Draft Meeting Summary

First Technical Workshop Concerning Draft Initial Study for Southern California Edison Divestiture Application

Pasadena Center, Pasadena, California, June 12, 1997

The following is a summary of a technical workshop on the California Public Utilities Commission's Draft Initial Study conducted for the application by Southern California Edison Company to divest 12 of its fossil-fueled power plants. The summary is not an official record of this informal event, which was not subject to the CPUC's recording rules; it is intended to give parties information about the assumptions and methodologies used in the Draft Initial Study. Wherever possible, speakers are identified by name. However, many speakers did not identify themselves, or they submitted anonymous questions in writing. Many of the answers were truncated and paraphrased, and clarifications were added in parenthesis.

The meeting began at 10:10 am with introductions of all parties in attendance. Kay Wilson of Public Affairs Management (PAM) explained the agenda, as well as the procedure for asking questions and submitting comments. She noted that each speaker would make a short presentation, after which audience members could ask clarifying questions about the material presented. She requested that audience members submit detailed questions in writing, to be answered in the afternoon session.

Bruce Kaneshiro of the California Public Utilities Commission (CPUC) provided a brief explanation of the electric utility restructuring effort, stating that the Commission's goal is to begin competitive retail sales of electric service starting on January 1, 1998. One of the barriers to a competitive market is the possible exercise of market power in the generating sector. As a way to remove this barrier, the Commission proposed that Pacific Gas & Electric (PG&E) and Southern California Edison voluntarily "divest" or sell a portion of their in-state fossil-fueled power generation capacity. PG&E then applied to divest roughly 50 percent of its gas-fired capacity, and Edison applied to divest nearly 100 percent of its in-state fossil-fueled capacity. (Edison will continue to own a small fossil-fueled plant on Catalina Island). Kaneshiro emphasized that restructuring will occur with or without divestiture.

Kaneshiro explained that the Draft Initial Studies conducted for the two divestiture applications are "decision point documents." The Commission will use the studies to determine whether to conduct a full Environmental Impact Report (EIR), as defined in the California Environmental Quality Act (CEQA), or issue a Negative Declaration or a mitigated Negative Declaration. He stated that the ultimate goal of Commission staff, its consultant and subcontractors is to prepare the "appropriate document."

Anna Shimko of Cassidy Cheatham Shimko & Dawson then laid out the responsibilities of the CPUC in complying with CEQA. She explained that the CPUC is the "lead agency" that is being asked to "approve" the divestiture applications. Because the approval would constitute an "entitlement from a public agency," divestiture is a "project" under CEQA requiring some level of CEQA review. Shimko said that because the new owners may operate the plants differently than Edison, some level of environmental review is required.

Shimko also described the differences between direct and indirect environmental impacts. For example, a direct impact might be an increase in air emissions resulting from increasing power generation at a plant; an indirect impact might be environmental degradation resulting from the loss of funding for a monitoring program.

Shimko noted that the basis for CEQA review is the difference between how Edison would operate the plant in the restructured marketplace compared to how the new owners might operate them. Essentially, CEQA analysis is to be based on facts and "reasonably foreseeable events." Among other things, the purposes of the Draft Initial Study are: to provide information for determining whether to prepare an EIR, a Negative Declaration or a Mitigated Negative Declaration; to allow Edison, the CPUC, other agencies a

nd the public to comment on the analysis and assumptions of the study and to suggest mitigation measures that would enable the project to qualify for a Negative Declaration; to focus the EIR, if required, on effects that may be significant; and to document the factual basis to support a Negative Declaration, if appropriate. The CPUC will use the final Initial Study as a "decision point" document to conclude whether to proceed with an EIR, a Negative Declaration or a Mitigated Negative Declaration.

Q: An audience member then asked, How will operation of plants owned by San Diego Gas & Electric (SDG&E) change after restructuring?

