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Exhibit 4006

OF THE

### STATE OF CALIFORNIA

ADMINISTRATIVE LAW JUDGE REGINA DEANGELIS, presiding

) EVIDENTIARY
) HEARING
)
Application of Southern California
Edison Company (U338E) for Approval
of the Results of Its 2013 Local
Capacity Requirements Request for
Offers for the Moorpark Sub-Area.
)

## CONFIDENTIAL

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Reported by: Thomas C. Brenneman, CSR No. 9554 Doris Huaman, CSR No. 10538 Carol A. Mendez, CSR No. 4330

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and therefore, they didn't respond to it?

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A There was a tremendous amount of outreach done for that PRP. It was very heavily marketed on websites, on trade publications, on distribution lists from the Commission. So I don't believe that was the case.

Q Now, did Edison itself go out and inspect these 150 megawatts of rooftop and car parks?

A We engaged Clean Coalition and the consulting assignment to go and do that on our behalf.

Q But you say they identified feasibly 150 megawatts?

A They identified technical potential, which is very similar to what Robert Perry was talking about. Technical potential does exist, but how much of that technical potential is actually feasible is a very different number. And often through demonstrated procurement it's many, many multiples less.

Q Well, the fact is that technical potential and responses to an RFP don't necessarily relate to each other. They're a certain apples and oranges comparison there.

If Edison went out and actively pursued folks

to bid in or to have their project, potential projects inspected and facilitated their efforts, you would have gotten more bids, wouldn't you?

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A Again, I believe that we did that through the PRP RFO. We did a tremendous amount of outreach through that RFO reaching out to property owners, developers, and facilitating them to go out and visit these sites. You know, we shared that report publicly on our web site letting people know, here is what we have identified, here are the areas that we've identified it in so that developers have that information available to them to go and then market and try and get those, secure those rights. So I believe we did a tremendous amount of outreach.

Q All right. On pages 15 -- actually, let me just say, you're talking about net present value calculations, and I don't want to talk about any of the dollar numbers that are confidential.

ALJ DeANGELIS: To clarify, page 15, line 13?

MR. CHASET: Yeah, page 15. Well, actually, a lot of the -- there's a lot of scratched out text on this page. I'm trying to limit myself to larger -- larger question

that doesn't get into any of the numbers that are confidential.

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Q Generally speaking, in comparison against gas-fired resources has Edison calculated the net present value of distributed energy resource projects which include both cost and revenue elements to the local community?

A The NPV analysis assesses the costs of the products that are submitted, and it also assesses the value. The value that is assessed is based on monetizable market revenue, so what can be attained from bidding the energy from the DER into CAISO markets, what can be attained from the capacity of the DER energy RA compliance requirements, if their resource can participate in ancillary service markets, what revenue can be obtained from that.

Those are the quantifiable metrics calculated into the NPV analysis. It's pretty standard across all the procurement activities that we do. It's outlined in great detail in our procurement plan that was formed as part of the LCR. It's also outlined in some great detail in the RPS proceeding in the LCDF part of that RPS proceeding. So we follow very consistent NPV

1 analysis approach to all of our procurement 2 activities. 3 That would include DER projects? 4 That would include DER projects. 5 Now, with respect to gas-fired Q 6 generation projects, in doing those 7 calculations, do you assign a price to CO2 emissions? 8 GHG is a cost that's accounted for 9 Α 10 in the valuation, yes. 11 All right. What's the dollar 12 value, \$12 a ton these days? 13 Α It's the market value. It's about 14 12.71, 12.72, yeah. 15 It's in the \$12 range? 16 Α I escalate. So that's a starting 17 price right now. Our price forecast when 18 we're doing long-term analysis as we would be 19 doing here would be going out 10, 20 years, there would be an escalation in that. 20 21 And what's the escalator? 22 Α It's based on brokers forecasting, 23 consultants, brokers, market brokers and 24 consultants. 2.5 Can you tell me -- go ahead. 26 I think the price for -- I can't 27 talk about the specifics of where the price 28 forecast goes, but it does escalate.

