CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

INTEGRATED ENERGY POLICIES REPORT COMMITTEE

INFORMATIONAL PROCEEDING AND

PREPARATION OF THE 2004

INTEGRATED ENERGY POLICY REPORT UPDATE

AUDITORIUM

CALIFORNIA PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

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WEDNESDAY, SEPTEMBER 29, 2004

10:30 a.m.

REPORTED BY:

JAMES A. RAMOS

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APPEARANCES

COMMITTEE MEMBERS PRESENT

John L. Geesman, Commissioner and Presiding Member

James D. Boyd, Commissioner and Associate Member

Jackalyne Pfannensteil, Commissioner

Melissa Jones, Adviser to Commissioner Geesman

Rick Buckingham, Adviser to Commissioner Keese

Michael Smith, Adviser to Commissioner Boyd

STAFF PRESENT

Kevin Kennedy, Program Manager, IEPR process

Sandra Fromm, Assistant Program Manager, IEPR process

ALSO PRESENT

Jane Turnbull, League of Women Voters

Gary Ackerman, Western Power Trading Forum

Jack Pigott, Calpine

Marcel Howiger, TURN

Don Smith, ISO

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1 P R O C E E D I N G S

2 COMMISSIONER GEESMAN: Welcome, I am
3 John Geesman, the Presiding Member of the Energy
4 Commission's Integrated Energy Policy Report. To
5 my left is Commissioner Jim Boyd, the Associate
6 Member of the Committee, and the Presiding Member
7 of the 2003 Integrated Energy Policy Report.
8 To my right, Commissioner Jackie
9 Pfannensteil, the Associate Member of the
10 Commission's Renewables Committee, and many of our
11 proceedings have been joint proceedings of our
12 Integrated Energy Policy Report and the Renewables
13 Committee.
14 This is the 15th public hearing that we
15 have held in conducting the 2004 update of our
16 2003 Integrated Energy Policy Report. SB 1389,
17 which was passed by the Legislature in 2002, put
18 the state back into the business of integrated
19 energy resource planning. We used to do this
20 about 20 years ago, but over the course of the
21 1980's and 1990's those skills atrophied quite a
22 bit in state government and were disassembled
23 completely in the mid-1990's under AB 1890.
24 Since 2002 we have been called to
25 perform this task again. We issued our first such

1 effort in November of 2003. Pursuant to the
2 statute we were conducting an update of that first
3 report, focused on three particular issues.
4 One is the general subject of our
5 reliance on and aging fleet of power plants. The
6 second is ways in which we can improve our
7 transmission planning process. And third is ways
8 in which we can accelerate the development of
9 renewable resources.
10 In California it's widely said that the
11 energy policymaking process is more politicized
12 than anywhere else in the country. Perhaps that's
13 true. One thing that I think is indisputable
14 though is that our process is a public and
15 transparent one.
16 We are blessed in this state with some
17 of the most innovative and inventive thinkers
18 among our citizenry, and a very well-represented
19 group of stakeholders that have contributed
20 greatly to the richness of our information
21 gathering process. And I think made a significant
22 contribution to the development of state policy.
23 We have a tradition of a pluralistic and
24 diverse process in trying to identify what
25 policies the state should pursue in energy.

1 Today's hearing is an important part of that
2 process. We will conduct four more hearings
3 around the state on our draft report, we'll
4 publish a revised draft on October 20th, and
5 submit that to the full Commission for it's
6 consideration at it's November 3rd Business
7 Meeting.
8 Commissioner Boyd, did you have
9 anything?
10 COMMISSIONER BOYD: Thank you,
11 Commissioner Geesman. Actually, no, you covered
12 it quite well. So my only comment would be that
13 as I look forward to the input from the public in
14 this entire process. This, as you say, is the
15 15th public meeting we've had, and we look very
16 much to get that input to help us formulate the
17 policy recommendations we're going to make, which
18 are fairly meaningful with regard to where we're
19 going with our energy future.
20 So, I hope to hear some cogent comments
21 today from the interested public who is here.
22 COMMISSIONER GEESMAN: Commissioner
23 Pfannensteil?
24 COMMISSIONER PFANNENSTEIL: Thank you,
25 Commissioner Geesman. I'm here by way of a guest

1 or observer today, because I'm not actually on
2 this Committee, but since by definition this
3 report and the process that leads up to it feeds
4 into and reflects a great deal of the policy work
5 of the Commission, I'm grateful to be able to be
6 here and to hear first hand some of the public
7 input involved in that report, so thank you for
8 inviting me to join you.
9 COMMISSIONER GEESMAN: I neglected to
10 introduce our Advisers, Mike Smith, to the left of
11 Commissioner Boyd, is Commissioner Boyd's Adviser.
12 Melissa Jones, to my right, is my Adviser.
13 Sandra, would you like to make the staff
14 presentation?
15 MS. FROMM: Thank you, John. I'm Sandra
16 Fromm, the Assistant Program Manager for the 2004
17 energy report process. Kevin Kennedy, sitting
18 across the room, is the Program Manager. I'd like
19 to welcome you here today and thank you for your
20 participation in this process.
21 The format for today is very open. We'd
22 really like to hear public comment on the draft
23 policy document. We appreciate receiving any
24 comments on this document by October 13th.
25 I'd like to provide you with just a

1 brief background on SB 1389 to supplement some of
2 John's comments. Senate Bill 1389 set forth a
3 process whereby energy issues facing the state
4 would be analyzed in an integrated fashion. Every
5 two years the Energy Commission will prepare an
6 in-depth assessment forecast of all the energy
7 sectors. The information contained in these
8 assessments will establish a common information
9 base that will be used by all the state's energy
10 agencies.
11 In the in-between years the Energy
12 Commission will prepare a supplement to the
13 previous years' energy report. It is expected
14 that the updates would work out specific or
15 current issues. The Commission would adopt these
16 energy reports at the conclusion of an open and
17 transparent public process.
18 As John indicated earlier, the 2004
19 process was very public. It involved the Energy
20 Commission's collaboration with several state
21 agencies. The state held numerous meetings with
22 stakeholders and held 14 public workshops. During
23 this process over 200 comments were received in
24 our Dockets Unit.
25 Staff used the information gathered

through the meetings, the public record, and docketed comments to prepare white papers. After a workshop on each of the white papers the Committee prepared the draft policy document drawing from the staff reports, the public record and docketed comments.

In looking at the near-term supply and reliability concerns, the 2003 Energy Report concluded that under average weather conditions California will likely have adequate energy supplies through 2009. But with adverse weather conditions, operating reserve margins in 2006 and beyond could fall below the seven percent threshold needed to maintain system reliability.

The 2004 aging power plant study noted that as many as 9,000 megawatts were at risk of retiring by 2008. If many of these at-risk power plants retire between now and 2008, the reserve margins could potentially fall below the 7 percent.

Additionally, during the past summer regional reliability concerns associated with transmission congestion emerged, particularly in southern California. It was noted that aging power plants appear to help alleviate this

1 congestion.

2 To address near-term supply issues and

3 reliability concerns, the Committee recommends

4 that all investor-owned and municipal utilities

5 work aggressively to attain the 2007 statewide

6 goal of five percent peak demand reduction through

7 demand response programs.

8 In the Committee draft policy report

9 there are several specific suggestions, such as

10 modification of the tariff design, immediate

11 rollout of advanced metering systems, and

12 development of dynamic rate offerings and load

13 control options.

14 The Committee further recommends that

15 the Energy Commission work with the Public

16 Utilities Commission to develop a capacity market

17 that includes a capacity tithing mechanism and

18 tradeable capacity rights. The PUC will be

19 holding a capacity market workshop on October 5th

20 and 6th here in San Francisco.

21 The Committee also recommends that the

22 Energy Commission, the Public Utilities

23 Commission, and all utilities enhance supply

24 management by establishing more closely

25 coordinated planning and research hearings,

1 pursuing cost-effective seasonal changes with the
2 pacific northwest, and exploring opportunities to
3 use existing pump storage facilities more fully.
4 Although the Committee poses these
5 short-term solutions, they also recognize that
6 these solutions should not interfere with long-
7 term goals for our electricity system.
8 Transmission upgrades and expansions are critical
9 to ensuring a reliable electricity delivery
10 system. However, transmission expansions
11 typically have long lead times that must be
12 considered during the planning process.
13 SB 1565, recently signed into law,
14 requires the Energy Commission to adopt a
15 strategic plan for the state's electric
16 transmission grid beginning in the 2005 energy
17 report process. The Committee recommends that the
18 Energy Commission establish a comprehensive
19 statewide transmission planning process, in
20 collaboration with the Public Utilities
21 Commission, the ISO, key state and federal
22 agencies, as well as stakeholders and interested
23 public.
24 This transmission planning system must
25 recognize the long and useful life of transmission

1 assets, their public goods nature, identify
2 transmission corridors, and consider access to the
3 state's renewable energy resources.
4 The Committee further recommends that
5 the Energy Commission increase its participation
6 in the joint transmission study group on the
7 Tehachapi Wind Resources Area, work with the PUC
8 to establish a joint study group for Imperial
9 County's geothermal resources, and work with the
10 PUC and the ISO to investigate whether changes are
11 needed to the ISO tariff to meet transmission
12 needs for renewables.
13 The governor supported a 33% goal in SB
14 1478, but his veto letter objected to appended
15 measures that would impede progress. The
16 Committee recommend that the state enact
17 legislation to require all retail suppliers of
18 electricity, including large, publicly owned
19 utilities, to meet a 33% eligible renewable goal
20 by 2020.
21 Because much of the technical renewable
22 potential lies in the Southern California Edison
23 service area, and because SCE has demonstrated
24 strong leadership in achieving renewable
25 development and has nearly met the current goal,

1 the Committee recommends that the state enact
2 legislation that allows the PUC to require SCE to
3 purchase at least one percent additional renewable
4 energy per year between 2006 and 2020.
5 For PG&E and SDG&E, the Committee
6 believes that the 20 percent target for 2010 is
7 reasonable, and should not be adjusted at this
8 time.
9 The Committee also recommends the
10 repowering of wind turbines to harness wind
11 resources efficiently and prevent bird deaths.
12 Since the draft document was released, the federal
13 tax reduction credit, which expired in December of
14 2003, was extended by Congress to December of
15 2005. Although not yet signed, the American Wind
16 Energy Association has indicated that President
17 Bush is expected to sign the bill. Passage of
18 this bill will help several stalled wind projects
19 to come online.
20 The Committee further recommends that
21 the PUC require investor-owned utilities to
22 facilitate repowerings in its pending effort to
23 develop renegotiated qualifying facilities
24 contracts.
25 Although the Energy Commission will

1 launch a performance-based PV incentive pilot
2 program in 2005, the Committee makes this an
3 official recommendation to reinforce this program.
4 Lastly, the Committee recommends that
5 the Energy Commission continue to assist the
6 governor's solar initiative to achieve greater
7 market penetration of PV systems.
8 As John indicated earlier, today's
9 hearing is one in a series of hearings around the
10 state. On October 20th the Committee will publish
11 its final draft update report, which will also
12 report on the state's progress in meeting the 2003
13 recommendations.
14 Again, we appreciate receiving any
15 written comments by October 13th. The full Energy
16 Commission will consider the policy
17 recommendations for adoption on November 3rd, and
18 then it will be forwarded to the governor.
19 With that, I'm going to turn -- oh, I'm
20 sorry. I stated earlier that the PUC capacity
21 workshop would be held on the 5th and 6th. It's
22 actually October 4th and 5th, I'm sorry about
23 that.
24 And with that, I'd like to turn the
25 workshop back over to the Committee.