A: Martha Sullivan of the CPUC explained that:

- 1) SDG&E has not applied for authority to sell its power plants, therefore, they are not part of the current CEQA study.
- 2) The CPUC is conducting a CEQA review of the proposed merger of SDG&E and Southern California Gas Company (SoCal Gas), and is considering the potential impacts of this merger on the operation of SDG&E's power plants.
- 3) If a case were to be made that operation of SDG&E plants will have an effect on the operation of the Edison and/or PG&E plants targeted for divestiture, the CEQA review for divestiture would need to consider that fact.

John Hathaway of Environmental Science Associates (ESA), Bob Weatherwax and Bob Logan of Sierra Energy & Risk Assessment Incorporated (SERA), and Richard McCann of M.Cubed then described the process of framing and conducting the Draft Initial Studies. The process began with devising a detailed description of the "project" under review, followed by setting baseline conditions, establishing an Agency Outreach Program, and conducting economic, financial and operational analyses. Hathaway reiterated during the project description that the objective of divestiture is to enhance competition in the restructured marketplace. This is intended to decrease electricity costs for consumers.

Logan introduced the economic, financial and operational aspects of the Draft Initial Study. He explained that the basic premises of the study are that restructuring will go forward, and that divestiture will benefit ratepayers. Because the plants proposed for divestiture currently run at relatively low levels, he said, they have potential for significant increases in generation, and resulting environmental impacts.

Logan then addressed the primary environmental issue: Will the power plants operate differently under independent ownership than under utility ownership? Because the utilities will operate the plants as part of a portfolio that includes other forms of generation, including hydro and nuclear, while the independent owners will rely only on the plants they purchase to generate profits, the Draft Initial Study concludes that the divested plants will have greater generation under independent ownership.

McCann cautioned that the various parties involved with the application speak four different languages: CEQA (by environmental specialists), environmental regulation (e.g., by the Air Quality Management Districts and Water Quality Review Boards), rate regulation (by the CPUC), and economese (by economists). Miscommunication can occur, he said, because terms used in the study process often mean different things in these four different languages.

The extent of environmental impact hinges on the incentives of the new owners to operate the plants at maximum capacity, McCann said. Many of the plants currently run at low levels, but the new owners could increase operations substantially, resulting in greater environmental impact.

The policy proposal in question is not just divestiture, he added; the underlying policy question is, "How will reduction of market power affect the environment?" If it did not divest the 12 plants, Edison would be precluded from participating in the direct-access market until 2002 (the transition period), and would sell power from the plants only through the Power Exchange (PX).

The new owners, and the utilities themselves, will be taking different kinds of risks in this new market, McCann said, but the risk is higher for one "stand-alone plant" than for a plant that is part of a large portfolio. The new owners also would likely have different fuel purchasing practices than Edison, he added.

McCann then addressed the potential for plant retirement/repowering by the new owners. He stated that a basic assumption of the study is that if its costs were not recovered through Power Exchange sales or Independent System Operator contracts by 2002, Edison would retire those plants not classified as must-run . Another assumption was that the new owners would likely repower the plants as soon as practical to enter the new marketplace.

Q: An audience member asked, "As an economist, did you assign any probability to raised heat rates?" A: (McCann) Many of the basic assumptions in the studies, including heat rates, were drawn directly from utility filings.

Bob Weatherwax gave a basic description of the preliminary production cost modeling conducted for the studies by SERA, which utilized their copyrighted SERAM and SERASYM computer models. SERA assumed that both the Los Angeles Department of Water & Power (LADWP) and the Sacramento Municipal Utility District (SMUD) would participate fully in the restructured marketplace. The analysis included both Edison and PG&E, he said, because Sierra had to "model the entire state in order to get an accurate picture."

Modeling limitations in the then-current model structure, and scoping limitations inherent in an Initial Study, very much limited the use of modeling, Weatherwax said. Because the study team did not then have the capability to simulate the bidding process, it did not attempt to craft a model that would compare the environmental impacts of a restructured California electric industry with or without divestiture. The team did perform modeling to asses the impacts of Edison's proposed transmission upgrades, a related project. The simulation results for 1998 for the Transmission Upgrades case were then reported in Table 3.1 as the Expected Capacity Factors without Divestiture, and in Tables 4.5.4, et seq, for the unit and plant level pollutant emissions. Results from this simulation case, along with selected input data, were also employed in the repowering analysis presented in Attachment C, "Data mining" from the SERASYM dataset provided the basis for determining the capacity factors and emission levels found in the "Environmentally Conservative" scenarios reported in Table 3.1, and in the individual plant and unit results found in Table 4.5.4, et seq.

