Regulatory Assistance Project Electric Resource Long-range Planning Survey¹ Compiled by CM LB

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Name of Agency: California Public Utilities Commission (CPUC)

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Policies

- 1. Is any form of long-range electrical resource and/or investment planning required? Yes No
- 2. If yes, what planning processes are going on? R.04-04-003, the Order Instituting Rulemaking to promote Policy and Program Coordination and Integration in Electric Utility Resource Planning, is an umbrella proceeding that coordinates and incorporates Commission efforts in the Community Choice Aggregation, Demand Response, Distributed Generation, Energy Efficiency, Qualified Facilities, Renewable Portfolio Standards, Transmission Assessment and Planning proceedings and Resource Adequacy requirements. The Long-Term Procurement Plan (LTPP) is one of the critical issues addressed in this proceeding.

Is a similar process used for transmission and distribution planning? Or is T/D incorporated into the LTPP process?

Rulemaking 04-01-026 addresses streamlining the transmission planning process and integrating it with the LTPP. This proceeding is still open.

3. Please describe the LTPP process.

This is a very new process, beginning in 2004 and involving California's three major electric investor-owned utilities (IOUs). The three IOUs, PG&E, SCE, and SDG&E, were asked to submit LTPPs on July 9, 2004 for review and approval. The IOUs had to meet the following requirements, among others:

-- Resource adequacy -- IOUs must have 15-17% reserve margins by July 2006. -- Renewable Portfolio Standard (RPS) -- Renewable energy must be 20% of each IOU's portfolio by 2010, and must increase by at least 1% each year toward that goal.

¹ All responses written from notes compiled and edited by Liz Baldwin, RAP researcher. Corrections to the draft document, suggested by the contact person(s), have been incorporated.

-- Energy Efficiency (EE)-- Each IOU must meet specific MW and GWh/year goals, mandated by the CPUC and based on requirements in the state's Energy Action Plan, with annual increases through 2013.

-- Demand Response (DR) -- Each IOU must meet 3% of its annual system peak demand for 2005 through DR programs, increasing 1% annually through 2007; these goals are translated into quantifiable MW savings for each IOU (see below).

The CPUC's review of the plans is guided by the prior Commission decisions and the Energy Action Plan (EAP) adopted in 2003². In addition, D.04-01-050 (the order establishing procurement guidelines) provided guidance on the parameters of the plans, e.g., load scenarios, portfolio choice issues, cost issues, etc. Other rulings and the scoping memo (http://www.cpuc.ca.gov/published/rulings/37116.htm) provided further direction and guidance on the specifics.

Every two years, each utility will file a 10-year LTPP with the CPUC. In response, intervenors representing consumer groups, municipalities, energy producers, environmental groups, and others may make formal comments on various portions of the plan through CPUC's litigation process. The CPUC analyzes each plan and the parties' positions and may approve the plans, in whole or in part. IOUs may be required to submit compliance filings to resolve any deficiencies in the plans. Once approved, the plans become the guidelines for IOU resource procurement. Each utility files a quarterly report which is used by the CPUC for monitoring purposes.

4. Is it statewide or utility-specific planning? What types of entities are required to participate?

The process is utility-specific, involving the three main electric IOUs. The CPUC has set statewide goals (e.g., 20% renewable energy by 2010) that have been defined and quantified for each utility. The utilities then formulate individual plans, which are required to meet those goals.

5. Is there any relationship between this process and other decisions, e.g. construction permits, likelihood of inclusion or pre-approval of rate treatment for the anticipated resource investments?
Inclusion in the LTPP does not guarantee pro approval for rate treatment. The IOUs

Inclusion in the LTPP does not guarantee pre-approval for rate treatment. The IOUs are required to file separate applications to get authorization to sign contracts with a

² The Energy Action Plan established a "loading order" to guide new resource procurement. The loading order prioritizes among energy sources, directing utilities to consider cost-effective energy efficiency, demand response, distributed generation, and renewable energy to meet new demand before considering energy from fossil fuel plants. Here is a link to the Energy Action Plan: http://www.cpuc.ca.gov/word_pdf/REPORT/28715.pdf

duration of five years or longer. A similar procedure is used for turn-key or IOU-built projects. Requirements for all-source solicitations are listed in D.04-12-048.