1 COMMISSIONER GEESMAN: Okay. We're
2 going to follow our time-honored tradition of
3 responding to blue cards. So if there is anyone
4 who would care to address us obtain a blue card
5 from Nick, and he'll bring it up to us. I'll
6 proceed in the order in which I receive the cards.
7 The first witness is Jane Turnbull from
8 the League of Women Voters.
9 MS. TURNBULL: Good morning,
10 Commissioners Boyd, Geesman and Pfannensteil. The
11 League of Women Voters of California is pleased to
12 have this opportunity to speak to the
13 recommendations of the Energy Commission's
14 Committee regarding specific changes in policy
15 recommendations which developed as a result of the
16 numerous public workshops held over the past eight
17 to ten months.
18 We applaud the level of collaboration
19 displayed by the state's principal energy
20 agencies, and equally applaud your consistent
21 leadership.
22 While it is now sufficiently blatant
23 here to have some confidence that the electric
24 resources will meet the peak 2004 power demands,
25 the League is concerned about the reliability of

1 electric service in the coming years.
2 At this time the forecast of state
3 reserve margins presumed a continued availability
4 of most of today's generation capacity. Actually,
5 given the lack of assured revenue sources for as
6 many as 32 aging plants, it seems likely that
7 approximately 5,000 megawatts of capacity will
8 come offline.
9 While some of the units could be
10 repowered, such investments are not likely unless
11 owners are assured of long-term contracts.
12 Because many of these older units have good load
13 following capability, we hope that some of them
14 will be retained for backup service. We think the
15 proposal to put some of these units into full
16 standby status, rather than keeping them online as
17 spending reserve, has considerable merit.
18 Demand response definitely is the best
19 option for meeting our state's reliability
20 concerns. Reducing customer peak demand by five
21 percent by 2007 will not be easily accomplished,
22 and it certainly will require investments in
23 energy efficiency infrastructure.
24 We believe dynamic rates schedules
25 should be developed for all customer classes.

1 Customers, meaning citizens, should become aware
2 of the real cost of power. They need to
3 understand that their lifestyle decisions can have
4 a direct impact on utility costs and thus on
5 monthly utility bills.
6 The League agrees with the Committee
7 recommendation that the Energy Commission work
8 with DWR to reduce peak demands of water supply
9 systems. Collaboration on developing a demand
10 response program would be an appropriate first
11 step toward greater integration of planning for
12 energy and water infrastructure.
13 The League finds the Committee's
14 suggestion of working with the PUC to develop
15 proposals for a capacity market for generation
16 quite intriguing, and rather nervous making.
17 While capacity payments are included in many, if
18 not most, of the qualifying facility power
19 purchase agreements that were the result of PURPA
20 legislation, the negotiations associated with
21 defining those payments did not reflect much in
22 the way of hard data.
23 A capacity market would need to be tied
24 to solid resource adequacy information. The
25 proposal to institute capacity tagging does not

1 provide any real confidence. In fact, we're not
2 really sure of the distinction between a capacity
3 market and a spot market.
4 On the other hand, we like the
5 Committee's recommendation for a petition to have
6 the PUC allow utilities to sign contracts of more
7 than one year with existing generation facilities.
8 So long as these contracts would not deter new
9 resources, this would foster the reliability of
10 the system and the stability of power costs.
11 Of even greater importance is the
12 direction that the utilities haver received form
13 the PUC to address local reliability needs, taking
14 into account transmission congestion. The all-
15 too-limited investments in transmission
16 infrastructure are already impacting local
17 reliability in San Francisco Peninsula area and
18 San Diego County and greater L.A.
19 We concur with the suggestion that
20 greater efforts be made to integrate the CAL-ISO
21 control areas with the control areas of the
22 publicly controlled transmission areas in order to
23 decrease barriers to sharing generation reserves.
24 California needs a statewide, long-term
25 transmission planning process supported by a broad

1 coalition of stakeholders. This planing process
2 should be based on the recognition of the future
3 statewide projected requirements for energy
4 infrastructure.
5 A corridor and right-of-way planning
6 process should also involve planners from other
7 industries with similar long-term planning
8 requirements and the relevant federal, state, and
9 regional agencies. A process for land banking to
10 meet future needs should be initiated.
11 The League is concerned that FERC has
12 pre-empted financial regulation of the
13 transmission network. We hope that this will not
14 deter or delay the needed improvements. It is
15 hardly surprising that nine out of ten
16 Californians support doubling the use of renewable
17 energy over the next ten years. What is
18 surprising is that the Legislature has not
19 supported a consistent statewide mandate for
20 renewable energy generation.
21 Almost without exception, League members
22 from all over California have come out in support
23 of a consistent statewide RPS. And that includes
24 a whole lot of League members who live in
25 municipalities.

1 While some municipal utilities have made
2 significant investments in renewable energy, many
3 have not. We believe that of the municipals only
4 Alameda will meet the current goal of 20 percent
5 by 2010.
6 We're also in agreement that large
7 hydropower is not a renewable resource, either for
8 the IOU's or the publicly owned utilities.
9 Energy Commission staff have developed
10 good information on the location of available
11 renewable resources across the state, and
12 identified the greatest potential to be in SCE's
13 service territory. The League supports the
14 ongoing acceleration of renewable energy
15 development and commends SCE for its leadership.
16 Still, we have questions regarding the
17 Committee's recommendation that the Legislature
18 require SCE to add at least one percent of
19 additional renewable energy between 2006 and 2020.
20 We would like to hear from the utility if it has
21 other ideas for developing additional resources in
22 that part of the state.
23 Renewable energy certificates will offer
24 a market for environmental attributes and thus
25 provide a further monetary value for owners of

1 renewable energy installations. Thus, besides
2 providing a further incentive for development,
3 such certificates can become a commodity that
4 enables electric service providers, community
5 choice aggregators, SDG&E, and even some municipal
6 utilities to meet RPS targets.
7 We note the possible environmental
8 justice issues raised by the Committee, but we
9 believe that displacing fossil energy with
10 renewable energy is a plus, period. Since it is
11 now clear that California is impacted by emissions
12 from power plants in China, the basic goal should
13 be overall reduction in SOX, NOX, and CO2
14 anywhere.
15 And with that in mind, we also think
16 it's important to look at the lifecycle
17 environmental impacts of small hydro and
18 geothermal, as they are being brought online.
19 The League is enthusiastic about the
20 Committee's position on assessing the potential
21 for performance-based incentives for renewable
22 energy, including time-of-use net metering
23 incentives for installers of rooftop solar.
24 We are disappointed not to see any
25 recommendations for encouraging the development of

1 biomass resources. We hope that emission can be
2 addressed before this update is submitted to the
3 Legislature.
4 Thank you for giving us the opportunity
5 to provide these comments.
6 COMMISSIONER GEESMAN: Thank you. As
7 always, Jane, I do have a couple of questions.
8 Let's start with the Edison goal -- and I'm sure
9 we'll probably take this up in our Los Angeles
10 hearing, or they may appear in our Sacramento
11 hearing, I'm not sure what their plan is -- but
12 let me try and restate what they've said to us
13 before.
14 And that is that they have worked hard
15 to achieve the 20 percent goal early, and that as
16 a consequence they should not be penalized for
17 their success by having a higher goal applied to
18 them. They've also expressed concern about the
19 potential impact on their ratepayers.
20 We have generally come back with the
21 explanation that between 70 and 80 percent of what
22 our staff has identified as the commercially
23 developable renewable resource instate is within
24 their geographic area.
25 And because they have accomplished their

1 20 percent goal without yet having spent one dime
2 of the supplemental energy payments that the law
3 provides to subsidize any overmarket renewable
4 resources that they're required to purchase, that
5 they should continue to demonstrate their
6 leadership in this field, and that we are as a
7 state somewhat in need of their continued
8 leadership in the area, if we're going to fully
9 develop this resource.
10 Now, I don't think any of us know as to
11 the adequacy of public goods charge monies to
12 cover supplemental energy payments, either for an
13 accelerated Edison goal, or for that matter for
14 the 33 percent goal beyond the year 2010. That's
15 a separate question that I think, as we gain more
16 experience, we'll have to investigate.
17 But I would raise a question about the
18 sustainability of our supplemental energy payment
19 subsidy structure to meet the 2010 goal if the
20 Edison company, which is the source of about 40
21 percent of that revenue stream, if they are not
22 participants. I don't think I can envision an
23 environment between now and 2010 where their
24 ratepayers are asked to provide 40 percent of the
25 supplemental energy payments, but none of that

1 flow of funds goes back to support projects in the
2 Edison service territory.
3 And I wonder if you have a view as to
4 that sustainability?
5 MS. TURNBULL: We recognize that this is
6 a real enigma, it is not a nice, simple solution.
7 On the other hand, we feel that we would be
8 inconsistent if we actively supported this one
9 percent per year increase, putting Edison at 35
10 percent renewables by 2020.
11 If, we're also pushing for a statewide
12 consistent mandate, and so it's, this balancing of
13 taking two positions -- I think we'd like to hear
14 from Edison to see where they are and if they have
15 a position which meets both the state's needs and
16 their needs.
17 COMMISSIONER GEESMAN: I have to say
18 that, well, in the temper of the times, earlier in
19 this process I reminded them of the biblical
20 imperative -- and unfortunately I can't remember
21 the chapter and verse, but it went something along
22 the lines of "to those to whom much has been
23 given, much is expected."
24 And I think they have been blessed with
25 an abundance of resource within their territory,

1 and as a consequence it's reasonable to expect a
2 comparable level of effort on their part. But we
3 do need to hear more from them, and I'm sure that
4 we will.
5 I also had a question as it related to
6 your response on the environmental justice issue
7 that has been raised regarding RECs. And let me
8 sketch the scenario for you.
9 Someone proposes a RECs transaction to
10 Pacific Gas and Electric. Let's say the operator-
11 - and this is hypothetical, it's not real-- the
12 operator of the Hunter's Point Plant or the
13 operator of the Potrero Plant then links that with
14 RECs developed from a wind farm in Washington
15 state. Should indeed that be counted under the
16 RPS program?
17 It does create a CO2 benefit from a
18 global perspective, but the local neighborhood
19 feels that the state's pro-renewables policy is
20 being applied in such a way as to discriminate
21 against the environmental impacts on that local
22 community.
23 MS. TURNBULL: Well, personally, we have
24 not, I have not supported RPS contributions coming
25 from out-of-state. And I am quite concerned about

1 the northern counties of the state, which are
2 blessed with considerable renewable resource
3 potential, which is not being developed because
4 the utilities that serve those counties are
5 developing out-of-state rather than in those
6 particular counties.
7 That's not exactly what your question
8 referred to --
9 COMMISSIONER GEESMAN: No, but I'll
10 reframe my question, but let me observe, the
11 interstate commerce clause requires us not to
12 discriminate against out-of-state resources. Let
13 me change it then to a wind farm in Palm Springs.
14 MS. TURNBULL: Okay. I think that,
15 actually the, each individual resource, as it is
16 developed and kept online, has to be looked at in
17 terms of the implications of the overall
18 environmental implications and balanced against,
19 you know, the whole.
20 Certainly, grandfathering in facilities
21 which have been around for quite awhile, which
22 currently would not get permits, you know, should
23 be looked at.
24 COMMISSIONER GEESMAN: Okay. I thank
25 you for your comments, strongly encourage you to

1 continue to see the linkage between our water
2 situation and impacts on the electrical system. I
3 think that's going to be a large theme in our 2005
4 process, and I know the League has been very
5 heavily engaged in both water and energy policy
6 issues in the state.
7 I suggest to you that those are going to
8 come together in a stronger form in '05 than they
9 have previously.
10 MS. TURNBULL: The League is really
11 quite excited about this. We have a statewide
12 list, and when discussion of this issue came out
13 on that list we just got overwhelming support from
14 all corners of the state.
15 COMMISSIONER GEESMAN: Well, then I'd
16 invite your continued involvement with us in that
17 regard.
18 COMMISSIONER BOYD: Jane, before you sit
19 down, I want to thank you, literally salute you,
20 for your dogged, steady, and regular participation
21 in this subject for the last two iterations of
22 this report. Very much appreciated, and I for
23 one, and I think all of us, look forward to
24 hearing what the League has to say, and as I tick
25 off the points you raise here, you raise some good

