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December 10, 2015

Ms. Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: San Diego County Water Authority and  
City of San Diego, California  
San Vicente Pumped Storage Project No. 14642

***Information Submittal***

Dear Secretary Bose:

Pursuant to 18 C.F.R. § 4.38(b)(4) (2015), the San Diego County Water Authority and City of San Diego (together, "the Applicants") hereby submit written transcripts of the joint agency-public meetings held on November 9, 2015, as required by 18 C.F.R. § 4.38(b)(3). The Applicants' request to use the Traditional Licensing Process was approved by Commission letter issued September 28, 2015.

If you have questions or comments regarding the attached filing, please contact Kelly Rodgers of San Diego County Water Authority at 858-522-6776 or [krodgers@sdewa.org](mailto:krodgers@sdewa.org).

Sincerely,

\_\_\_\_\_/s/\_\_\_\_\_  
John Clements  
Counsel to San Diego County Water  
Authority

Attachment

Cc: Frank Belock - SDCWA  
Robert Mulvey – City of San Diego  
Kelly Rodgers - SDCWA

SAN VICENTE PUMPED STORAGE STUDY  
JOINT MEETING ON THE PRE-APPLICATION DOCUMENT  
(FERC NO. 14642-000)  
NOVEMBER 9, 2015  
  
TRANSCRIPT OF MEETING

Transcribed by: Rosalie A. Kramm, CSR, RPR, CRR

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1 APPEARANCES

2

3 KELLY RODGERS

4 ENERGY PROGRAM MANAGER

5 SAN DIEGO COUNTY WATER AUTHORITY

6

7 LAN WIBORG

8 DEPUTY DIRECTOR LONG RANGE PLANNING and

9 WATER RESOUCES, CITY OF SAN DIEGO

10

11 JEFF HARVEY

12 PRINCIPAL and SENIOR SCIENTIST

13 HARVEY CONSULTING GROUP

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I N D E X

EXHIBIT A - SAN VICENTE PUMPED STORAGE STUDY POWERPOINT

PRESENTED AT MEETING

EXHIBIT B - SIGN-IN SHEET OF ALL ATTENDEES

1 NOVEMBER 9, 2015 2:23 P.M. LAKESIDE, CALIFORNIA

2 JEFFREY HARVEY: Welcome, everybody, and thank  
3 you again for coming.

4 Lan, do you want to start, or do you want me to  
5 start with introductions?

6 LAN WIBORG: Go ahead, please.

7 JEFFREY HARVEY: Let me introduce Kelly  
8 Rodgers, the Energy Program Manager for the San Diego  
9 County Water Authority. Lan Wiborg is the Deputy  
10 Director of Long-Range Planning and Water Resources for  
11 the Public Utilities Department, City of San Diego. And  
12 I'm Jeff Harvey. Oh, I'm sorry. We also have Bob  
13 Mulvey, the City of San Diego.

14 LAN WIBORG: He's our Assistant Director of  
15 Public Utilities, so boss.

16 JEFFREY HARVEY: Very good. And I'm Jeff  
17 Harvey, a consultant to the Water Authority for this  
18 project.

19 Some of this presentation is geared for our  
20 public meeting tonight, which, of course, any of you are  
21 welcome to attend. This part of the joint meeting really  
22 is directed at the resource agencies and tribes required  
23 by FERC as an initial consultation, now that the City and  
24 the Water Authority have decided to proceed with the  
25 preliminary studies of this project.

1           So for housekeeping, I know that you all saw  
2     the -- the restrooms are outside the door to my left.

3           Oh, sorry. Would you please come in and have a  
4     seat. We just got started.

5           Speaker slips and comment cards are for tonight  
6     and not for this meeting. We're expecting that all of  
7     you will be commenting in writing, to the extent that you  
8     have comments, I am sure you do, and that the comment  
9     cards are not sufficient for what -- the kind of comments  
10    that you would be providing.

