) in local areas experiencing load growth as a result of DR programs, although the conditions under which DR programs actually do avoid such investment and the amount of investment avoided is often uncertain and speculative.

2. As an interim method, utilities will establish a default avoided T&D cost (or area-specific default avoided T&D costs) which will be applied to DR programs which meet "right place" and "right certainty" criteria. As more experience with the ability of DR programs to avoid transmission and distribution investments is developed (particularly after roll-out of advanced metering technologies), it is anticipated that the utilities will be able to refine this approach.

3. The default avoided T&D costs will be calculated from marginal transmission and distribution costs by using the component of these marginal costs associated with non-ISO transmission and distribution substation equipment, which is principally related to transformer capacity.[5]

4. The criteria "right place" and "right certainty" are intended to limit the application of the avoided T&D costs to programs that (1) are located in areas where load growth would result in a need for additional delivery infrastructure but for demand-side potential; (2) are located in areas where the specific DR program is

[4] If a call option model is used to estimate avoided energy costs, any incentive participants are paid under that DR program for reductions in energy consumption would be used in place of variable generation costs.

[5] The marginal T&D costs calculated in a general rate case include local transmission and distribution lines, towers and power poles, and underground conduit and structures which are added as service is extended into new geographic areas. These costs are generally not related to the peak demands in a specific area, and thus are not avoided by a DR program.

capable of addressing local delivery capacity needs;[6] (3) have sufficient certainty of providing long-term reduction that the risk of incurring after-the-fact retrofit/replacement costs is modest,[7] and (4) can be relied upon for local T&D equipment loading relief. Utilities will review specific DR programs based on these criteria, and either apply the default avoided T&D costs or apply the results of a specific investment study to the cost effectiveness evaluation of any qualifying DR program load reduction.

5. Utilities may perform a case-specific study of avoided T&D costs in place of the default values.

F. Other Benefits

1. Both the new CT used to establish generation capacity value and DR programs are expected to provide ancillary service value. To the extent a non-event-based DR program reduces peak demand and energy requirements, it may reduce the need for procuring ancillary services.

2. At present, utilities will not make any adjustment (upward or downward) to account for any difference in the ability of a CT and a DR program to contribute ancillary service value. Once it becomes clearer how the CAISO will incorporate the value of DR programs in supplying ancillary services (e.g., in response to a recent FERC ANOPR), utilities will consider the relative ability of a new CT and a DR program to earn revenues in CAISO ancillary service markets as part of the cost effectiveness framework.[8] Further research in this area would be helpful.

3. Utilities may use a generation capacity value in excess of the annualized and adjusted CT value for periods in which the regional planning reserve margin is expected to fall below the CPUC-adopted planning reserve margin standard, in order to elicit additional supplies of DR program capacity prior to when it would be feasible to permit and construct a supply-side resource. The ratio of relative LOLE values at the recorded reserve margin level and at the planning reserve margin standard may be an appropriate adjustment.

4. The cost of meeting environmental emission standards for criteria pollutants (NOx, SOx, PM-10 and VOCs) and other environmental regulations should be included in avoided generation capacity and energy costs, but will be separately calculated (if material) when this is not the case. Because the mechanism for implementing AB 32 is still being developed, the value that a DR program

[6] For instance, an air conditioning cycling program is unlikely to avoid distribution investments in coastal areas with low air conditioning penetration where distribution circuits typically peak as a result of evening lighting loads.

[7] For programs which do not involve direct load control technology, utilities may discount the long-term load reduction potential until there has been sufficient experience to reliably assess load impacts.

[8] FERC Docket Nos. RM07-19 and AD07-7.

provides in changing GHG emissions included in cost effectiveness evaluations should be consistent with Commission direction in D.05-04-024 and D.07-09-024, or subsequent related decisions by the Commission.

5. Utilities are not expected to include the various other benefits which are sometimes attributed to DR programs, such as price elasticity effects, market performance benefits, reliability impacts, and "hedge" or "insurance" value. Such benefits are often captured in the CT proxy value. Further research on these issues would be needed to include these values in cost effectiveness evaluations.

G. Sources of Input Data

In evaluating the cost effectiveness of a DR resource, each utility will use its most recent, up-to date estimates of the future annual market value of generation capacity, future electricity prices, as well as that utility's marginal T&D cost(s) and line loss rates. In some cases, those values may be obtained from published/litigated sources, to the extent that such data are available from those sources at the required level of detail and/or aggregation, and are practical, reasonably accurate and up-to-date. A utility's general rate case marginal cost studies may provide CT cost and gross margin data and avoided T&D cost data. Either general rate case marginal cost studies or modeling studies which underlie that utility's long-term procurement plans may provide avoided energy cost data.