1 questions, and I'm grateful for your support and
2 the many issues you raise.
3 I don't really have a question as much
4 as a comment. Your comment on biomass, I couldn't
5 agree more, and here's where I and some folks, not
6 necessarily up here, we struggle. Sometimes I try
7 to rationalize myself why we can't get this issue
8 off dead center better, and I think it's total
9 frustration and/or exhaustion of trying to move
10 this subject.
11 And even though I stepped down from the
12 Renewables Committee this year, I'm still going to
13 dog this subject of biomass. I brought that issue
14 with me to the Commission from other employment
15 and I will try to see what we can do to push that
16 subject. It's just one, like climate change, that
17 I'm every much emotionally tied to.
18 So let us keep up the pressure on that
19 subject. And I'm going to bring up something
20 else, spurred by Commissioner Geesman's
21 questioning of you on RECs and environmental
22 justice. It's something that I brought up
23 internally, and I almost hate to bring it up in
24 public, but one has to be totally forthcoming, but
25 I have been biased -- as an old long-time air

1 quality guy I have been struggling with the RECs
2 issue as it relates to the very issue that was
3 brought up, the long-term nature of the
4 transferability of these.
5 And, see, I come from 25 years in the
6 air quality business, where emission credits were
7 discounted the farther away from the area of
8 benefit that they were, to the point that they're
9 worthless if they're too far away to have any
10 meaningful effect. Now that would complicate the
11 living daylights out of the accounting system and
12 what have you.
13 But it is something that keeps rattling
14 around inside my mind, and when you bring up,
15 Commissioner Geesman, something that we have to
16 deal with so close in the neighborhood as the
17 power plants right down the street here, and the
18 environmental justice issue associated with them,
19 and the possibility of environmental credits from
20 Palm Springs or Washington state, it does tickle
21 in my mind the equity issue that I had to deal
22 with in the air quality business of, if it's too
23 far away it doesn't count, and there's a discount
24 applied and what have you.
25 Now this is energy and this is a little

1 different, but if you're attributing an
2 environmental benefit you're getting into multiple
3 benefits, and the biggest one most people think
4 about is air quality. So this is an issue we have
5 to wrestle with. So, thank you again Jane.
6 COMMISSIONER GEESMAN: Commissioner
7 Pfannensteil?
8 COMMISSIONER PFANNENSTEIL: Yes, thank
9 you. Thank you very much for your comments, Ms.
10 Turnbull. My one question has to do with the area
11 that you described of demand response, and that
12 being the best near-term option we have.
13 I believe you said that you thought that
14 all customers, down to the smallest, should be
15 offered dynamic pricing, or some kind of demand
16 response rates. Is that what you had said, did I
17 hear you correctly on that?
18 MS. TURNBULL: That's where the link
19 seems to be coming out. We recognize the fact
20 that the motivation for dynamic pricing is a great
21 deal later for larger customers, but on the other
22 hand, the personal, daily decisions that each of
23 us make in terms of when we operate our washing
24 machines and so on does make a very real
25 difference.

1 COMMISSIONER PFANNENSTEIL: And as my
2 colleagues, I think, know, I share that. But of
3 course you run into metering issues of the cost
4 there. And do you think it might make sense to do
5 some kind of targeted rollout of metering and
6 therefore rates. Is that something that you've
7 looked at, in terms of how it might best be
8 implemented?
9 MS. TURNBULL: Well, part of the
10 information we need -- and I am planning to go to
11 the advanced metering session tomorrow -- is the
12 cost of metering, the additional cost. The number
13 that we've seen is something like $130 a meter.
14 How that would be paid for, and over what time
15 frame, you know, sort of needs to be clarified.
16 COMMISSIONER PFANNENSTEIL: Sure. I
17 think there's also the question of, some
18 customers, while the information about the time
19 and costs would be useful information, some
20 customers are not able to shift their use rate at
21 all, therefore wouldn't actually ever be able to
22 pay for that meter in terms of their load
23 reduction I would think.
24 MS. TURNBULL: Yes, we've also seen
25 that, even though the people will cut back during

1 certain times of the day, their overall usage may
2 not change a lot, and that is a concern. But I
3 think people need to understand what are the costs
4 of electricity, where do they come from, and that
5 they are not the same at 4:00 a.m. as they are at
6 4:00 p.m.
7 COMMISSIONER PFANNENSTEIL: Thank you, I
8 look forward to hearing from you tomorrow then.
9 COMMISSIONER GEESMAN: Thanks again
10 Jane. Gary Ackerman, Western Power Traders Forum.
11 MR. ACKERMAN: Any mike will do?
12 COMMISSIONER GEESMAN: I think so.
13 MR. ACKERMAN: Okay, I usually don't
14 play to such a large audience, so --.
15 COMMISSIONER GEESMAN: You've got your
16 back to them, Gary, so --
17 MR. ACKERMAN: It's a very dangerous
18 position, but there's not too many utilities in
19 the audience today, so I should do all right.
20 Good morning, Commissioners. I'm Gary
21 Ackerman, I'm Executive Director of the Western
22 Power Trading Forum. The Western Power Trading
23 Forum is an organization, and advocacy group, of
24 buyers and sellers of wholesale and retail power
25 across the entire western region, and I'm here

1 today to generally support the IEPR, the report
2 that you folks have put out.
3 Because I believe that its policy
4 findings are on a fast track to being the
5 Schwarzennegger administration's policy document
6 for next year. And I'm sure as I say that, that
7 would probably raise some eyebrows and come as a
8 surprise to some of the folks in Sacramento and
9 Governor Schwarzennegger's staff, but maybe not.
10 I see the administration in 2005 needing
11 to change from a transition administration, which
12 they've sort of been for the last, almost year
13 now, to one where they have to be very proactive.
14 And your policy document, I believe, is their best
15 shot at an early start, to get the Legislature in
16 2005 active and going on some important policy
17 items, so -- I hope that was in your thoughts
18 before you wrote this update, and I hope it's in
19 your thoughts now, and I certainly would publicize
20 it, from my point of view, as being such.
21 The three areas that are discussed in
22 your report are all terribly important. The
23 transmission corridor and the renewable portfolio
24 standards, we generally I would say, more than
25 generally, actively support the goals that you

express. But today I want to spend most of my time talking about aging power plants and what they mean to the state of California in terms of its future energy policy.

It was a little unclear to me in my reading of your report whether there was a sense of urgency to replace aging power plants, or support aging power plants, and maybe that can be clarified in a redraft. There was some sense that I felt, in its reading, that there is a role for them, but that you wanted to encourage the many megawatts of capacity that have been certified by this Commission to be built. In other words, the 8,000 megawatts of paper power plants that are out there, you would like to become, or see become, steel in the ground.

And I want you to think a little bit about that, and what it is you're really saying, and how you're going to either support something which keeps those aging power plants around or replaces them with something newer, cleaner, more efficient, less emissions.

It's not such an easy question to answer, and here is why. In a hydro rich system, such as we have in the western states, where 40

1 percent of the generating capacity of the western
2 states is hydro based, what you find is that the
3 older gas-fired power plants play a very
4 significant role when there is a drought. And we
5 saw that clearly in 2000 and 2001, we saw it a
6 little bit this year, we don't know what it's
7 going to look like in the future.
8 A drought is the type of event that will
9 last not one day, not one week, not one month, but
10 for many months. In the last episode it lasted
11 for approximately 18 months, from the time that it
12 was realized by the market at least that was
13 trading energy, somewhere around April of 2000,
14 that hydro conditions for the balance of the year
15 were going to be bad, and then they subsequently
16 got worse as we headed into December of 2000. And
17 we all know what happened to prices and everything
18 else along with that trajectory.
19 The aging power plants then play a very
20 significant role. What do they do the rest of the
21 time when there's enough water, or there's an
22 abundance of water. They sit around. Now, right
23 now they're not receiving any capacity payment to
24 sit around.
25 They have to offer up their capacity to

1 the ISO under these rules which were instituted in
2 2001 by the Federal Energy Regulatory Commission
3 called the must offer obligation -- or it makes a
4 cow sound when you put the initials together, and
5 you come up with moo -- but that's the language of
6 the ISO, we don't have to go there.
7 The must offer obligation is eventually
8 going to go away, sooner rather than later, and if
9 the aging power plants don't have any revenue
10 stream from being ready, to stand ready
11 -- either on a cold start basis, as you suggest in
12 your report, which makes a lot sense, or on an
13 active basis, where they can come on the next day
14 as opposed to several months from now.
15 In any regard, they have to have some
16 revenue stream for providing that kind of service.
17 Now, they might not be utilized, like we have
18 already said. Maybe several hours of the year,
19 the normal years, but if there's a drought for
20 many, many hours of a year in that kind of
21 situation.
22 Where does this all lead to? It leads
23 to capacity markets, which of course you talked
24 about in your report, and I'm encouraged by that.
25 I think you should stress the fact that the role

1 of the aging power plants would be not only
2 strengthened but at least providing, a capacity
3 market would provide an element of value to it.
4 In other words, what kind of value would
5 the asset owners see if they had kept their plant
6 on cold standby and, instead of losing money of
7 course they would hope and take the risk that they
8 might be actually able to make some money, or at
9 least get closer to a break-even situation.
10 But if an asset owner has no revenue
11 from standing by, and they are the most expensive
12 provider of energy in the grid, there's not much
13 hope that those units are going to stick around.
14 And I think your report has done an excellent job
15 of providing an acid test to the question do we
16 want these plants around or not?
17 Well, you know, California cannot meet
18 its reserve obligation and provide reliable
19 electricity to its consumers unless those plants
20 are around. Your report shows that very, very
21 clearly, and with stunning accuracy I suppose in
22 the numbers you've provided, given the two ranges
23 where, you know, there's a base case I guess,
24 retirements, and then evolving older units retire.
25

1 Somewhere in-between those two is the
2 truth. But in either of those two tables that you
3 provide on that report, it doesn't look good for
4 California for the years 2006, 7, 8, and 9.
5 The other part of it the owners of those
6 power plants would want me to say today -- and I'm
7 sure you'll hear on subsequent days as you take
8 your road show around the state of California, is
9 that the locational attributes of those older
10 power plants cannot be replaced by the newer power
11 plants. The locational attributes being close to
12 the load center and utilizing existing
13 transmission are very important. If those
14 particular sites go to condominiums they're never
15 going to go back to power plants.
16 I mean, if you think it's hard to site
17 transmission in a crowded area, just think how
18 hard it would be to site a power plant. And I
19 don't think anybody would debate that.
20 So keeping those sites viable as power
21 plants is one thing, and -- going back to my
22 earlier point -- that the older power plants for
23 the occasional drought that the region suffers
24 from time to time is important. Because it
25 doesn't make any sense to build a new and clean

1 facility to replace an old facility that's only
2 going to be used once in awhile, every couple of
3 years.
4 I mean, the last thing you want a new
5 facility with a 7,000 heat rate to do is stand
6 around idle. Obviously, the generating owner
7 doesn't want to do that, that's not why they built
8 the 7,000 heat rate unit. They built those units
9 because they want to be operating all the time.
10 So there's an appropriate place for a
11 new and clean unit, and I think there's going to
12 be plenty of opportunity for those new units to be
13 constructed, given what comes out of the long-term
14 procurement order that's currently before the
15 Commission -- the Public Utilities Commission that
16 is -- but at the same time, a capacity market is
17 the item in the ticket for keeping those older
18 power plants doing what we most need them to do,
19 which is stand idle, stand by, be ready, and
20 operate when we need you.
21 So, I think that clarification needs to
22 be brought out, because it just looked a little
23 bit too much in your update that there was this
24 effort underway to "let's get rid of those old
25 power plants and replace them with new." I'm

1 putting words in the report's mouth, I don't mean
2 to do that, but I'm just trying to make my point.
3 COMMISSIONER GEESMAN: Gary, let me
4 interrupt you and express where I think some of
5 our concern comes from. And that is that the
6 indication, from Edison in particular, that
7 because of their uncertainty about future load,
8 and their concern about debt equivalence, that
9 their long-term procurement plan is centered on
10 contracts, at least contracts for other than
11 renewable resources, of no longer than three
12 years.
13 And I think the concern that we have is
14 in encouraging multiyear, short-term procurement
15 contracts that we think could assist in keeping
16 these aging plants online, and in encouraging the
17 development of a capacity market where we think
18 some of these aging plants can compete quite
19 effectively, we don't want to create a
20 disincentive to that longer term procurement that
21 will prove necessary to bring any of the new
22 plants online.
23 We're not able to perfectly stage manage
24 the appropriate balance, and I think ultimately
25 the Public Utilities Commission is going to have