11          So the agenda for our meeting is just an  
12    overview of the project, some of which we were able to  
13    accomplish in our brief visit, the site visit at the dam,  
14    and then overview of the Federal Energy Regulatory  
15    Commission process, the Pre-Application Document that we  
16    submitted July 28 to FERC, and the study plans that are  
17    specified in that Pre-Application Document, and that we  
18    are specifically looking for your comments on and your  
19    comments about additional studies, any additional studies  
20    that you would suggest or require.

21          And then we will talk about schedule and next  
22    steps for us and the project.

23          We'll have some time at the end of the meeting  
24    to discuss your comments and anything you would like to  
25    say in exchange with the Water Authority and the City

1 today, and obviously in advance of your more formal  
2 written comments.

3 So FERC requires that we have a joint meeting.  
4 It is to present in this case co-applicants with the City  
5 and the Water Authority joining together, about their  
6 understanding of the proposal and the potential  
7 environmental impacts of that proposal, and then the data  
8 and studies that are proposed to be conducted and -- as  
9 part of this initial consultation process. This is the  
10 first in a long process. This is a three-stage  
11 pre-filing process that starts with the Pre-Application  
12 Document being sent to resource agencies, tribes, and  
13 members of the public; and a Notice of Intent was also  
14 filed with FERC indicating the intent to -- for the  
15 applicants to submit a licensed application to FERC,  
16 prepare and submit a draft license application, in  
17 approving the -- oh, and a request to use the traditional  
18 licensing process. I believe most of you saw that and  
19 commented on that.

20 The traditional licensing process, FERC did  
21 grant approval of that on September 28, and part of their  
22 approval triggers the requirement that within -- or  
23 within 30 to 60 days after their approval that we conduct  
24 this joint meeting, which is why we're here in November.

25 After this meeting you'll have 60 days to

1 submit your formal comments, which gives us a comment  
2 deadline for comments to be postmarked by January 8.  
3 After that -- that will conclude the Stage 1 pre-filing  
4 process, which will take us to Stage 2, where the  
5 applicants conduct the required studies and develop their  
6 formalized draft license application, and that gets  
7 submitted to FERC as the beginning of Stage 3; and in  
8 Stage 3 FERC will review the license application, they  
9 will determine whether they have any request for  
10 additional information, and -- and then they will go on  
11 in their formal environmental review process to satisfy  
12 requirements of the National Environmental Policy Act.

13 And Lan?

14 LAN WIBORG: Thank you, Jeff. So, again, my  
15 name is Lan Wiborg, and the City of San Diego is very  
16 happy to partner with the San Diego County Water  
17 Authority, which I will refer to as "the Water  
18 Authority." They prefer to have that reference.

19 Now, this project has the potential to generate  
20 revenue for both agencies to offset future water rate  
21 increases for our rate payers, so for the next few  
22 minutes I'll be showing you a couple of slides and  
23 provide a description of the proposed project.

24 So the map on the screen shows the expanded  
25 San Vicente Reservoir, which is owned and operated by the



1 City of San Diego. Both the City and the Water Authority  
2 own water storage capacity in the reservoir. This  
3 existing reservoir will be part of the project along with  
4 the existing electrical transmission corridor that  
5 connects to the regional grid. Using these existing  
6 infrastructures at the San Vicente Reservoir as a  
7 foundation, the Water Authority and the City are studying  
8 the potential for developing a 500-megawatt pumped  
9 storage project that would help meet the region's energy  
10 needs during peak demand periods. It could generate up  
11 to 4,000 megawatt hours of energy, enough to serve  
12 approximately 325,000 homes annually.

13 The project will provide -- or excuse me --  
14 would involve creating a small upper reservoir,  
15 approximately 8,000 acre feet above the existing lower  
16 reservoir, that is the San Vicente Reservoir that you  
17 just visited, along with a tunnel system and an  
18 underground powerhouse to connect the two water bodies.  
19 The powerhouse would contain four reversible pump  
20 turbines. The upper reservoir will be in an area with no  
21 natural lakes or streams, and the system is what is known  
22 as a closed-loop system, where it does not have any  
23 connection to naturally flowing bodies of water.