1 amount of allowances starts getting reduced by carb in the market, the cost of emissions 2 3 does increase the further out you go, a relatively steep increase. 5 Like 10 years, in 10 years out do 6 you have any ballpark estimate of what that 7 cost is going to be? 8 I can't give you specifics on 9 numbers, but it is escalated. 10 0 It's escalated. Would it be in the 11 20 to \$30 range? 12 Α That's reasonable. 13 Let's say as a matter of policy the 14 state kicked that up to 60, \$70 a ton. 15 would make the net present value of 16 distributed resources that are renewable, not 17 GHG emitting, a lot more favorable than those 18 gas resources based on the current evaluation 19 that you're doing; isn't that so? 20 It will adjust the metrics of the 21 gas-fired resources to be more expensive and 22 in turn should lead to higher power prices 23 because the CO2 emissions should be embedded 24 in the power prices. 2.5 Whereas, the DER resources, the 26 DERs would stay the same?

They would not have a compliance

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cost for CO2, yes.

1 Q That's fine. Thank you. 2 ALJ DeANGELIS: Mr. Chaset, I think 3 you're reaching your time estimated. 4 MR. CHASET: I only have a few more. 5 Thank you. 6 Now, at pages 15 to 16 you're 7 talking about limited expected operation 8 available. Does the limited expected 9 operation of Ellwood include any likelihood 10 of disruption to the transmission system, the 11 transmission and subtransmission lines coming 12 in? 13 Α It does not. 14 All right. And you've also stated 15 that Ellwood might be dispatched at times of 16 very high prices. You recall that? 17 Yeah. It may be dispatched at 18 times of very high prices. 19 On the CAISO market? In the CAISO markets. 20 Α 21 All right. As a resource that 22 would be placed in service due largely to 23 inadequate supply from outside generation in 24 to Santa Barbara, would the very high prices 2.5 for energy generated by Ellwood be spread 26 among all its ratepayers or just those in the 2.7 Santa Barbara-Goleta area? 28 So recognize that the contract that Α

1 we had with Ellwood is a tolling contract. 2 So we are paying a fixed capacity payment to 3 have that resource under contract. And SCE 4 owns the dispatch rights. Those dispatch 5 rights are owned on behalf of all customers. So when the resource is dispatched into the 6 7 market because the CAISO has a price spike, the only reason that Ellwood would be 9 dispatched would be that it's recovering its 10 fuel costs, its variable O&M costs from the 11 market and make it a proper -- it's an 12 economic dispatch.

And so there wouldn't be necessarily a cost that would be shared with all the customers. It would probably be a revenue stream because the only reason that asset would get turned on and dispatched in the CAISO market is if it was making money.

Q So NRG would collect the dollars for the high prices?

A No.

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Q Rather than --

A SCE holds the tolling rights to the contract. Those dollars would come back to SCE, and those dollars would flow back to customers.

Q Thank you. That's actually helpful.

as specific as possible.

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MR. VESPA: Q It's really not too in depth. It's really just in the introductory paragraph of this document, which is page 1.

So, it starts off with the electric power industry is fundamentally transforming. And then further down of that same paragraph it states technology is like rooftop solar. Battery storage and inverters continue to become more efficient and affordable. And then it says, enabling another fundamental shift from centralized generation to distributed generation.

So is it possible that with this over-doubling of DERs, which you -- SCE itself forecasts in its white paper and which you're now requesting significant rate-based investment to help realize Ellwood would soon no longer be needed to meet local reliability needs?

A I didn't work on this analysis.

It's already been discussed, but from my perspective, the white paper is talking about the SCE system in whole, as a whole. What we are talking about today is the Goleta sub area. And I'm not sure that the growth of DERs in that sub area is as significant as the rest of the system, first of all. And I

1 think that our proposal here today that we 2 talked about, where Ellwood, as witness 3 Chinn's testimony states, is a cornerstone of our proposal, is in alignment with what we 4 5 have outlined in the white paper and discussed here in the first paragraph, in 6 7 terms of we are moving towards this DER future, but there are still limitations in what DERs can do. 9

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We have identified a need that we have that is imminent right now in the Goleta area and to meet that imminent need, Ellwood is the right resource for investment perspective. It's the right resource from an economic perspective to put us on a path towards the longer term objectives of the DER solution. So I think it is aligned.

Q Okay. But you can under your bundled procurement plan authority contract for less than five years.

A Under the bundled procurement plan authority, we can do up to 59-month contracts.