1 to wrestle with that more than we do, but it's a
2 balance that I think that needs to be struck, if
3 in fact we are going to bring some of the 8,000
4 megawatts of paper plants into construction.
5 MR. ACKERMAN: I suppose that, you know,
6 some or most of the 8,000 watts of paper plants
7 will come into construction because of the
8 procurement efforts before the PUC,
9 notwithstanding Edison's paranoia about debt
10 equivalence, which I think is totally overblown,
11 and the fact that there's customer migration,
12 which can be addressed a number of ways, including
13 through capacity markets.
14 So I think that the PUC is on that track
15 to do that. I feel, I take comfort from the fact
16 that the Energy Commission has an appropriate role
17 in terms of just slicing that nuance so it's real
18 clear. We need the aging power plants, we need
19 the new power plants. We're not going to be
20 wasting our time siting new power plants if we're
21 not going to use them. Well of course we're going
22 to use them.
23 But on the other hand we recognize this
24 role for the aging power plants as well. You've
25 done the aging power plant study, you've taken the

1 lead in that regard, I think it's very, very
2 important, and to point out why those differences
3 exist. And I just think it's a matter of
4 text, getting it into words so that it's real
5 clear. I mean, I find that clarity probably
6 provides -- especially with a new Legislature.
7 Basically, what, a third of the people coming into
8 the Legislature in 2005 are going to be new? I
9 think they're going to be looking to your document
10 for clarity, and they're not going to understand
11 some of the nuances that those of us, such as
12 yourselves and myself and the people behind me,
13 live with every single day. We have to put it
14 down, excuse me, down to an eighth grade level,
15 and then we have to explain it to them.
16 COMMISSIONER BOYD: I'm encouraged by
17 your willingness to acknowledge that people out
18 there are going to pay attention to this, they're
19 going to have to. I mean, I appreciate that.
20 Just to pick up on this, and then I'll let you
21 finish.
22 I think Commissioner Geesman made a very
23 good point about the need for balance, and I keep
24 reflecting where we are today, and I was just
25 reflecting back on why this even showed up in the

1 2003 IEPR that needed to be addressed in this
2 update, and you've said the words several times.
3 There were polar, you know, there was a very
4 polarized situation.
5 There were those people who said, just
6 carte blanche, you've got to get rid of all these
7 old power plants. They've got to go, they're
8 inefficient, they're dirty, and they therefore
9 have got to go.
10 The other end of the spectrum was, you
11 know, you're going to be in big trouble if we
12 don't keep these plants and what have you. And I
13 think the staff, I know the staff really struggled
14 with this study, with a great bit of difficulty,
15 and I think they've done a real good job of
16 finally getting their arms around this issue and
17 helping us explain -- as you said, this is not an
18 easy situation.
19 I mean, I come from a long environmental
20 background, air quality, and, you know, "yeah,
21 let's get rid of that." And a lot of people say
22 that without looking at the facts, and I'm very
23 interested in the facts. And I think the staff's
24 done a good job of pointing out how complicated
25 this is.

1 If we can improve the text, I guess
2 we'll work to improve it. But there are so many
3 different views in the audiences that we address
4 that you've got to get all the words in there to
5 convince various people to move away from the long
6 held positions they have, that there is a need for
7 those, and this and that and the other.
8 I think you've been very eloquent in
9 expressing how this should be received, and I
10 receive your input as very helpful on that point.
11 But I'm just saying man, that's been a tough one.
12 MR. ACKERMAN: Yes, well, I think your
13 preamble to the report should be "every simple
14 statement about energy policy is misleading, with
15 the possible exception of this one." And then
16 you're off to the races.
17 Because, if I have criticism of what
18 our Legislature does on energy is they try to take
19 a lot of simple ideas and slap them down into
20 statute and you find yourself with a mess. And
21 that's why I believe the Legislature is
22 dysfunctional when it comes to energy legislation.
23 Yet what might be the case in 2004, I
24 don't think it's going to be acceptable to the
25 public in 2005, they're going to look for this

1 administration to be more proactive, and that gets
2 me to my next point -- well two points, one about
3 what happened in the summer of 2004, and lastly
4 the interaction between a resource adequacy
5 requirement and a renewable portfolio standard.
6 Let me quickly dispense with what
7 happened in the summer of '04. I know that
8 Commissioner Geesman was at a recent meeting where
9 Jim Detmers, who's the Vice-President of
10 Operations at the ISO -- Jackie, you were there
11 too now that I think about it -- gave what I
12 thought for the very first time was an analysis of
13 what happened on the peak day, which I believe was
14 September 10 if I'm correct, of 2004, so we're
15 talking not even 20 days ago.
16 I was stunned. I've often been quoted
17 in the Sacramento Bee and other newspapers around
18 the state by saying our energy policy right now is
19 to throw the dice and see how it all comes out,
20 and that's what we call reliability. I didn't
21 realize how accurate that was until Jim gave his
22 analysis.
23 We skimmed through the summer of 2004,
24 we just made it through there. There were a
25 number of factors that occurred that got us

1 through because of the right way the dice showed
2 up. There was a very low forced outage rate in
3 all the power plants in California, and the
4 weather was such that in the rest of the region it
5 allowed imports in a very large way.
6 We had 9,000 megawatts of imports in the
7 state of California, which is 50 percent higher
8 than what the ISO expects, and I believe you used
9 in your forecast something on the order of 2,500
10 or twenty --
11 COMMISSIONER GEESMAN: 2,700 actually.
12 MR. ACKERMAN: 2,700 megawatts of
13 imports. So think of the difference that we're
14 talking about that helped us get through this last
15 summer. We're not going to be so lucky next
16 summer.
17 And I believe your report can give a few
18 paragraphs to that. Maybe not the way I just said
19 it, but if you can point out what happened in the
20 summer of 2004 I think it becomes obvious to
21 anybody reading it that we cannot be complacent
22 about making it through 2005 and 2006.
23 Once there's rolling blackouts, once
24 there's an event like that in the state of
25 California, everything changes, you know that.

1 Politically it becomes the front burner issue
2 again. And then everybody starts resorting to the
3 kneejerk reactions and simple solutions to very
4 complex problems, which makes us probably worse
5 off not better off.
6 Why am I bringing this up? Because the
7 more it's said in different venues -- and I think
8 your policy report is one of those venues -- the
9 more that the public, as well as the new
10 legislators, as well as those who are returning,
11 will understand that we are sitting on a dicey
12 situation in '04, and when it comes to '05 and '06
13 there's really not a lot those paper megawatts can
14 help us to get through that, conservation is going
15 to have to be the watchword in order to get
16 through those tough periods and those hot days in
17 those summers, and who knows, maybe we'll get
18 lucky.
19 But in case luck just runs out we have
20 to be prepared, and I believe your document is a
21 good place to put some cautionary to that effect.
22 And I hope you'll consider that. And you probably
23 could get a lot of backup in the numbers from the
24 ISO, especially from Jim Detmer's report, to
25 support that.

1 So I just put that out there for your
2 consideration in the hope that you might consider
3 taking that up.
4 COMMISSIONER GEESMAN: I want to
5 interrupt you there again.
6 MR. ACKERMAN: Please do.
7 COMMISSIONER GEESMAN: I want to confess
8 to a fair level of apprehension in this regard,
9 and I think we need to conduct a thorough and
10 rigorous post-mortem on the summer of 2004. But I
11 think we also need to question the planning
12 criteria that we use, and the degree to which
13 we're willing or implicitly prepared to explain
14 away bad weather.
15 For example, the Energy Commission bases
16 its weather criteria, if you will -- we do a one
17 in two, and a one in ten, and a one in twenty
18 weather scenario in calculating reserve margins.
19 It's based on California weather stations.
20 As you know, one of the things that
21 allowed us to skate by this past summer is the
22 fact that we did not have simultaneous heat storm
23 across the west as we did in the summer of 2000.
24 I doubt that we have presently the analytic
25 capabilities to properly frame what a one in two,

1 one in ten, one in twenty regional weather
2 perspective looks like.
3 It's very hard to adequately weigh that
4 weather station data to reflect changing
5 demographics and changing economic growth. And I
6 have some concerns as to whether we're keeping up
7 in our in-state adjustments. You compound the
8 problem significantly once you take it to a
9 regional basis.
10 But I would submit to you that if we're
11 truly going to do a risk management approach to
12 this question you need to regionalize that
13 planning criteria. Once you've done that, what
14 level of risk avoidance do your utility planners
15 or grid operators or state energy commissions
16 determines is the appropriate level of risk
17 avoidance.
18 I think that there is a tendency to want
19 to adopt what have been traditional industry
20 planning criteria, so we've tended to hover around
21 one in ten. I think the Bay Area Economic Forum
22 has done some analysis that shows, at least based
23 on California data, what we call one in ten is
24 much closer to one in five.
25 There's, I think, a natural response on

1 the part of planners in all sectors. Beyond some
2 criteria, stuff happens, and it's considered to be
3 excusable -- the 500 year flood, to take an
4 example.
5 But in the electrical area I think that
6 we're subject to a lot more sense of trip wires,
7 and if you doubt that I know an ex-governor in
8 West Hollywood that would probably differ with
9 you.
10 MR. ACKERMAN: Well, he keeps on
11 referring to pirates, that was one of the trip
12 wires, but before he walked the plank he didn't
13 have quite that attitude. Let me say that I think
14 the way you're doing it now is pretty darn good.
15 I take a lot of comfort in the fact that you're
16 looking at one in two and one in ten, and I don't
17 think you have to go much beyond that.
18 I think where your risk analysis comes
19 into material effect is looking at those imports
20 and then seeing what happens. It's funny to me,
21 when I go to the northwest and have discussions
22 with my folks up there about resource adequacy
23 they of course are looking at December, January,
24 February while we are looking at July, August, and
25 september.

1 And when they look at those three months
2 in the winter time they're assuming about the same
3 number of megawatts coming from California up to
4 the northwest as we typically buy 3,000 megawatts,
5 to crank into our assumptions. So we're equally
6 ignorant, that's the good news.
7 And I don't know if I would want to go
8 much beyond that in terms of what you're already
9 doing portraying the risk. Let me put it this
10 way, if I felt the general public understood the
11 risks that are expressed as you have them now in
12 your report, I'd say that's a huge step forward.
13 I don't think they do. I know the media
14 doesn't, and I don't think they even care. If
15 they did there'd be cameras rolling behind my
16 back, and we wouldn't be sitting here amongst the,
17 you know, those who look at this -- the policy
18 wonks of the world --.
19 But we're going into a new era in 2005.
20 And that's why I brought this up. If we have
21 blackout in '05 -- and, you know what, I'm
22 thinking to myself how are we going to avoid
23 something like that -- then everything changes.
24 We're under the microscope again, and the public's
25 going to look very hard at what of course the

1 Legislature is doing, and what the agency's are
2 doing, the state agency's have done to prepare us
3 for it.
4 I say start now, and -- you know, Jeff
5 Trainer once said "reliability is everybody's
6 job." I think that's a good watchword. It's just
7 not the ISO to go out there and bang the drum,
8 when we know one thing for sure, they're not the
9 best drum bangers in the world. Why not you guys,
10 why not me? And why not everyone else.
11 Let me get on to my last point so other
12 speakers can have an appropriate amount of time to
13 speak and address some of your questions as well.
14 The last one is probably the most
15 complicated. It comes under the heading that
16 "nothing is easy," or "everything gets a little
17 complex in this business." And that has to do
18 with the interaction between the resource adequacy
19 requirement, which this state is going to adopt
20 very soon, and the renewable portfolio standards,
21 which of course you folks understand very, very
22 well.
23 These two things clash. They clash in
24 the following way. When you have a resource
25 adequacy requirement, each resource that a load