6. This form of planning has been required since what date?

The EAP was finalized in 2003, and the current LTPP process was begun in 2004. The utilities' first LTPPs were approved in December 2004.

7. How is this process enforced, if at all? Are there any consequences for noncompliance?

If the CPUC finds all or a portion of a plan to be non-compliant, they may ask the utility to modify and file the updated plan via compliance filing. The implementation process is monitored by the utilities' quarterly reports and other applications and reporting requirements, and the process is enforced through its impact on the utilities' cost recovery. Cost recovery may not be allowed for expenses that are not in compliance with the plans.

8. Is anything similar required for natural gas-related planning? \boxtimes Yes \square No

If yes, what is that process called? The electric IOUs file Gas Supply Plans to address their plans to meet their natural gas needs for Department of Water Resources-related contracts twice a year. The DWR related contracts are a subset of the total electric portfolio.

Required Elements

9. Back to the electric resource process. Which of the following resources must be explicitly evaluated/included:

Generation A Transmission A Distribution A Energy efficiency A Load Management A Other demand side measures A Specific generation (e.g. renewable, distributed) A Others Demand response resources must be included. Departing load due to

Community Choice Aggregation must be evaluated. Natural gas supply plans are filed on a semi-annual basis, see question 8, above.

What tests must be included/utilized?

There is no specific "test" in the long-term procurement planning, but the chosen resource mix must be the "Least cost-best fit³" (LCBF) mix of resources.

10. Describe the analysis required by the regulatory body (what is compared to what to make decision? How are resources compared to each other? Cost with one set of resources vs another, economic, environmental?)

Currently, the three IOUs are still under previous contracts for energy. As these expire, and as new procurement is needed, the EAP loading order must be followed. When EE, DR, and DG resources have been exhausted, then the utilities are required to issue Requests for Offers (RFOs) for supply-side resources. The RFOs are to be issued in an open, competitive process. These resources are compared using the least-cost/best-fit test. Before issuing an RFO, the burden of proof is on the utility to show that the priority options following the EAP loading order have been exhausted, and use of fossil fuels over renewable resources must be justified.

11. Does the process investigate how the employment of one strategy vs. another may increase the consumers' exposure to risk (e.g. natural gas prices)? If so, how?

The IOUs must provide revenue requirement estimates for each load scenario. The CPUC also requires monthly risk reports addressing consumers' exposure to market risk.

- 12. Is a comparison of supply or T&D infrastructure and demand side options/resources required? Xes No Supply-side and demand-side resources are compared. T&D planning is still evolving.
- 13. The plan's objectives, from the regulatory perspective:

The plans are designed to meet the energy needs of a growing California economy with adequate and reliable resources while implementing the best possible measures to ensure low rates and reduce environmental impact.

14. The plan's objectives, from the utility perspective:

The plans seek authorization to procure the necessary resources and demonstrate compliance with the Commission decisions.

15. Are alternative scenarios analyzed as part of the plan? Xes No High, low, and medium load forecasts are prepared by the IOUs.

³ The least-cost best-fit methodology is employed to evaluate competing bids in competitive solicitations. This concept encompasses both qualitative and quantitative attributes of each bid. The IOUs develop their own methodologies for demonstrating least-cost best-fit.

Are externalities considered? If so, which ones and how are they considered?

Climate change is considered and dealt with through the use of a Greenhouse Gas (GHG) Adder, which requires utilities to assume an additional \$8 per ton of carbon dioxide added to the bid price of all fossil fuels. The \$8 is never actually charged, but is factored into the utility's decision-making process. The \$8 per ton is expected to increase over time and is designed to reflect the cost of climate change to California, as well as decrease the state's investment in a fuel source that is likely to face increasingly stringent environmental regulation in the future.