Q Okay. So you could conceivably do shorter-term contracts with Ellwood to assure there is capacity while the DERs are procured in this -- in this area?

A The possibility exists. The

refurbishment costs, again, we didn't verify what these refurbishment costs will be. assuming that the costs that were portrayed to us in the contract reflect the actual costs of doing the refurbishing NRG would be subject to, if we did the shorter-term contract, those same costs would have to be recovered for that refurbishment. And now you're recovering those costs over a shorter duration of a smaller kilowatt month, so the price by kilowatt month would be higher and the value that ratepayers or customers would get would be significantly lower. Because now you're only getting five years' worth of value from the asset you have invested in or 10 years' worth of value from a planning perspective, as witness Chinn has already discussed, a planning horizon, a 10-year planning horizon. And based on our knowledge of the development of DERs to meet the needs, it would make sense to have a 10-year contract, amortize those costs over that 10-year period, make sure the customers were getting a significant portion of the value of that contract while we developed a strategy to implement DERs. So this is a package solution.

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I think it's completely in line with what

we've outlined here in this white paper.

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Q Okay. Well, your comments are assuming refurbishment would occur for a short-term contract. You could continue along with what you're doing now with Ellwood for a shorter duration of contracts without a refurbishment. And certainly you have other resources well over four years that you contract with RA now, correct?

So from an RA compliance perspective, I would agree. If we were only looking at RA compliance, we could continue doing the shorter-term contracts and the reliability of the asset wouldn't be as big a concern, but what we're talking about here is a different -- different type of situation in the Goleta area. It's more of -- as witness Chinn has stated, it's a safety issue regarding short circuit duty if those two towers were to go done. In that instance, you want an asset that's reliable, that's going to turn on, that's not going to be on a forced outage, so that you don't have a risk to the public and to SCE's employees who are working on this transmission line. So it's a very different situation in RA compliance from my perspective.

Q All right. Let's move on to the

RFO, the new RFO you're contemplating. This you discussed on page 14 of your opening testimony.

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Would resources procured under this solicitation be required to meet local capacity reliability requirements like the preferred resources you procured in the Preferred Resources Pilot and the LA Basin and the original Moorpark RFO?

A I think we are still in the planning stages of the requirements that we would set out for this DER. I would imagine that we would want to have those requirements so that we could make sure that we are getting the most value out of those assets. If you don't have those requirements and you can't check into the RA value and so the DERs will look more expensive.

So in order to minimize costs and maximize value for customers, I would expect that we would want those requirements.

Q And I think there was reference in the data request about also using your 2016 energy storage RFO to express a preference for storage in the Goleta area. Would that same storage procurement hold the same characteristics for qualified --

(Interruption by court reporter.)

MR. VESPA: Okay. Sure. I'll start from scratch. I'll start from the beginning.

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I believe in a data request response you also indicated you would target the Goleta area in an upcoming energy storage specific RFO. Would that storage procurement also be required to meet local capacity requirements?

A Yes. The energy storage RFO that we outlined for 2016 in our storage procurement plan that was filed with the Commission outlined that we would be seeking resource adequacy products up to 20 megawatts. So those are the megawatts that we are talking about taking a portion of that and targeting it towards the Goleta area to see what kinds of bids we could get.

energy storage RFO that we will be launching later this year, which is a distribution deferral component. And that is targeted at four particular circuits. Those circuits I don't believe are in the Goleta area. The characteristics there may be slightly different. But, again, from a customer-value proposition perspective, I would say that we were probably trying to seek those RA or LCR characteristics to make sure that we're

maximizing customer value.

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Q Okay. So the storage you're targeting for Goleta and the storage RFO and very likely the resources you would procure under this new solicitation you're contemplating would count toward meeting the Moorpark area need identified by CAISO, correct?

A Yes. Should count towards that Moorpark need that's identified and any future needs that may come up.

Q Okay. And I believe you stated in the data request response you had tentative plans to launch the RFO in the first quarter of 2017. I know the PRP to RFO was maybe a year-ish from launch to application. Is that the similar timeline or maybe slightly less given it's a smaller area? What are you thinking?

A I haven't had enough discussions with the procurement team to make a statement. I would imagine it would be similar, personally, just because of the complexity of the nature of the products that we're trying to solicit, that we might have to do some changes to our performance and so forth. So I would say that's a good estimate is to use what we did for PRP.