24 So the next slide shows you a schematic of how  
25 this system will work. As I mentioned earlier, if built

1 as currently envisioned, this project would have up to  
2 500 megawatts of capacity over eight hours, which means  
3 that we as a region will be able to store and have up to  
4 4,000 megawatt hours of energy available to meet demands.

5 It's important to clarify that this is an  
6 energy storage project. This is essentially a giant  
7 battery. Typical operations would entail generating  
8 during peak energy demand periods, and a storage of  
9 potentially unused energy or curtailed energy that would  
10 otherwise be lost, such as renewables when demands are  
11 low, for later use.

12 During off-peak periods when power is  
13 inexpensive, and renewable supplies from wind and solar  
14 facilities may exceed demand, turbines would pump water  
15 to the upper reservoir, where it would act as a battery  
16 of stored potential energy, and during the peak energy  
17 demand the system will release the water, which will flow  
18 downhill and create carbon free power, and the power  
19 would be generated as the water traveled through the  
20 turbines.

21 The exchange between the two reservoirs would  
22 not consume water, and we are planning studies, which is  
23 why we invited all of you here to participate in this  
24 process. We're planning studies, and we're also  
25 welcoming ideas for studies to determine whether it would

1 interfere with water supply, water quality, fisheries, or  
2 recreational use of the reservoir. Initial indications  
3 are that there will be no significant impacts to other  
4 uses of the reservoir.

5 Power generated at the pumped storage facility  
6 would be delivered to the regional energy grid via new  
7 transmission lines, mostly parallel to the existing  
8 corridor of the Sunrise Power Link. The new lines would  
9 connect to an existing electrical substation about -- as  
10 Jeff will mention, about eight miles away.

11 And so the goals and the objectives of this  
12 project are several-fold. And I'm sorry, but my notes  
13 kind of went AWOL for a minute here, but essentially what  
14 we're attempting to do is use existing infrastructure to  
15 generate energy and revenue for the two entities. We  
16 want to utilize also the water resources that we have to  
17 offset additional rate increases.

18 So, in order to do that, we are able to  
19 envision using low-cost energy to basically pump the  
20 water to the upper reservoir, and then generate revenue  
21 by generating energy when energy prices are higher.  
22 That's the very basic concept here.

23 So with that, I'm going to turn this over to  
24 Kelly. She will -- may backfill anything I neglected to  
25 mention.

1 KELLY RODGERS: Thank you, Lan. I'm going to  
2 stand back here just for transcription purposes. You can  
3 hear me as well.

4 Next slide, please.

5 So what we're looking at here is an overview of  
6 the FERC process as it relates to permitting. This  
7 process is for obtaining the federal license and related  
8 permitting. It is complex, and this Preliminary  
9 Application Document and joint meeting is the beginning  
10 of the process, as far as the FERC formal process. We  
11 also wanted to meet with you to really engage you early  
12 on so that we are coordinating with you every step of the  
13 way.

14 The key steps that are highlighted here on the  
15 slide, the process is expected to take four to five  
16 years. There are many additional opportunities to engage  
17 resource agencies, tribes, and the public in the process  
18 to review our study plan, review plans, and provide  
19 comments.

20 So you can see checkmarks here. The first two  
21 we've completed so far. We have a preliminary permit  
22 from FERC, and we completed the submission of the  
23 Preliminary Application Document to FERC in July of 2015.  
24 The Traditional Licensing Process that we requested to  
25 use was approved by FERC on September 28 of 2015, and so

1 the future steps include conducting the studies outlined  
2 in the study plan that Jeff is going to describe in a  
3 minute, and submitting to FERC a full license  
4 application.

5 And should we move forward, these be would the  
6 steps should we move forward with the project, and these  
7 will begin sometime before 2018.