Q: A representative of Edison asked whether the model showed an increase in out-of-state generation? A: (Weatherwax) Overall, in the remainder of the Western Systems Coordinating Council, the model showed that total amount of generation would go down.

Q: Another audience member asked for a definition of "must-run" or "local reliability" plants.

A: (Weatherwax and Hathaway) Such a designation means that the plants must remain on-line during certain circumstances, usually during peak load period, in order to maintain reliability of the local electric system.

Q: Another audience member asked whether the duration of must-run generation was taken as an input, or your own calculation?

A: (Weatherwax) The data was taken as an input from lists provided by the Applicant.

Paul Miller of ESA then went over Sections 3 and 5 of the Initial Study, showing the eight factors that could lead to possible significant impacts (see study). Miller identified 11 areas that could potentially have significant environmental impacts as a result of divestiture:

- 1. Land Use and Planning (Unless mitigation incorporated)*
- 2. Geological Problems (Unless mitigation incorporated)*

- 3. Water
- 4. Air Quality
- 5. Biological Resources (Unless mitigation incorporated)*
- 6. Hazards (Unless mitigation incorporated)*
- 7. Noise (Unless mitigation incorporated)*
- 8. Public Service
- 9. Utilities and Service Systems
- 10. Aesthetics: and
- 11. Cultural Resources
- * The phrase "Unless mitigation incorporated" was assigned to areas where the analysts felt feasible mitigation measures clearly are available to reduce impacts to less than significant levels, but these mitigation measures have not been incorporated into the project. There may be feasible mitigation in the other areas as well, and a purpose of releasing the Draft Initial Study is to begin the process of identifying suitable mitigation measures.

The "factors" of divestiture that could lead to potentially significant impacts include: amounts of energy generated; amount and timing of construction, refurbishment repowering or retirement of the plants; maintenance practices at the divested plants; pollution control technology installed by the new owners; employment levels, and related indirect factors; extent and character of land use; approach to plant decommissioning, repowering and environmental clean-up; and, permit transfers for divested plants.

For example, increased generation would potentially have an impact on: water resources, because of the increased use of groundwater for cooling; on air quality, because of the increased emissions of air pollutants; on noise, because generators are run longer at higher power levels; and on utilities and service systems, because of the increased use of local and regional water supplies.

Q: An audience member asked whether the study assumes the Applicants are consistently and thoroughly in full compliance with all permits, and all applicable rules and regulations?
A: (Weatherwax) Yes.

Q: Another person asked what assumptions were made about the ability of either Edison or a prospective buyer to market more power than is currently being produced.

A: (Weatherwax) The amount of generation produced at a given plant would depend on the owner's marketing ability and its ability to squeeze efficiencies out of the plant. The effect could be a "shifting" of generation, possibly resulting in increased generation in a given region.

Kay Wilson of PAM then closed the opening presentation session, and opened the floor to general questions.

Q: (Jeff Koch, Edison representative) Are you aware that the Ventura County AQMD has rescinded a letter about possible impacts in its region, saying the concerns expressed were based on inaccurate conclusions? And are you aware that all four AQMDs in Edison's service territory support a Negative Declaration on the divestiture application?

A: (Miller) We have heard that information, but have not seen confirmation in writing.

Anna Shimko added: Just because AQMDs support a Negative Declaration does not mean the CPUC does not have to conduct a thorough study. As lead agency, it has to draw its own conclusions.

Q: Can the lead agency in a CEQA review override other agencies? A: (Shimko) That rarely occurs; it's dependent upon data.

Q: (Cynthia Burch, Edison representative) Do current regulations prohibit increasing generation in nonattainment zones?