Q Okay. And I have one last set of questions on this solicitation. This is our -- this is actually our own data request that's already in the record. So I don't need to put that in.

But I'm showing you a copy of
Sierra Club SCE Data Request 4, question 3.
And this is a -- this just goes into your
historic peak load for Goleta. And so if you
-- right now you're assuming a 285 megawatt
peak for 2018. And so you take out the 180
for the transmission. You take out Ellwood,
assuming it's approved. You're around 50
megawatts?

A 55, yeah.

2.5

Q Yeah, 55. And I believe in your testimony you were going to do solicitation and revisit the peak demand to sort of see how much you were actually going to procure.

A Correct.

Q So my question here is if you look at the 2016 peak, you actually reported a 247 megawatts. And your -- if you go further to --

A Well, there is an asterisk on that, so that's the peak through October 13th.

Q Okay. But now it's been raining and cold. So, I mean --

1 Α I'm not familiar enough with the 2 circuit to know if it's a summer peaking or a 3 winter peaking circuit. It may be a winter 4 peaking circuit which would mean that the 5 peak hasn't happened yet. It could happen in December or November. 6 7 Okay. So you have no idea if this 8 is actually going to be your peak? 9 I don't know if that 247 is the Α 10 peak, correct. I think that would be a 11 better question for witness Chinn. 12 MS. REYES CLOSE: Yeah, I think that 13 says --14 (CROSSTALK.) 15 MR. VESPA: Well it had a -- there was 16 a connection to the solicitation itself, 17 which is why --18 MS. REYES CLOSE: Oh. Okay. 19 MR. VESPA: Q Well, let's just assume 20 this is your peak. And the reason why I'm 21 asking this is your forecast was 273 for that 22 year. So you're, you know, 25 megawatts 23 short or overestimated it by 25 megawatts. 24 If this was to carry forward, you know, you 2.5 would now be procuring instead of 50, 55, 26 you're down to 20 or 25 megawatts of 27 preferred resources, correct? 28 Well, we would assess that at the

time. So I wouldn't say that we -- we adjust our forecasts all the time. So they can go up. They can go down. And then I would -- what we've done in typical solicitations is that we do have -- I'm going to call it sort of a margin of procurement because there are understandably risks that developers may not complete their projects, things might fall out, things may not get built. And then there is uncertainty in your forecast. So I think, you know, you'd look at a couple of scenarios of your forecast, and you'd make an informed decision at the time you were making your performance selection.

2.5

Q Okay. The last question I had was I saw in I guess the air permit application that NRG had submitted, there's actually two 27 megawatt engines that have their 400 hours each. Could you procure a 27 megawatt RA contract from Ellwood?

A I don't believe you can operate Ellwood in that way. That would be a better question for data request for NRG. I don't believe you can operate it that way. It has to be --

- Q All of it.
- A All of it. 54 fast tracking CT.
- Q Those are all my questions.

OF THE

#### STATE OF CALIFORNIA

Application of Southern California )
Edison Company (U338E) for Approval ) Application of the Results of Its 2013 Local ) 14-11-016 Capacity Requirements Request for )
Offers for the Moorpark Sub-Area. )

## CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Thomas C. Brenneman, Certified Shorthand
Reporter No. 9554, in and for the State of California
do hereby certify that the pages of this transcript
prepared by me comprise a full, true and correct
transcript of the testimony and proceedings held in
the above-captioned matter on November 1, 2016.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of November, 2016.

Thomas C. Brenneman CSR No. 9554

)

OF THE

### STATE OF CALIFORNIA

	)	
Application of Southern California Edison Company (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area.	)	Application 14-11-016
	)	

# CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Doris Huaman, Certified Shorthand Reporter No. 10538, in and for the State of California do hereby certify that the pages of this transcript prepared by me comprise a full, true and correct transcript of the testimony and proceedings held in the above-captioned matter on November 1, 2016.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of November, 2016.

Doris Huaman CSR No. 10538

OF THE

### STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for	) ) ) ) Application ) 14-11-016
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# CERTIFICATION OF TRANSCRIPT OF PROCEEDING

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I further certify that I have no interest in the events of the matter or the outcome of the proceeding. EXECUTED this 1st day of November, 2016.

Carol A. Mendez CSR No. 4330