1 serving entity procures for the purpose of meeting
2 its requirement has a value attached to it in
3 terms of the megawatts it contributes at the time
4 of the system peak.
5 Now I'm not going to get into the
6 definitions, because there's plenty of devil in
7 the details about what I mean by system peak, etc.
8 But generally speaking, a year ahead, a load
9 serving entity has to demonstrate they have enough
10 resources to adequately meet their load, simple
11 enough.
12 The problem is that when you get to
13 intermittent resources -- and we can start with
14 hydro and work all the way over to other resources
15 such as solar and wind, which fall in the
16 renewable camp -- you have to detach or devalue
17 some of those nameplate megawatts for those
18 resources into something which represents how many
19 megawatts they contribute at the time of the peak.
20 Now, if we didn't have a resource
21 adequacy requirement, this Commission and other
22 bodies could talk about a 20 percent RPS, a 25
23 percent RPS, a 35 percent RPS, and really not
24 worry too much about what the cost consequences
25 might be. Because you could sort of walk around

1 that and say "well, you know, they might be high
2 they might be low, but we'll take care of that
3 later on."
4 With a resource adequacy requirement you
5 can't do that anymore, because it becomes
6 numerical. 100 megawatts of wind might be 30
7 megawatts at time of peak. And if the load
8 serving entity that has the ownership of that
9 capacity is only going to count, let's say the 30
10 percent at the time of the peak, then they have to
11 make up from other resources, all right, the
12 megawatts necessary to meet that 15 percent
13 reserve margin above their forecasted peak load.
14 What am I trying to say? If you jump a
15 RPS goal from 20 to 35 percent let's say, for
16 Edison, which I believe is page 43 of your report,
17 by the year 2020 I think it was. I wonder what
18 impact that's going to have on the ratepayers
19 across the state for the other load-serving
20 entities, they're going to have the same
21 obligation.
22 And here's what I'm trying to tell you.
23 Can this Commission take a look at what the
24 potential cost impacts of that might be? And I
25 think it can, I think you have the staff that's

able to do that. Because what you basically need to do is make some assumptions about what the mixes of the renewables that the load-serving entities might have, and you have some scenarios around that.

It might be 50 percent wind, 20 percent solar, whatever numbers you'd like to attach, and use some sensitivity there. Not a lot, just a little bit. And then say if you had that 20 percent or 30 percent or 35 percent renewable portfolio inside this load-serving entity, in order for them to meet their resource adequacy requirements, they're going to have to have a paper reserve margin.

And what I mean by a paper reserve margin is the old traditional way of how we used to calculate it, nameplate grading relative to load, of something like 35 percent, 40 percent, much higher than what we're traditionally used to thinking about as a reserve margin. That's going to have some cost.

If you want to make my members terribly happy, you keep those RPS ratios as high as possible. I have wind producers that are going to be happy, I have aging power plant owners that are

1 going to be happy. And I have builders of new
2 power plants that are going to be also happy.
3 But I don't think the consumers are
4 going to be too happy when they see the bill. I
5 think you ought to highlight that fact ,I don't
6 think you have to solve the problem. A lot of
7 people who I explain this to, they listen to what
8 I have to say and say "well that's anti-
9 renewable." It's not, far from it.
10 What' I'm trying to do is think ahead so
11 that we don't end up in a situation where we have
12 to backpedal a whole bunch, where we have to back
13 down on a renewable portfolio standards, or change
14 our resource adequacy requirement because
15 politically it suddenly became too hot, we didn't
16 know this interaction was going to happen.
17 I think the California Energy Commission
18 is well suited to do this kind of analysis, and I
19 think it would be a path breaking thing, I think
20 it would lead the nation in terms looking at it
21 elsewhere, and it allows for some sober
22 conversation about what's the appropriate level
23 that any let's say state or society is willing to
24 accept in terms of renewables. I don't think the
25 sky's the limit, I don't think it's 100 percent

1 renewables.

2 But I see other states following the

3 same lead that you're doing right now. In Oregon

4 for example they've set some pretty lofty targets.

5 Loftier than even here, but no more lofty I

6 suppose than you're proposing for Edison let's say

7 in the out years. I just wonder what the great

8 impact is going to be on consumers, what kind of

9 consumer backlash there's going to be when the

10 bills show up.

11 So I would just encourage you to take a

12 close look at that, and maybe I can take some

13 questions to sort of clarify that little point

14 that I just brought up.

15 COMMISSIONER GEESMAN: Let me say that

16 we do intend to make the costs of integrating

17 renewables, and particularly intermittent

18 renewables, into our electricity system a primary

19 focus of our '05 cycle. We have quite a bit of

20 work underway now to try and key that issue up for

21 hearing next spring and into the summer. So I

22 think there's a lot of discussion of that that you

23 can anticipate happening next year.

24 But I guess I would raise the cautionary

25 note that you may be assuming more about the RPS

1 program than we presently know, particularly as it
2 relates to the mix of resources brought into the
3 RPS program. And probably more importantly, the
4 extent to which our renewable goals are driven by
5 energy considerations, or the extent to which
6 they're driven by capacity considerations.
7 I would suggest that the way the statute
8 is structured, and arguably the economic incentive
9 on the utilities, although that remains to be
10 seen, is to focus on the energy side of the
11 equation. And until we've gone through I think
12 several iterations of solicitation I don't think
13 you're going to have a particularly good feel for
14 what types of resources are actually being put
15 under contract.
16 To simplify, I would guess that if most
17 of the resources looked like geothermal, and are
18 contacted for, because of their capacity benefits
19 to the utilities, then I think you're going to
20 need to conduct an evaluation of the extent to
21 which that nominal capacity needs to be discounted
22 for reality.
23 If most of the mix, on the other hand,
24 is wind, I'm not certain how much of that is
25 actually going to be reflected in meeting the

1 utility's capacity needs. That's a subject of
2 quite a bit of debate now, as to what capacity
3 credit to afford wind.
4 MR. ACKERMAN: I think it will be
5 answered very quickly. Because the resource
6 adequacy requirement order, which will come out
7 soon, might not have the number that I'm talking
8 about for let's say wind or geothermal, but we are
9 going to have workshops which will have to be
10 resolved before September 30th of 2005.
11 So I believe that, for better or for
12 worse, we are going to have numbers that the load
13 serving entities are going to have to apply to
14 each of those resources. And of course, since
15 they're paying for those resources, they want to
16 count them to the maximum extent possible for
17 capacity.
18 But if they see that they're after the
19 discounting takes place that they're way short of
20 their reserve margin obligation for a year ahead,
21 then they have to go out and buy more capacity --
22 thermal, renewable, or whatever, and there's
23 nobody who has the say.
24 I guess what I'm saying is, because we
25 have a resource adequacy requirement the actual

1 numerical value is going to be specified. We're
2 going to come to some number.
3 COMMISSIONER GEESMAN: And you think
4 that what will evolve is the utility under RPS
5 being required to pay, let's say a 100 percent
6 nameplate capacity value for a wind farm, and only
7 receive a 25 percent real contribution to
8 capacity?
9 MR. ACKERMAN: Yes.
10 COMMISSIONER GEESMAN: Why do you think
11 that that capacity payment won't be discounted
12 from the very outset to whatever the expected
13 capacity from the wind farm is likely to be? What
14 is it about the RPS program that you think --
15 MR. ACKERMAN: It's just the goal of the
16 target has to be established, you establish a
17 target for RPS --
18 COMMISSIONER GEESMAN: Which is
19 expressed in kilowatt hours.
20 MR. ACKERMAN: Okay, but --
21 COMMISSIONER GEESMAN: It's a sales
22 goal.
23 MR. ACKERMAN: But it's a percentage --
24 COMMISSIONER GEESMAN: Of sales.
25 MR. ACKERMAN: Okay. and I realize it's

1 not a percentage of capacity, it's a percentage of
2 sales. And in order to achieve that you have to
3 have, you know, purchased the energy, right. And
4 at the same time you're not going to purchase
5 energy from two different sources or duplicate the
6 energy purchases. If you have more and more
7 coming from renewable you have less and less
8 coming from thermal.
9 Now, that's part one. Part two is I now
10 have a resource adequacy requirement I have to
11 meet. That's the second part. So, I have this
12 energy coming from renewables and I have to
13 quantify now what that contributes to my time and
14 peak load. And now that I'm buying less thermal
15 energy I have to figure out exactly what my
16 resource adequacy requirement, am I meeting my
17 load plus reserve requirement given the discount I
18 apply to all my resources.
19 Not just renewables. It will be applied
20 to, hydro will be applied to all thermal resources
21 as well as appropriate. So it's not an
22 endorsement for thermal versus renewable. But it
23 does lead to the instance where, as you increase
24 the RPS, I think -- and this is what I'd like your
25 staff to investigate -- I think it puts more

1 pressure on, I think it means that the load
2 serving entity is going to have to buy more
3 thermal resources in order to meet its RAR
4 requirement, while they're meeting a higher and
5 higher RPS target as well.
6 And that's what I'd like you to look at.
7 Because, if you don't look at it, and it happens,
8 and it turns out that consumers are taking on more
9 costs than they can bear, then that's not an
10 outcome that we want. Like I said, if you really
11 want to make my members happy, sure, go ahead and
12 make the RPS standard as high as possible, it's
13 going to please everybody.
14 But I think I've learned a lesson in the
15 last go around. You forget the consumer you're
16 going to get your head handed to you real quick.
17 So, I think it's all our business to sort of look
18 at that very carefully and make sure we're
19 protecting the true objective of what all these
20 efforts are about.
21 Sure, my members are out there to trade
22 and make money wherever possible, but if we take
23 advantage of a situation that leads to a bad
24 outcome, and we know it ahead of time and didn't
25 say anything, shame on us.

1 COMMISSIONER GEESMAN: Well, we long ago
2 abandoned the standard of trying to make people
3 happy, so I think you raise a good point, and we
4 will look at it.
5 MR. ACKERMAN: And I can't think of a
6 better place for it to be considered in that
7 regard. Thank you.
8 COMMISSIONER GEESMAN: Thank you Gary.
9 Commissioner Boyd?
10 COMMISSIONER BOYD: I don't have any
11 questions. It's just, I really enjoy these
12 colloquies because it reminds me of things. One
13 thing it reminds me of is the caprice of mother
14 nature, and how that's the biggest player of all
15 in this particular arena. She killed us a couple
16 of years ago, she was kind to us this year. Your
17 point is right on, we skated through, we rolled
18 the dice and won for a change.
19 Which gets you to your subject of risk.
20 And recognition of risk leads to, I mean,
21 meaningful people that talk about risk avoidance,
22 leads them to talking about, I call it insurance.
23 Resource adequacy is maybe a down payment on
24 insurance. And you got to the question that
25 everybody doesn't like to talk about, cost and who

1 pays and how much. And I guess we're still
2 struggling with it.
3 And now you bring up a potential
4 collision between getting that insurance
5 straightened out and other objectives, other
6 social if not civil objectives that we try to
7 pursue, i.e. renewables. So --. It's a tough
8 one, and it's a good point, and I hope the staff's
9 up to it.
10 MR. ACKERMAN: Good, ball's in your
11 court.
12 COMMISSIONER GEESMAN: Commissioner
13 Pfannensteil?
14 COMMISSIONER PFANNENSTEIL: I have no
15 questions, but thank you for this discussion.
16 COMMISSIONER GEESMAN: Jack Pigott from
17 Calpine.
18 MR. PIGOTT: Good morning. It's always
19 tough to come up here after Gary. I had several
20 points, and actually some of them, he gave me some
21 ideas as the last conversation was going on.
22 My first point though, it's on page 16
23 of the draft document that I have here. And there
24 is a reference to the, really the second
25 paragraph, the first sentence, it says

1 "California's newer combined cycles are operating
2 below their design levels which significantly
3 reduces their efficiency and increases their
4 emissions."
5 And that sort of carries on a theme that
6 was in the draft aging power plant report that
7 Calpine submitted written comments to, and --
8 COMMISSIONER GEESMAN: And which we're
9 still trying to review. I took a note of some of
10 your written comments when I saw them a couple of
11 weeks ago, and our staff is trying to prepare a
12 response.
13 MR. PIGOTT: Great, because this
14 sentence implies, or states, that the new combined
15 cycle units are operating at significantly less
16 efficiency and greater emissions and that's just
17 not the case.
18 In 2003 I went back and looked at the
19 GADS data, and for our three big combined cycle
20 units in California -- that's Sutter, Los Medanos,
21 and Delta Energy Centers -- they all operated at
22 better than 7,300 heat rate on average for the
23 entire season, and they didn't operate baseload,
24 they were cycled. And so --
25 COMMISSIONER GEESMAN: Have you

1 submitted that data to us?
2 MR. PIGOTT: I did -- I didn't submit
3 the data but I summarized it, just, I believe, as
4 I said.
5 COMMISSIONER GEESMAN: Could you provide
6 us plant by plant data for '03? Or are you
7 uncomfortable doing that?
8 MR. PIGOTT: Well, I'm uncomfortable
9 committing to it right here, but I can ask.
10 COMMISSIONER GEESMAN: Okay. I guess
11 what I would ask you to think about would be what
12 percentage of the year did each plant operate, and
13 what was its attended heat rate.
14 MR. PIGOTT: Okay.
15 COMMISSIONER GEESMAN: And if you can't
16 do that on a plant by plant basis, if you did it
17 on an aggregated basis -- I'm just looking for
18 some numbers to try and compare against what was
19 in that draft staff white paper.
20 MR. PIGOTT: Okay, great. And I know
21 that the aging power plants don't operate much
22 here, but it's interesting that there are actually
23 combined cycle units in the southeast that don't
24 operate very often either, and their heat rates
25 were still significantly better than the report

1 seemed to suggest.