A: (Shimko) Not necessarily. It would depend on district-wide total emissions. (For example, owners can "offset" increased emissions through the South Coast Air Quality Management District's RECLAIM program.)

Q: Have you considered the San Diego Air District in your analysis?

A: (Weatherwax) In the limited modeling we did, we determined that generation would increase somewhat in San Diego, and to a lesser degree in San Francisco, if Edison installs its proposed transmission upgrades, which would reduce the number of required "must-run" plants by four.

Q: Can you clarify what you mean by construction as a result of divestiture?

A: (Miller) Edison or the new owner may build fences or access roads that would allow subdivision of an existing single parcel of land into two or more parcels.

Q: (from Edison representative, regarding pollution controls) What are you referring to in "scheduled control technologies" mentioned in the study?

A: (Miller) Any pollution control technology that Edison had planned to install during future retrofits. That's something we looked at, but it didn't to my knowledge trigger an impact.

Another Edison employee stated he didn't think the utility has any plans to install new pollution control technology at any of the plants targeted for divestiture.

After a lunch break, panel members answered several questions that were submitted before the break.

Q: (Anonymous, to Bruce Kaneshiro) You gave a definition of market power that differed from the Department of Justice definition cited in the Commission's Preferred Policy Decision. Was that intentional? Do you disagree with the DOJ definition?

A: (Kaneshiro) We as a team agree with what the commission has defined as market power. The definition I gave was a paraphrase of the definition in the Preferred Policy Decision, and I did not mean to imply that the study team used any other definition in the process of conducting the Draft Initial Study.

Several questions were directed to McCann.

Q: For the plants that did not cover their costs and were assumed retired in 2002, why did you assume that someone would buy them?

A: (McCann) There is value in the access to the grid, allowing the new owner to participate in the marketplace through repowering. There is also value in the physical assets of the plant, including the pipeline that delivers gas to the site.

Q: What purchase price did you assume?

A: (McCann) There was no assumed purchase price.

Q: If repowering was economic for a new buyer, why was it not assumed [to be economic] for Edison?

A: (McCann) Repowering was considered economic for Edison, but not until after 2013. On the other hand, the new owners are likely to want to enter the market immediately.

Q: What assumptions were made about the probable behavior of an operator of a must-run facility in a local reliability bundle (i.e., the Huntington Beach plant), as distinct from other plant operators who are free to operate based strictly on the basis of financial signals?

A: (McCann) The amount we assumed for must-run generation is a floor. There will also be times that must-run plant owners could sell into the Power Exchange. The amount of must-run generation we assumed is not an upper bound.

Q: Is there any probability assigned to the "reasonably expected upper bound" scenario, either by the analysis or by CEQA?

A: (Shimko) No. It would be very difficult to determine a reasonably accurate probability for the "environmentally conservative" scenario. And CEQA does not require the lead agency to assign probability, only to determine reasonably foreseeable events.

The panel members then took several direct questions from the floor:

Q: In the statement of assumptions made about prospective buyers, why do they think a new owner can step into Edison's shoes and make more money?

A: (McCann) Part of it is company culture. The new owner could be leaner and meaner, and could get more profit out of the plant. Also, the new owner will see the purchase as a way to get into a market. The incentives for the new owners differ substantially from Edison's.

Audience member John Burkholder, an independent consultant in the gas industry, commented: If that same new entrant was SoCal Gas, or the merged company of SoCal Gas and SDG&E, all of a sudden you do have a new owner with expertise in many areas, and now access to the transmission grid. That alone could give them a significant advantage.

McCann: That alone would indeed give them a distinct advantage. And there are other companies with diverse experience that are interested in participating in the California market. Enron is one; they own large gas supplies and control several gas pipelines in the country.

Q: Now that we understand the kind of motivation, how does that translate into increased production, when there's still the same demand?

A: (McCann) You have to look at each plant alone. Using the San Bernardino plant as an example, if they decide to repower, clearly they would sell more energy. Another is Ormond Beach, which is one of the cheaper resources. But if it is the only asset an owner has to pay off a loan, their costs drop faster as you increase power, leading to increased revenues and quicker payback of the loan.