H. Program Costs

1. The cost of incentives paid to participating customers should be determined consistent with the forecasted usage of the DR program that is used to calculate avoided generation capacity and energy benefits. This may differ from the budgeted cost of the DR program, which may be based on the maximum potential use of the DR program.

2. DR program costs should include all costs which are incremental to the program. Overall DR costs which are not incremental to an individual program, such as marketing and administrative overhead costs, should only be included in the evaluation of a utility's overall portfolio of DR programs.

3. The amounts that third party aggregators are paid for administering DR programs under contracts resulting from competitive solicitations are expected to recover some incremental common costs, because third party aggregators must recover such costs across their entire portfolio of projects in order to earn an appropriate return. As a result, the amounts that third party aggregation firms are paid for such programs may not be completely comparable to the costs of utility-administered DR programs. Parties should understand and consider these differences when comparing utility and third-party programs.

ATTACHMENT B

Table Pointing to the Sections of the DR Cost Effectiveness Evaluation Framework that Address Questions 1 – 18 of the October 15 Ruling

Issue #	Issue Description	DR Cost Effectiveness Evaluation Framework References
1	To what extent does Demand Response avoid generation capacity: up to the level of the planning reserve margin, or beyond that level?	A.1, B.1, C.3
2	What Demand Response programs should be treated as avoiding generation capacity costs: those that qualify for RA status, or all Demand Response programs?	A.1, B.1
3	Regardless of method of calculation, should an adjustment be made to fixed avoided costs due to margins on energy sales from any marginal resources?	C.1
4	Do the cost-effectiveness protocols apply to the Demand Response portfolios in addition to specific demand response programs, and if so, how?	A.2, H.2
5	To what extent and how should geographic location be accounted for in the cost effectiveness methodology? Please explain the factual bases and assumptions that support your response.	C.4, D.2, E.1, E.4
6	What is the appropriate definition of ancillary services, and how should the ancillary service value of a demand response resource be treated in evaluating the cost-effectiveness of that resource?	F.1, F.2
7	What environmental factors should be included in the cost effectiveness analysis, and how should they be valued and analyzed?	A.4, C.4, F.4
8	What reliability benefits should be included in the cost effectiveness analysis, and how should they be valued or analyzed?	F.5
9	Should a market performance benefit be included in the cost effectiveness methodology, and if so, how should it be valued and analyzed?	F.5
10	Should Modularity and Flexibility Benefits be included in the cost effectiveness methodology, and if so, how should they be valued or analyzed?	F.3
11	Is the value of improved price signals resulting from demand response already incorporated in avoided capacity costs and avoided energy benefits? If not then how, if at all, should these benefits be valued and included in the analysis?	F.5
12	Is the value of any benefits of load shape improvement from demand response already incorporated in avoided capacity costs and avoided energy benefits? If not, how if at all should these benefits be valued and included in the analysis?	F.5
13	Are the protocols being developed appropriate for determining the cost effectiveness of price-based (nonevent) programs? Which aspects of the protocols should be different for the two	A.1, A.4, D.1

	types of programs? What additional information must be collected in order to apply the protocols to pricing programs (e.g., more understanding of customer costs)?	
14	Which characteristics of Demand Response programs can be accounted for with the Joint Utilities' proposed loss of load expectation (LOLE) model (e.g. availability)? Which characteristics of Demand Response programs cannot be accounted for with the Joint Utilities' proposed LOLE model (e.g., notification time, event duration, and number of consecutive days an event can be called)? What methodologies should be used to value these characteristics so as to set reasonable incentive levels for different program options?	C.2
15	How will the load impact outputs feed into the cost effectiveness analysis?	B.1
16	What should the IOUs report when they file an application or advice letter related to a demand response program?	A.2, B.2
17	Is more research needed on the following topics and, if so, why? Market effects of demand response; Avoided transmission and distribution costs; Customer costs; Is a Combustion Turbine really the appropriate proxy unit for demand response?	F.5, E.2, B.3, C.1
18	Is further research needed on additional areas, and if so, what areas and why?	F.2, F.5

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true copy **JOINT COMMMENTS OF CALIFORNIA LARGE ENERGY CONSUMERS ASSOCIATION, COMVERGE, INC., DIVISION OF RATEPAYER ADVOCATES, ENERGYCONNECT, INC., ENERNOC, INC., ICE ENERGY, INC., PACIFIC GAS AND ELECTRIC COMPANY (U 39-M), SAN DIEGO GAS & ELECTRIC COMPANY (U 902-E), SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) AND THE UTILITY REFORM NETWORK RECOMMENDING A DEMAND RESPONSE COST EFFECTIVENESS EVALUATION FRAMEWORK** on all parties identified on the attached service list(s). Service was effected by one or more means indicated below:

Transmitting the copies via e-mail to all parties who have provided an e-mail address. First class mail will be used if electronic service cannot be effectuated.

Executed this **19th day of November, 2007**, at Rosemead, California.

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