2 COMMISSIONER GEESMAN: And I did note,

3 that point was in your written comments, and

4 that's what we're currently going through and

5 trying to come up with, I think a better

6 evaluation than we were able to provide in that

7 staff white paper.

8 MR. PIGOTT: Okay, great. My next

9 point, with regard to the recommendation that

10 aging power plants be, receive some sort of

11 capacity payment or RMR contract, I think we agree

12 that in emergency situations those facilities are

13 necessary, but the trick is to not discourage the

14 development of new resources. And

15 although there are all of these proceedings going

16 on, one thing that we do look at when we're

17 considering moving forward with a project is what

18 the current prices of electricity are. And if a

19 large number of aging power plants are contracted,

20 that could cap the prices at whatever their

21 incremental, or their marginal heat rates are, and

22 I don't think that that's an outcome that you

23 would necessarily want.

24 COMMISSIONER GEESMAN: Yes, let me

25 interrupt you there, Jack, because I had said some

1 things at the independent energy producers meeting
2 earlier this week, and I don't think you were
3 there at the time.
4 I think that the Committee draft
5 reflects a preference for relying on market
6 mechanisms for establishing the capacity value of
7 those aging plants, and that it rejected some of
8 the suggestions that we'd received earlier for an
9 expanded RMR instrument or a replay of handing the
10 checkbook to the state Department of Water
11 Resources, or someone without a direct economic
12 stake in the decision to decide which plants
13 should operate and how large the checks should be
14 for keeping those plants in operation.
15 We have focused on extending the
16 authority of the utilities to enter into longer
17 than one year contracts because of our belief that
18 that will bring some economic discipline to the
19 question, and more importantly the development of
20 a capacity market, because we believe that that
21 will actually bring a still greater transparent
22 level of calculus to the capacity value of those
23 plants.
24 So, the Committee draft I think reflects
25 a pretty strong apprehension about someone without

1 a direct economic stake in the outcome making
2 those decisions. And as we said to Gary, we are
3 quite sensitive about not discouraging the
4 development of new resources.
5 MR. PIGOTT: Okay. My next point is on
6 a totally different subject. I believe it was in
7 the transmission section. You recommended joint
8 transmission study groups for Tehachapi and the
9 Imperial Valley geothermal facilities. And I know
10 that, at one of the workshops I had mentioned that
11 you should also consider other renewable areas, in
12 Calpine's case it would be the Glass Mountain
13 area.
14 Both of these areas that are recommended
15 are of course the largest in the state, but they
16 are both in southern California, ours is in
17 northern California and we cater to a different
18 market.
19 And, you know, it's interesting, we've
20 looked at the transmission situation up there, and
21 there are more, I'd say, institutional barriers
22 than necessarily physical constraints.
23 And in one case, in one version of
24 PG&E's transmission study for bringing renewables
25 to market they propose a 100 mile transmission

1 line that went from Glass Mountain down to the
2 Cottonwood substation, and I've heard cost
3 estimates for that of about $170 million, and it
4 makes it tough for the first 50 megawatt project
5 to come online.
6 The other scheme, which we had
7 originally planned for that area, is to connect to
8 the Bonneville line that runs between Alturas and
9 Mohin (sp). And if you look at the cost of
10 bringing power from there down to PG&E, it turns
11 out that we touch three different systems in the
12 first 30 miles that amount to, on the order of $10
13 a megawatt, just to bring the power to Cobb. So
14 it's something that, I think RTO West, or whatever
15 it's called now, was originally designed to
16 address, but it doesn't seem to be moving forward.
17 And I think that's an area where the
18 Commission could become involved, and in
19 particular you've indicated a desire to get closer
20 to the Pacific Northwest utilities and to try and
21 work out arrangements with them, and this is a
22 situation where, I think, that would be helpful.
23 COMMISSIONER GEESMAN: I think that's a
24 good point, and I think that, in terms of trying
25 to prioritize our finite staff resources, as we

1 get a better feel for the timing of construction
2 in that KGRA, I think we'd be prepared to add that
3 to the transmission planning process, and
4 prioritize accordingly.
5 MR. PIGOTT: Well, it's sort of a
6 chicken and egg, we need to --
7 COMMISSIONER GEESMAN: Yes, I
8 understand, I understand.
9 MR. PIGOTT: The other issue is one that
10 Gary Ackerman raised, and particularly the issue
11 of intermittent resources and what the ultimate
12 outcome of the RPS solicitations will be.
13 As you know, the production tax credit
14 for wind looks like it's going to be extended, and
15 at least currently it's not going to be extended
16 to other renewables. And given the way that
17 renewables are evaluated currently, it's going to
18 be very hard for other resources to compete,
19 unless a very high value is given to capacity.
20 And, it's just something to consider,
21 but with all of the various subsidies and benefits
22 that wind now has, it's going to be very tough for
23 other resources to compete.
24 COMMISSIONER GEESMAN: I read in the
25 newspaper that you are such a political juggernaut

that I would expect you'd be successful in getting that production tax credit applied to geothermal quite shortly. Is that assumption wrong?

MR. PIGOTT: It's funny what you can read in the newspapers.

COMMISSIONER GEESMAN: Yes, it is.

MR. PIGOTT: Those are all my comments.

COMMISSIONER GEESMAN: Jack, I appreciate it. Commissioner Boyd?

COMMISSIONER BOYD: Thank you, no comment.

COMMISSIONER GEESMAN: Commissioner Pfannensteil?

COMMISSIONER PFANNENSTEIL: No thank you.

COMMISSIONER GEESMAN: Thank you very much.

MR. PIGOTT: Thank you.

COMMISSIONER GEESMAN: Marcel Hawiger from TURN.

MR. HAWIGER: Hello. I'm Marcel Hawiger, I'm staff attorney with the Utility Reform Network, and good morning Commissioner Geesman, Commissioner Boyd, we have met previously, it's a pleasure to see you in San

1 Francisco. And Commissioner Pfannensteil, a
2 pleasure to meet you.
3 TURN has filed comments on the draft
4 report on issues concerning transmission planning,
5 and I'm not going to address those issues at all,
6 I'm not the person who worked on that, and
7 hopefully, if we still have any outstanding issues
8 with the final report we will address those in
9 writing by October 13th, as you requested.
10 COMMISSIONER GEESMAN: Can I interrupt
11 you there?
12 MR. HAWIGER: Certainly.
13 COMMISSIONER GEESMAN: And I had this
14 conversation with Mike Florio a couple of days
15 ago. I've not read your comments on the draft
16 report, but if they don't address this question,
17 I'd like to ask that you address it in your
18 subsequent written comments.
19 I went through what you filed on the
20 staff white paper, specifically about utilizing a
21 social discount rate in transmission planning.
22 And I focused on the discussion that your written
23 comment had on why one would use a social discount
24 rate for building or appliance standards.
25 And the question I pose to TURN, which I

1 did pose to Mr. Florio earlier in the week is
2 explain to us, as clearly as you can, why you
3 don't think that same analysis, in those same
4 words, should apply to transmission planning.
5 Because I found them very compelling.
6 MR. HAWIGER: I will certainly take that
7 back.
8 COMMISSIONER GEESMAN: Thank you.
9 MR. HAWIGER: And I think you were
10 correct, the comments I mentioned were comments on
11 the white paper filed on September 2nd.
12 COMMISSIONER GEESMAN: Okay, then I have
13 reviewed those.
14 MR. HAWIGER: What I would like to
15 address is actually the portion of the report that
16 is not one of the three major areas, but the
17 section concerning demand response on pages 16
18 through 18.
19 And I address them because I am the
20 attorney who's been working on the demand response
21 proceeding being conducted basically by the PUC as
22 well as the Energy Commission, on Rulemaking 02-
23 06-001.
24 And I am extremely concerned about the
25 fundamental recommendation in your report on page

1 19, and I think in the Executive Summary,
2 recommending a full scale rollout of advanced
3 metering systems for smaller customers. And I
4 will be present tomorrow when this issue is being
5 addressed in detail at a joint agency hearing, so
6 I'll try not to bore you with all the factual
7 details, but just to summarize our concern.
8 And before I do that, let me actually
9 just backtrack and address an issue raised by
10 Commissioner Pfannensteil in discussion with Ms.
11 Turnbull from the League of Women Voters -- how do
12 customers respond, residential customers?
13 And I think the first thing we need to
14 be clear on is the issue of customer behavior in
15 the residential sector, and can you affect that by
16 different types of rates, and specifically can you
17 affect it better by time of use rates versus some
18 sort of dynamic pricing, whether it's critical
19 peak pricing or hourly pricing.
20 And I think it's almost self-evident,
21 and certainly our discussions with customers and I
22 think some of the research, indicates that a
23 residential customer who knows that day in and day
24 out they're going to be charged more from 12 to 6
25 or 2 to 8 for electricity, and has received a lot

1 of education -- because frankly they don't
2 understand anything about energy pricing at the
3 moment, they understand more now than they did
4 three years ago, but it's still minimal -- but
5 that customer receives a lot of public education
6 and notices about that will change their behavior.
7 They'll stop using things like the
8 dishwasher or the regular washing machine during
9 those afternoon hours. They're not going to turn
10 off their refrigerator, and they may or may not
11 turn down their air conditioners, that's an open
12 question, but, you know, they'll change their
13 behavior.
14 If you have critical peak pricing on 15
15 days a year with day ahead notification, or even
16 hourly pricing, are those residential customers
17 going to sit around and say "well, I just learned
18 this today, tomorrow I'm going to go around and
19 change my life" or "I'm going to look at the
20 website from hour to hour each day." Frankly, I"m
21 extremely skeptical that's going to happen.
22 And certainly not in any sustained
23 fashion. And why is this important? It's
24 important because we care about that issue of
25 cost. And you can get a time of use rate by

1 adding a, theoretically a $25 clip-on to existing
2 meters that changes the consumption meter from
3 registering just electricity for the whole month
4 to having three intervals or two intervals that it
5 registers.
6 And you don't need any communications
7 equipment, you don't need fancy new meters. You
8 can do it fairly cheaply, although when the
9 utility does it and adds everything else it still
10 comes out to be a lot more than $25.
11 I think PG&E, right now I'm not exactly
12 sure, but I think if you want to sign on to a
13 residential time of use rate they'll charge you
14 about $250 for the privilege. It's too high,
15 frankly, but that's what they charge you.
16 Now, if you want to add on to TOU at
17 critical peak pricing, as recommended by the
18 Energy Commission in the rulemaking and the
19 advanced metering rulemaking, where 15 days out of
20 the year max you'll have much higher prices than
21 supposedly for some benefit, right away you're
22 talking about an interval meter that you need and
23 you need at least one way communications equipment
24 to notify that meter that that critical peak day
25 is occurring.