8 And then the longer-term steps span from 2018  
9 to 2021, and they entail applying for a Water Quality  
10 Certification with the State Water Resources Control  
11 Board, performing all of the environmental reviews and  
12 documents to satisfy CEQA and NEPA. We expect that we  
13 would have a decision on the water quality and FERC  
14 licensing decision in 2021.

15 And, again, should we move forward with this,  
16 we'd begin construction around 2021.

17 And that pretty much sums up this process, and  
18 I'd like to turn it back over to Jeff so he can describe  
19 the study plan.

20 JEFFREY HARVEY: Very good.

21 So in the Preliminary Application Document we  
22 described the proposed project, the locations of  
23 facilities, and the operations of the pumping of water up  
24 into the upper reservoir, releasing it back to generate  
25 electricity. The goals and objectives of the project

1 that Lan mentioned, which are, in part, about revenue  
2 generation to help offset water rates for the two  
3 co-applicants, but much more than that, storage is  
4 important as a way to integrate renewable energy.

5 In the energy system, as you all know,  
6 renewables are intermittent, and there -- we may have  
7 with it achievement of the State's renewable portfolio  
8 standard goals of 33 and up to 50 percent. We may have  
9 actual periods of overgeneration by renewable sources  
10 that would have nowhere else to go.

11 That's what this project is envisioned, as  
12 being a solution to that problem of periodic  
13 overgeneration and of the need to generate power to  
14 regulate the transmission grid to offset the intermittent  
15 effects of wind and solar power generation. So it is an  
16 important part of the energy system in Southern  
17 California, as it would be -- as it would be operated,  
18 both for its storage and for its generation capabilities.

19 So the PAD describes all of that, and then it  
20 describes the existing environment that would be  
21 affected. This is an area that has been heavily studied  
22 for both the -- an emergency storage project, the  
23 San Vicente Dam Raise project, the Sunrise Power Link  
24 project, and, of course, as all of you are aware, many of  
25 you are aware, heavily studied for the lands and their

1 values as part of the MSCP and habitat conservation  
2 plans.

3 So we had all of those available to draw upon  
4 in understanding the range of potential effects, and  
5 based upon that evaluation, the table -- or Chapter 4 of  
6 the Preliminary Application Document does identify a  
7 number of studies that would be undertaken to support the  
8 license application. The license application actually  
9 includes five main exhibits, they're called, and they  
10 include evaluation of economic feasibility, engineering  
11 project description and general engineering.

12 And then in Exhibit E, which is the  
13 environmental exhibit, prepared in the form of an  
14 environmental report, like a NEPA or CEQA report would  
15 be, and that is what these studies will be supporting, is  
16 the applicant's Exhibit E to their draft license  
17 application.

18 So the list of them, and this list is in the  
19 order that they are set forth in the FERC regulations, so  
20 I know most of you are used to, at least for CEQA  
21 documents, seeing things laid out alphabetically or  
22 clustered by group; a little bit different clustering,  
23 only for that reason, because of the way they're laid out  
24 in the FERC regulations.

25 For geology and soils, the -- we'll have a full

1 geotechnical investigation, specific to the upper  
2 reservoir, to determine its ability to support the dam  
3 structures that are proposed to be built there in order  
4 to create that reservoir body, and, of course, all the  
5 tunneling.

6 I said that all of the movement of water back  
7 and forth between the two reservoirs and the powerhouse  
8 itself is all underground within this tunnel system, and  
9 so the geotechnical investigation will determine the  
10 suitability of the rock type and of the subsurface  
11 conditions, and then from that will -- the engineering  
12 specifications will be determined.

13 For the upper reservoir and dams that are  
14 required for that, I believe three separate dams, the  
15 tunnel interconnection system and the inlet/outlet works  
16 that will be in both the upper reservoir and, of course,  
17 in the lower reservoir; and that to get to the upper  
18 reservoir site, we do have to construct some access  
19 roads, and to get power out from the powerhouse, we'll  
20 have that 230-kilovolt transmission line system, which is  
21 approximately eight miles long.