16. What is the planning horizon? 10 years

Length of Energy and Demand forecasts 10 years

Length of Short-term Action Plan Short-term procurement plans (STPPs) were approved in 2003 and 2004 in order to authorize procurement while restructuring was suspended and to allow utilities to provide adequate supply while the long-term planning process was being developed.

17. How often do utilities have to file plans? Update plans? What actually happens?

LTPPs were filed by all three utilities in December 2004. Plans will be updated and reviewed every two years.

As of June 2005, compliance filings have been filed in a timely manner. Applications for additional projects had not yet been received by the CPUC, but were expected to be submitted at a later point in the procurement cycle.

18. What monitoring or other processes are used to determine consistency of investments with plans? Are there consequences for non-compliance?

All of the utilities' procurement transactions must appear in their quarterly reports. If the CPUC determines that a utility's investments were non-compliant, costs for those investments will not be reimbursed.

19. Are environmental issues considered in the planning process? Xes No If yes, please describe.

Climate change and air pollution are considered, with several mechanisms employed to discourage their use, such as the EAP loading order, use of the GHG adder, RE goals, and goals and funding for EE programs. Other adders are being considered to address environmental concerns, but have not been adopted by the CPUC.

20. Is reduction or elimination of carbon emissions an issue? If so, how is it dealt with?

Reduction of carbon emissions is dealt with directly through use of the GHG adder, and indirectly through other means (see above). The CPUC also requires the IOUs to state their positions on the threat of climate change and address the threat should be minimized, as well as how their LTPP addresses the threat.

Agency Process

21. Is there a formal acceptance and/or acknowledgement process used for the resource filing? ∑ Yes □ No

22. Does the agency hold public hearings on draft/final utility plans? \Box Yes \Box No If not, describe what does happen.

If yes, what is the duration of the public hearing process? The duration of the process is determined by the size and scope of the issue and the number of intervenors. During the recent LTPP approval process, there were 4 weeks of evidentiary hearings.

23. Other ways the public participates and comments on plans are: (Prompts if needed: email or mailing lists, interactive web sites)

The public can attend Commission meetings in order to express concerns and opinions to the Commission. They can also email/send letters to the CPUC.

24. What action can the Commission take on the plan(s)?

Review it Accept it Accept it Approve it Approve it Accept Ac

25. Have resource acquisition decisions changed as a result of the planning process?

[If "Yes", get recent example (docket number, etc.)]

In D. 4-12-048 (the decision adopting the IOUs' LTPPs), a 500 kV transmission line proposed by San Diego Gas & Electric (SDG&E) in their LTPP was denied by the CPUC; SDG&E was instructed to analyze alternative that could be used to meet its anticipated local resource deficiency while also meeting its RPS goals.

26. Are competitive processes used to acquire new resources? \square Yes \square No

27. If yes, do you require regulatory review and approval of the competitive solicitations used? Is regulatory review and approval of resulting contracts required? Contracts of

5 years or more must be approved separately by CPUC. Review and approval of smaller projects is done through quarterly reports.

- 28. Do utilities file an energy efficiency or DSM plan? Yes No If so, is it separate or integrated with other plans? It wasn't integrated during the last LTPP process. The idea is to integrate it in the future, but not sure about timeline for this.
- 29. Is competitive bidding used to acquire EE resources? Yes No A minimum of 20% of the total EE budget must be put out to competitive bid.
- 30. Does the regulatory agency have open dockets, or is it considering opening a docket investigating any long-range electrical investments?
- 31. Citation and description:

There haven't been any open dockets directly related to long-range electrical investments since the CPUC adopted the LTPPs, but this is expected to change later in the procurement cycle.