1 The cost, well, you know, that's a
2 really good question, what will the cost be?
3 There are some estimates that say you can do that
4 for $150 to $200. Those estimates make various
5 assumptions about communications equipment that
6 may or may not turn out to be true. Those are
7 very theoretical numbers that, even if true,
8 that's, we add a huge cost to the entire utility
9 system. But frankly I don't think those are true
10 numbers at all. Those are numbers based on some
11 vendor promises.
12 You look at the actual installation
13 costs, well, you know, for the 22,000 meters
14 purchased with the $35 million from the Energy
15 Commission for the large customers, which are
16 admittedly not the kind of meters residential
17 customers need, but it's certainly the kind of
18 hydrotechnology that has been recommended by
19 Commissioner Peevey as necessary to install.
20 Well, you know, that cost about $1,500
21 per customer. In theory, when you take $35
22 million divided by 22,000 meters installed.
23 Except in practice it was really about $2,000,
24 because Edison didn't spend another $10 million on
25 that program that they came back and recovered in

1 their general rate case. That was on top of the
2 Energy Commission contract.
3 So, you know, you've got a range there
4 from $200 to $2,000, and we're very curious as to
5 what that actual cost will be. So that's sort of
6 an aside.
7 But my point really, with respect to
8 this report is, what is the basis for recommending
9 a full scale of rollout? And as near as I can
10 tell you discuss two things. You discuss the
11 statewide pricing pilot, and you discuss the large
12 customer experience.
13 And I would say that the report is
14 really factually deficient in the discussion about
15 the statewide pricing pilot. And certainly it
16 doesn't lead to a conclusion that it justifies
17 full-scale rollout.
18 Now this is a subject that will be
19 discussed at length tomorrow, but I'm just going
20 to summarize. Our understanding of the results of
21 the statewide pricing pilot indicate that,
22 basically it showed that residential elasticity is
23 lower than the lowest range that was assumed,
24 predicted, by the Energy Commission a couple of
25 years ago when you did, I think the SB 1976

1 report.

2 And that one could forecast based on the

3 elasticity numbers at demand reduction of about

4 1,200 megawatts from the residential sector, fully

5 half, almost half of that is from zones three and

6 four, climate zones three and four.

7 Now, that makes sense, climate zones

8 three and four are the hot zones where you've got

9 a lot of air conditioning load. Less than 40

10 percent, almost exactly 40 percent of the

11 investor-owned utilities' residential customers

12 who live in those two zones.

13 We can see a potential case for rollout

14 in those areas. And, you know, whether it's full

15 or partial, it gets to the issue of the benefits

16 of having metering everywhere in a contiguous

17 geographical area and thus having reduced meter

18 reading costs versus other issues. So, it may

19 make some sense.

20 But it certainly doesn't make sense to

21 have advanced meters installed in the coastal

22 climate zones in California. There's also

23 significant gaps in the data because these are

24 data from the 2003 pilot. Most significantly,

25 they were unable to compare the results from the

1 critical peak pricing results versus just the TOU,
2 time of use rate results.
3 And, you know, we've done some analysis
4 that indicates that there may not be -- well, let
5 me be frank. The analysis shows that if you're
6 looking at just the demand response it's totally
7 not cost-effective. You don't get enough demand
8 response in California from residential customers
9 to make up for the infrastructure costs.
10 Now, you may get enough in some areas.
11 But basically everyone's saying "well, but you get
12 all these other benefits." Reduced meter reading
13 costs and other social costs, which is
14 interesting, but the bottom line is that there's
15 some vision of what will be the future benefits to
16 customers from value-added services from having
17 advanced meters and two-way communications for all
18 residential customers.
19 And that vision has very little to do
20 with demand response, so we are concerned. Maybe
21 that vision is justified, maybe not, but spending
22 billions of dollars -- because we're looking at,
23 you know, at least a two billion dollar investment
24 for full rollout, assuming the $200 cost. It may
25 not be warranted, and certainly I'm not sure

1 residential customers want that vision for that
2 price.
3 So, I guess, more specifically you note
4 in your report that customers had, 80 percent of
5 customers reduced their bills, and that's a page
6 18. The average bill reduction was one to two
7 dollars per month per customer. Even if that's
8 true, that barely covers their cost of, if you
9 assume $200 per customer and make some very gross
10 assumptions about how two billion of investment
11 translates into monthly utility revenue
12 requirement, that's about $2 per month. it's
13 about equal, and that's assuming what I think is
14 the best case scenario for the costs.
15 Second point, second issue in the report
16 is the experience of large customers, which is
17 basically summarized in one paragraph on page 18,
18 and says, you know, "we spent $35 million" --
19 actually I'm not sure the actual quantifies of the
20 amount in the report -- but to install 2,000
21 meters for all customers greater than 200 KW. And
22 what did we get out of that? We got 25 megawatts
23 in price responsive load reduction.
24 Frankly, I think it should be an outrage
25 for anybody to recommend going ahead with two

1 billion dollar additional investment for small
2 customers when those customers who in theory and -
3 - pretty much you read the studies and they say
4 "well, most load response should be from larger
5 customers, they have more, the incentive, they
6 know their energy use, etc. etc."
7 The Energy Commission has funded a whole
8 bunch of studies through the PIER money on
9 commercial building temperature response. Most of
10 those, they're not all above 200 KW customers.
11 The commercial buildings, some of them certainly
12 fall below that, some of them are part of chains
13 that have, you know, an aggregate over 200 KW,
14 those that could be teased out.
15 But, anyway, the bottom line is those
16 customers have not given us anything. Isn't it
17 incumbent before we spend another, you know, few
18 billion dollars on an experiment in California to
19 at least figure out why we haven't gotten demand
20 response from those meters we've already paid for.
21 To do a pilot program, to do something to figure
22 out, what's the issue here.
23 And, frankly, you know, we know what the
24 issue is. In the WG 2, working group 2
25 established in the advanced metering rulemaking,

all the large customers said "no way no how." We're going to pay more if we have realtime pricing, we don't want to pay more. And that's where it went.

So now, well, let's put it all on the residential customers, because they don't have the political will to say "no way no how" to some of the dynamic tariff. You know, it's a reality, but at least maybe we should figure out some pilot programs. Right now, we have a -- the 25 megawatts comes from the voluntary critical peak pricing program.

So, we've done the statewide pricing pilot, hey let's do a pilot with large customers at a minimum, to see whether we can get demand response.

So, that said, I think, to me those two examples do not justify a full-scale rollout. There's a lot of issues about potential costs. I think those need to be addressed first, and I think there may be a case for partial rollout. But even that, it's not clear that a partial rollout of technology will bee better than using, having some mandatory time of use rates in those areas.

1 And so I would urge you, in closing,
2 either to change the factual conclusions and
3 either justify or explain why there is this
4 recommendation, but hopefully to eliminate the
5 recommendation for a full-scale rollout, and
6 instead acknowledge that there needs to be
7 additional study from the 2004 SPP results, that
8 there needs to be better data on actual costs than
9 currently exists, and there need to be some pilot
10 programs implemented for the large customers
11 before one goes on to send billions of dollars on
12 the residential sector. Thank you very much.
13 COMMISSIONER GEESMAN: Let me respond by
14 acknowledging -- and I think the word full-scale
15 may lack the precision that we actually intend to
16 be associated with the recommendation. And the
17 rational prioritization that we would expect the
18 state's program to have.
19 I think you misread that section of the
20 report though, because I think there is a pretty
21 clear acknowledgment that in the near term the
22 expectation is pretty clear that most of the
23 contribution will come from the large customer. I
24 believe you make a very good point as it relates
25 to the meters that the taxpayers have already paid

1 for, and the inadequate benefit that we've
2 harvested yet from those meters.
3 I think you also provide a pretty clear
4 diagnosis as to why, and it has been inadequate
5 tariff support. And I think our recommendation is
6 at least intended, and perhaps needed to be
7 sharpened, to emphasize the necessity of action on
8 the tariff side of the equation as well.
9 I don't disagree with you that we ought
10 not to be trying to get Grandma in the Richmond
11 district to try and turn off her refrigerator. My
12 belief is that this is an air conditioning driven
13 problem, and air conditioning zones -- both among
14 residential and commercial customers -- ought to
15 be saturated. And I think we ought to proceed
16 rationally in doing that.
17 I also believe that we ought to be well
18 informed by the data that has been collected, and
19 continue to direct our program based on the data
20 that we can collect. But I don't think what's
21 lacking here is an absence of study. I think
22 what's lacking is an absence of action.
23 We have looked at this problem for not
24 just the last couple of years but I think, as
25 Commissioner Pfannensteil will share with you,

1 between her recollection and my recollection at
2 least the last 30 years. I believe that what is
3 motivating the forcefulness of our recommendation
4 is the proximity by which we have skated near the
5 edge of the cliff this past summer, and the
6 prospect that we face in 2005 and 2006 and
7 thereafter of sliding across that cliff.
8 It's our assessment, and I think most
9 observers would agree, that the fastest and
10 cheapest way to address that problem is through
11 demand response. And the alternative I submit to
12 you, is a much more expensive cross to bear, in
13 terms of either very substantial purchases from
14 Mr. Ackerman's members and others, some of whom
15 were demonized in the past as pirates or out-of-
16 state generators or whatever focus group tested
17 phrase best fit the accusation.
18 Or, rolling outages, which I think we
19 all acknowledge are exceptionally costly. So the
20 forcefulness of our recommendation is driven not
21 only by the data that has been collected, but also
22 by the problem that we're trying to avoid, and
23 it's a very real problem in our judgment that
24 looms very large in our immediate future.
25 Having said that, I do appreciate your

1 comments. I think we do need to go through our
2 draft and retune it to make it more clear where
3 some of those words are too vague and ambiguous,
4 but I wouldn't look to us to really change the
5 thrust of that basic recommendation.
6 Commissioner Boyd?
7 COMMISSIONER BOYD: Just one comment --
8 hello, Marcel, good to see you again -- it was the
9 League of Women Voters, not the League of
10 Conservation Voters. I saw them all fidgeting
11 over there.
12 (laughter)
13 MR. HAWIGER: My apologies.
14 COMMISSIONER BOYD: That's all.
15 COMMISSIONER GEESMAN: Commissioner
16 Pfannensteil?
17 COMMISSIONER PFANNENSTEIL: Well, I'm
18 looking forward to tomorrow. I think that the
19 discussion there will bring out some of what
20 you've raised, and perhaps a lot more.
21 But I do think -- two points, two
22 observations. One is that, actually I'm delighted
23 that we're really not so far apart, I think, in
24 terms of how we're looking at what we, maybe what
25 the first steps are. I think that we agree that

1 all customers, including residential customers,
2 will respond somewhat to prices, if the prices are
3 correct and if they're starting to see a
4 difference in electricity costs at different
5 times.
6 They can respond within their own
7 limited household ability. I think we're also
8 seeing that there are regional or locational
9 obvious benefits from trying to saturate, whether
10 it's probably air conditioning and probably in the
11 zones that you mentioned. There are places where
12 you can sort of see the cost-effectiveness being
13 quite a bit stronger than in other places.
14 And I think we can also agree that we
15 don't know enough yet about metering costs, and
16 that that's a very big concern as we talk about
17 full-scale rollout, saturation, however you want
18 to characterize it.
19 Another point on which we agree is the
20 fact that there really is -- and I think
21 Commissioner Geesman just said it -- there really
22 is a tariff working. I look at the whole world
23 for rate designs, I think there's a rate design
24 issue here for both residential and larger
25 customers that we really have to be clear on if we

1 really are expecting to get the kind of response
2 that this whole program would be about.
3 So I'm encouraged. I think that the way
4 it was characterized in this report, you know, I
5 certainly was comfortable with. There may be some
6 more clarity when we're referring to some
7 characterization, but I think the point being we
8 need to start moving forward, actually capturing
9 that demand response.
10 And I think that we are, between the
11 statewide pricing pilot, the other information
12 that's out there, and I'm hoping that tomorrow's
13 workshop will start bringing both a synthesis to
14 what we do know and a clarity to what we don't
15 know, so that we can start acting on this.
16 But thank you very much for your
17 comments.
18 MR. HAWIGER: Thank you. Can I make two
19 observations in response to what Commissioner
20 Geesman said? It sounds to me like you're saying
21 yes we are concerned about demand response. My
22 point would be if that's really the concern, we're
23 proposing a price responsive program that's
24 voluntary that customers could respond or not.
25 There's already the ability to do direct

load control on air conditioners with very minimal technology costs, and that could be pushed and it could be required and it could provide the demand response. But nobody's talking about that.