22 And I was thinking as I looked at the map that  
23 it may be five miles as the crow flies, but the route to  
24 the actual transmission line, I think, covers a total of  
25 about eight miles. And most of that coincides with the



1 existing Sunrise Power Link transmission line. We are  
2 proposing to site that line literally adjacent to the  
3 existing right of way for the Sunrise Power Link.

4 Water resources, we have water quality modeling  
5 studies that are being done for -- to support the City's  
6 reservoir augmentation study, their pure water program  
7 that it is referred to, and that has also looked at -- on  
8 a preliminary basis, looked at the mixing that would  
9 occur in the reservoir as a result of the pumping  
10 operations and water release back to the lower reservoir  
11 for storage and generation from this project. So we will  
12 be looking at the effects of pumping on daily reservoir  
13 fluctuations, which are estimated right now to be around  
14 2 feet, a little less than 2 feet in the lower  
15 reservoir -- the upper reservoir will fluctuate much more  
16 than that -- and looking at what that means in terms of  
17 water quality implications for San Vicente Reservoir,  
18 which is first and foremost a water supply reservoir, and  
19 so this water quality portion of the study is essential  
20 to the co-applicant's decisions about moving forward with  
21 the project.

22 Fish and aquatic resources, we do have -- we  
23 don't have any native fish in the reservoir, all stocked,  
24 and there is a naturally-reproducing population of fish.  
25 So there is always the risk of entrainment of fish in the

1 pump system. The pump system is designed to operate at  
2 less than 1 fps flow, so that we are trying to minimize  
3 entrainment, but there will be expected entrainment, so  
4 we will be studying what the expected mortality rates  
5 are, the impacts to fish populations in the lower --  
6 particularly in the existing lower reservoir, as that is  
7 an important sport fishery for the region, and then what  
8 does that mean in terms of fish populations for the lower  
9 reservoir and expectations that some fish will survive  
10 and will thrive in the upper reservoir as well, and what  
11 do we do to mitigate for fish losses.

12 I guess in every case -- I don't have it stated  
13 explicitly on these slides, but in every case these  
14 studies will include not just identification of the  
15 potential impacts, but identification of the mitigation  
16 measures that we would employ to avoid, minimize, or  
17 offset those impacts.

18 For wildlife and botanical resources, full  
19 biological resources -- excuse me, surveys and vegetation  
20 mapping focused on special status species, habitat; and  
21 we'll have a full jurisdictional delineation of wetlands  
22 and waters of the U.S. We know that the shoreline of the  
23 San Vicente Reservoir with the inlet/outlet works is  
24 considered waters we believe that there are no waters at  
25 the upper reservoir site which is an upland environment.

1 But that will be determined in formal surveys, protocol  
2 level surveys for rare and for the listed species that we  
3 know to occur, Quino, Gnatcatcher, Vireo, and I know that  
4 there are some others as well. I think they are  
5 mentioned in the next slide.

6 Then, of course, we have the lands at the upper  
7 reservoir site, and some of the lands that are crossed by  
8 the transmission line are part of the regional MSCP and  
9 subarea plans. So we will be evaluating the consistency  
10 of this project with those plans and evaluating how we  
11 mitigate for the effects on those lands and what we need  
12 to do in terms of amendments to those plans to allow this  
13 utility project to -- to co-exist with those planning  
14 areas.

15 Floodplains, wetlands, riparian, and littoral  
16 habitat, this is focused mainly on the lower reservoir  
17 and shoreline of San Vicente Reservoir, aquatic and  
18 riparian habitat, and looking at the inlet/outlet works  
19 particularly for the lower reservoir, and that is mainly  
20 a construction impact, but we will be looking at the  
21 effects of operations on those systems as well.

22 More on rare and threatened endangered species,  
23 this is somewhat redundant with the biological survey  
24 work that is already described in the previous slide and  
25 for the previous studies, but full reconnaissance

1 surveys, habitat mapping, protocol level surveys for all  
2 of the state and federally listed species, and then  
3 surveys of the adjacent areas that won't be directly  
4 affected by the project to determine whether there are  
5 indirect effects, and that would extend as well to other  
6 species, bats, raptors, and possibly others that are  
7 important or protected species.