- 32. Are filed plans available on-line? Yes Summaries of each IOU's plan are available on the CPUC website at: http://www.cpuc.ca.gov/PUBLISHED/Graphics/43225.PDF
- 33. Citation and description of State policies (legislation, rules/regs, PUC orders) governing this planning process:

CA Energy Action Plan (EAP) http://www.cpuc.ca.gov/PUBLISHED/REPORT/28715.htm

D.04-01-050 adopting regulatory framework for LTPPs http://www.cpuc.ca.gov/Published/Final_decision/33625.htm

Assembly Bill 57 authorizing the utilities to resume task of electricity procurement http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_0051-0100/ab_57_bill_20020924_chaptered.pdf,

R.04-04-003, the Order Instituting Rulemaking to Promote Policy and Program Coordination and Integration in Electric Utility Resource Planning provides the umbrella process for many of the subsequent planning-related proceedings. http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/35505.htm

34. Do you anticipate any changes to this process in the near future? Xes No If yes, please describe.

The process itself is not expected to change, but aspects of it will evolve as certain issues are addressed. A docket on the issue of confidentiality of the plans is expected to

be opened soon. R.04-04-025 will address the need for accurate methods of comparing savings from DG, EE, and other sources. Rulemaking 04-01-026 is addressing streamlining the transmission planning process and integrating it with the LTPP. This proceeding is still open. Incentives for efficiency will be discussed in docket R.01-08-028. Other unresolved issues include the adequacy of the renewable energy supply; accurate methods for determining levels of procurement that can be expected from demand response; refinement of the GHG adder; the concept of carbon content requirement; modification to the methodology for determining transmission costs for renewables when using LCBF test; better integration of generation and transmission planning. The possible addition of pollution adders under Avoided Cost Rulemaking docket R.04-04-025.

35. Does your state do performance–based regulation? ⊠ Yes □ No If so, please describe briefly.

Yes – for customer service and reliability. Incentives are being considered for energy efficiency and demand response.

36. If your state uses PBR, is successful compliance with an approved resource plan one of the areas subject to incentives or penalties? ☐ Yes ⊠ No

No; receipt of PBR incentives is a separate process. The CPUC didn't accept PBR as part of the LTPP process; the closest it came was to establish a savings sharing mechanism for IOU-owned resources by putting a cap on the cost of capital, and requiring any savings to be shared 50-50 with ratepayers.

37. Are there any regulatory incentives specifically for energy efficiency or renewables?
 Yes No (Examples: lost revenue recovery, shared savings, bonus rate of return) If so, please describe briefly.

In the case of efficiency, utilities are authorized to collect and spend funds on energy efficiency. In the past, utilities earned incentives based on meeting performance targets and/or milestones. The incentives were awarded through the Commission's Annual Earnings Assessment Proceedings. For future programs, the incentives framework incentives has not yet been established; however, it will be based on program evaluation results. In the case of renewables, utilities are authorized to collect funds to subsidize distributed generation on the customer side of the meter. For small projects (less than 30kW), the funds are administered through the California Energy Commission's Renewable Energy Incentive Program. For larger projects (>30kW) on the customer side of the meter, incentive funds are administered through utility-administered Self-Generation Incentive Programs. In addition to customer side of the meter incentives for new installations of renewable energy, the utilities are required to procure renewable energy to meet their renewable portfolio standard (RPS) requirements. Incentives for utility procurement have not yet been established, but they are under consideration. The utilities are currently subject to a \$50/MWh penalty if they fail to procure sufficient renewable energy to meet their RPS targets.

38. Do any tariffs include a fuel/purchased power clause? ⊠ Yes □ No If so, how does it work?

Energy Resource Recovery Accounts (ERRAs) are used to cover procurement-related costs. The IOUs file applications with the CPUC to determine their revenue requirement for this component, and the same proceeding looks at reasonableness of past accounts.

State Energy Plan

- 39. Is there a State Energy Plan?
- 40. Is it connected to the planning described above?
- 41. If yes, who is responsible for the Plan?

The creation of the EAP was a joint effort between the CPUC, the California Energy Commission (CEC), and the California Consumer Power and Finance Authority (CPA). However, since its inception, only the CEC and the CPUC have been involved in long-term planning.

Yes

XYes

No

No

42. What is included in the Plan, apropos of long-range electrical planning?

The EAP includes EE, RE and other goals that must be met within a certain time frame and contains the loading order used to guide new energy procurement.