Bob Logan added: When you own a wide portfolio of units and are the provider of last resort, you have to follow load. So there really isn't a way for Edison to increase production at all the units. But if you only have one unit, you can match generation to load (by obtaining sufficient customers through Direct Access), which is one way that generation could go up significantly.

Q: (from Chris McManus, PG&E) Can you tell me what you mean by initial screening assessment? Is that a term of art?

A: (McCann) Yes. Initial screening is a simplified analysis to determine if an option is feasible and worth further consideration. If you use a reasonable set of assumptions, and you do not use a full set of data, you can assess, relatively, how sensitive the market will be to changes. You can still do a lot of modeling with what you have on hand to assess whether there will be significant changes or not.

Bob Weatherwax added, Computer modeling in the restructured electric industry is still in the early development stage. Basic protocols are still being developed as we go along, particularly with respect to divestiture in the context of the restructuring that is going to occur.

Q: (McManus) Would you characterize the comparison case, the non-divestiture case, as a lower bound case? In other words, there are many other things that can affect the worst case, is that indeed the worst case?

A: (Weatherwax) That was a cumulation of all plants as modeled in SERASYM, and it is right in the middle of the possible scenarios.

McCann added, It's not the expected outcome, and it is not the lower bound. The non-divestiture case is closer to the mid-range, but it falls into a gray range around the expected outcome. And it does not reflect the exercise of market power.

Q: Have you received information from the AQMDs in Edison's service territory that a Negative Declaration would be adequate?

Sullivan: In a recent meeting initiated by Edison, the basic impression we got from the air districts was that they did not see significant air quality impacts resulting from Edison selling the power plants.

Q: Would you expect to hear from the districts?

Sullivan: I hope so. That's why the Commission extended this process of taking comments on the Draft Initial Studies: to give utilities and everyone else an opportunity to participate.

Q: Prior to the recent meeting, had you contacted other agencies to get feedback?

Sullivan: Yes. Those are listed in the agency contacts section of the Draft Initial Studies.

Q: (Edison's Jeff Koch) You assumed in considering the nondivestiture case that we would not enter into contracts for differences with buyers from the PX, correct?

A: (McCann) Yes. Edison will still own a large portfolio of resources and would look at how to meet load in the most economic way possible. Contracts for differences would make no difference in the output.

Q: (Koch) Is it the Commission's position that we would be prohibited from entering into contracts for differences?

A: (Sullivan) No, we are not expressing the commission's position on this issue, which is being more fully assessed in A96-11-037.

Q: (Koch) Did you determine a level of market power?

A: (McCann) It's a qualitative assessment. For instance, Microsoft sold the operating system software for 90 percent of the computers in the country, but do they have enough market power to trigger enforcement by the FTC? We assumed that the Federal Energy Regulatory Commission would enforce its regulations concerning market power. But there could still be market power even with FERC enforcement.

Q: Are there other options besides negative declaration or an EIR?

A: (Sullivan) We have two cases, EIR or not. If it's an EIR, it could be focused.

Q: Is it likely that focus would be on air quality?

A: (Shimko) The focus would be on those impacts that the Initial Study has indicated could be potentially significant.

Q: So possible mitigation measures may be further identified/developed as a part of the EIR than they would be in a mitigated Negative Declaration?

A: (Shimko) If the CPUC determined that we are going to do an EIR, we would not need at this point to define mitigation measures; that would come in the EIR process. If we do an Negative Declaration, we would need to identify mitigation measures at this point.

Q: (from Edison representative) How are you defining "the project?"

A: (Shimko) The project is the auction process and the sale of the plants.

Q: And what the buyer does is part of the outcome of the sale of the plant?

A: (Shimko) Yes. The environmental analysis requires looking at what happens after the sale, and as a result of the sale.

When audience members had no further questions, Kay Wilson closed the workshop by thanking all participants, asking them to submit written comments on the Draft Initial Study by July 3, and inviting them to participate in the 2nd technical workshop on the study, in Pasadena on June 30. The meeting closed at 2:40 p.m.