COMMISSIONER GEESMAN: Will it achieve a 5 percent reduction in peak demand by the year 2007?

MR. HAWIGER: It can achieve as much reduction as one basically wants, because you can install as many air conditioner cyclers as there are air conditioners and cycle them on 100 percent, 50 percent, whatever percentage you want, to achieve the reduction you want.

I mean, you could turn off all the air conditioners, but we wouldn't want that, we don't want to kill people. But you could achieve a lot more than you could with any price responsive program.

But people are talking in all these workshops about price signals, not about achieving maximum demand response.

COMMISSIONER GEESMAN: Are you going to defend the current hide the ball pricing system?

MR. HAWIGER: I'm not defending it, I think it presents a real challenge in constructing

1 the realtime pricing tariff that has been one of
2 the challenges for the large customers in creating
3 a tariff.
4 COMMISSIONER GEESMAN: It also creates a
5 real challenge in constructing our electricity
6 supply system. We've tied ourselves in knots for
7 more than 30 years in order to meet these needle
8 peaks, which with the growing population choosing
9 to reside in interior parts of the state where
10 there's a higher air conditioning need is an
11 increasingly insurmountable barrier to meeting our
12 reliability requirements.
13 MR. HAWIGER: I think there are two
14 issues there, reliability and price. The current
15 market does not have needle prices in peak hours,
16 the current market is 9 percent hedged, even in
17 peak load. And peak prices are not as, you know,
18 ten times higher than shoulder or off-peak prices.
19 But I'm not going to -- that's an
20 interesting, that's a big issue, but it's not,
21 it's an interim issue, well, we'll see what
22 happens down the line.
23 But certainly I think the goal of all
24 the long-term contracting is to reduce that price
25 differential, and it has happened. But I don't

1 want to defend it.

2 I do want to say though that there have

3 been a lot of studies, not as many studies on

4 residential customers. And the studies that are

5 out there, an the market research that's out there

6 actually doesn't support the contention that

7 customers respond to prices, it supports the

8 contention that customers will do things if they

9 believe their bills will be lower.

10 And they do things because residential

11 customers, frankly, do things out of the goodness

12 of their hearts if they think it helps the state

13 and their community. And those are very different

14 motivations than motivations based on knowing an

15 hourly or peak price for wholesale energy. Thank

16 you.

17 COMMISSIONER GEESMAN: Thank you very

18 much, Marcel. Don Smith, how are you?

19 MR. SMITH: I have a few comments on

20 what was said by Mr. Ackerman and Mr. Pigott.

21 Regarding the issue of, as Ackerman put it, he saw

22 a clash between the renewable portfolio standard

23 and resource adequacy. I don't see it that way.

24 There might be, to some degree,

25 tradeoffs involving engineering and economics, but

1 I don't see them in any way as mutually exclusive.
2 One of his objections was that now the
3 reserve margin would be a much higher number than
4 traditional. Well, this is strictly a
5 definitional problem in that if you want to keep
6 numbers in the old range then you'd have to de-
7 range in some way intermittent renewables.
8 But regarding the economic costs, and
9 there are such costs, and they will get higher,
10 possibly exponentially at some really high
11 intermittent renewable penetration, which we
12 aren't anywhere near yet, but those issues are
13 being looked into by the California Wind Energy
14 Commission, funded by your Energy Commission, and
15 they're looking at three elements of intermittent
16 renewable potential problems or aspects requiring
17 a different approach to operating the grid.
18 One of them is the capacity value,
19 again, of intermittent renewables, and they are
20 using the effective load carrying capability to
21 try and deal with that and they are finding that
22 intermittent renewables do make it possible to not
23 build other capacity.
24 With wind they have approximately 25
25 percent of their nominal rating as a contribution,

as if they are perfectly reliable. With solar it's more like 80 or 90 percent, as you'd expect with the better fit to load.

The California Wind Energy Collaborative is also looking into ancillary services, costs of intermittent renewables, and trying to figure out how much the -- and the ISO is involved in this study too -- and they're working with each other to model the system and see what those amount to.

And a third thing they're examining is the -- our scheduling at the ISO, and of course with wind or solar there's the possibility you might have much less or more than you expected. And they're looking into whether or not that costs in extra costs for somebody, either the ISO or the person operating the renewable.

And what they found, on at least these last two elements, in the present situation they're essentially negligible, but it's pretty obvious as -- in fact, they're sort of like noise in the system, the up and down on an hourly or minute to minute basis of a wind or solar plant is such a tiny bit of variation compared to the variation in load and the variation in the, for instance if a large plant or a large liner or even

1 a tiny one breaks down or, at a certain time.
2 So there really isn't much of a problem
3 there, although in their study they'll move
4 towards testing of higher and higher penetrations
5 to find out when and if that would be a problem
6 that would make the system more expensive to run.
7 But another way that this is, to the
8 degree a problem might be sometime in the future,
9 the utilities, in conforming to the renewable
10 portfolio standard, have all set up ranking
11 methods for the bids of renewables. And although
12 they aren't, they're keeping all their information
13 confidential, although I'm on a procurement review
14 group, so I get to see some of this stuff.
15 And the utilities methods they've
16 developed are factoring in problems related to --
17 well, wind in particular. How well they fit the
18 load, and how much then, they're basically
19 penalizing an intermittent resource that comes on
20 when they don't need it and is not there when they
21 need it, so that is one element that, if wind in
22 particular, if it gets to be a larger and larger
23 percentage, and if in particular certain wind
24 areas are a poor fit, those potential contractible
25 sources will be in effect discriminated against

1 for either other renewables, intermittent or not,
2 or renewables such as, intermittent renewables
3 such as solar but with a better fit.
4 So at some point, in choosing the bids,
5 the utilities are already factoring in the problem
6 of intermittency and trying to reflect it.
7 And, a completely different reason, I
8 don't see this as a clash between renewables and
9 resource adequacy is the way the renewable
10 portfolio standard law was written, the utilities
11 are supposed to meet these percentage increases
12 every year, but if they're costs are higher than a
13 rate that's being set by a group here or at the
14 PUC, the market, as supposedly a proxy for market
15 rates, then the difference will be made up by
16 public goods funds, of which there is a set
17 amount, and if renewables became too expensive and
18 all those funds are used up, the utilities don't
19 have to meet, or can at least delay meeting the
20 RPS percentages.
21 So if it should happen that there's a
22 lot of wind penetration to the point where there
23 were problems, that then the utilities would
24 quantify that and not buy that, and then if they
25 had to buy other renewables that were considerably

1 more expensive, if the price got too high it's
2 automatically limited by this public goods charge,
3 at least as the law stands now.
4 And then, the speaker from Calpine
5 mentioned that the wind tax credit was just
6 passed, or if you read the WEA process release,
7 it's assumed that the President will sign it, but
8 they're extremely optimistic, and pointed out that
9 it wasn't passed from certain technologies, which
10 I agree is a bad thing and I don't understand the
11 power in Washington D.C., how wind was able to get
12 it and certain other renewables were not.
13 And since that PTC, which amounts to now
14 about 1.8 cents a kilowatt hour, was originally
15 calculated as supposed to balance out the
16 subsidies of other forms of energy, such as tax
17 breaks for fossil energy and R&D for nuclear. So
18 it logically should apply to all renewables, since
19 they're all going to reduce fossil and nuclear
20 use.
21 And I guess it's, I'm hoping, and I
22 think it's in another bill, that the PTC will be
23 extended to other renewables, such as biomass and
24 solar in the next few months.
25 But if that doesn't happen then I guess

1 California's in kind of a dilemma to in effect
2 give up some potential federal money in the belief
3 that it could be applied more equitably, which, I
4 don't think this is going to happen, or it would
5 be too logical.
6 And on one other thing, a much shorter
7 comment, on the issue of renewable trading credits
8 I do see potential problems with the out-of-state
9 situation. On the one hand, RPS law uses the term
10 over and over "in-state renewables", but then
11 certain lawyers are arguing this interstate
12 commerce argument for why California can't
13 discriminate.
14 I'm not a lawyer but I don't quite
15 understand, if that law were taken to its logical
16 extreme then any Californian could go out of state
17 or out of country and buy a polluting car and
18 bring it back and it would be a violation of
19 either that clause or NAFTA or something, so I
20 don't understand the legality of that and I'm just
21 assuming it could be argued against, but some
22 people want the credits.
23 But I think there's potential for abuses
24 similar to what happened with the BX and double
25 counting and mixing everything together in one

1 market where you don't really know where the
2 renewables were built, and whether they do have
3 benefits to in-state as far as employment or
4 cleaning up certain areas, etc. and the
5 environmental justice issues. And that's all I
6 have to say.
7 COMMISSIONER GEESMAN: Thank you, Don.
8 Let me ask you if you can dial back your memory,
9 probably at least a year and a half ago, ORA
10 submitted comments in the first phase of the RPS
11 proceeding that were reflected in the CPUC's
12 decision June of 2003 regarding your suggestion
13 that we review how we dispatch the existing gas
14 system in order to take advantage of its
15 flexibility and better bolster our increased
16 reliance on intermittent renewables.
17 Have you got had the opportunity to give
18 any additional thought to that or are you aware of
19 any published work or research that's gone on that
20 we might look to?
21 MR. SMITH: Well, at the latest meeting
22 of the Wind Energy Collaborative this issue came
23 up, although it was in the context of hydro
24 dispatchability, and it's a contentious issue
25 because you can set up a hydro dispatch, which you

1 could also do with a gas turbine peaker.
2 If you wanted to be dishonest -- I'm not
3 saying anybody's doing that -- but you could run
4 any sort of dispatchable peaker to either make
5 wind look a lot better or look a lot worse,
6 depending on whether you're running it when the
7 wind's there or isn't there.
8 Now, the models now being used and being
9 argued about at the Wind Energy Collaborative
10 either ignore hydro or dispatch it as if the wind
11 and solar and intermittents weren't there, which I
12 think is wrong, or they're trying to dispatch it,
13 other people, to after considering wind and solar
14 and then operating it that way.
15 And it happens that Southern California
16 Edison, their model can practically -- well, it
17 comes out, results with wind, only about half as
18 valuable per capacity as with model developed by
19 the CWEC. And I think, although they're still
20 going through their models and there's another
21 meeting next week, going through their models to
22 figure out why that is. But I suspect a
23 major part of it is this concept of how you
24 dispatch. And, anyway, that issue is being argued
25 about, as it should be. And it's also quite an

1 interesting aspect.

2 COMMISSIONER GEESMAN: Thank you.

3 Commissioner Boyd?

4 COMMISSIONER BOYD: No questions.

5 COMMISSIONER GEESMAN: Commissioner

6 Pfannensteil?

7 COMMISSIONER PFANNENSTEIL: None, thank

8 you.

9 COMMISSIONER GEESMAN: I'm out of blue

10 cards. Is there anybody else that cares to talk

11 to us today?

12 Okay, I want to thank you for your

13 participation. We may see some of you in San

14 Diego tomorrow, we may not. We may see some of

15 you in Sacramento on Friday, Los Angeles next

16 week, and Fresno next week. And if we don't see

17 you again, this will be in front of the full

18 Commission on November 3rd, and we'd invite your

19 participation there as well.

20 Thank you very much, we'll be adjourned.

21 (Thereupon the proceeding adjourned at 12:55 p.m.)

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CERTIFICATE OF REPORTER

I, JAMES RAMOS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 10th day of October, 2004.