8 Can you advance that manually? I'm not sure  
9 why I can't do it here. I broke it. I hit the wrong  
10 button.

11 Okay. Recreational land use, San Vicente  
12 Reservoir was closed, obviously, for the last several  
13 years with the dam raise project, but scheduled to be  
14 reopened in, I believe, the first quarter of 2016. We'll  
15 take that as approximate.

16 And anyway, at any rate, for this project we  
17 will be looking at the impacts of -- on recreational uses  
18 of the lower reservoir -- the upper reservoir is not  
19 proposed for recreational uses -- and that is primarily  
20 during construction. Post-construction for operations,  
21 we are designing the project and expect to have the  
22 project successfully designed such that we don't  
23 interfere with recreational uses.

24 We will also be assessing land use and  
25 management plans and recreational uses in the upper

1 reservoir area as they are included in the existing plans  
2 and how the upper reservoir operations would affect those  
3 plans.

4 Sorry. I still need you to advance that,  
5 Andrea. It is not working here.

6 Aesthetics are required, of course, by FERC.  
7 We will be looking at the existing visual character,  
8 particularly the upper reservoir. The lower reservoir  
9 exists, so we're not going to be changing that at all;  
10 and then during construction, staging areas and grading  
11 operations for the access road, the upper reservoir, and  
12 for the transmission line corridor; and transmission line  
13 corridor would be a long-term visual effect.

14 The next slide, please.

15 Cultural resources includes full survey work of  
16 the entire area of potential effects, that gets defined  
17 in consultation with the tribes and with the State  
18 Historic Preservation Office, and that will include the  
19 upper reservoir area and the power line corridor and the  
20 new access road. Again, because the lower reservoir is  
21 an existing feature, we aren't going to be changing that  
22 at all. We will not be doing additional survey work. We  
23 will report on the cultural resources -- the results of  
24 the cultural resources investigations that were done for  
25 the lower reservoir as part of the lower -- or as part of

1 the dam raise project.

2 Next. Evaluation of tribal resources, and that  
3 includes a full consultation process with all of the  
4 tribes that either identify themselves as the Barona Band  
5 of Mission Indians, already has identified, and Art Bunce  
6 is here as their representative today. We will also  
7 include any other tribes that are identified by the  
8 Native American Heritage Commission or by the State  
9 Historic Preservation Office.

10 So full consultation, full sharing of all the  
11 survey results and any findings we have, and then if  
12 applicable, if we have such resources, development of a  
13 historic properties management plan that will specify how  
14 those cultural and tribal resources would be respected  
15 and protected, both during construction and for long-term  
16 operation of the project.

17 Next. So schedule and next steps, some of this  
18 Kelly went through, but just to -- just to highlight  
19 about how early in the process we are and how much more  
20 there is to do, and we appreciate that all of you did  
21 come out and that we are engaged with you in this very  
22 early part of the project, as we need to be, to inform  
23 throughout the project and make sure we do address all of  
24 your issues and -- and that we build into design what we  
25 need to to satisfy resource agencies and tribal concerns

1 for the project.

2 So starting with the co-applicants, going  
3 through the pre-application process and our joint meeting  
4 here today, and then ending with the -- what is right now  
5 scheduled to be the April 2018 submittal of the draft  
6 license application to the Federal Energy Regulatory  
7 Commission, which triggers the beginning of their process  
8 in soliciting comments on the draft license application,  
9 and determining the projects' eligibility or being ready  
10 for environmental analysis under their NEPA analysis.

11 At the same time that we submit the FERC  
12 license application, we'll be submitting an application  
13 for Water Quality Certification, 401 Certification  
14 required under the Federal Power Act that we obtained  
15 before FERC to make its decision about a license, so  
16 we'll apply to the State Water Resources Control Board.  
17 Oscar Biondi is here with us today representing the State  
18 Water board, and -- and that will trigger the requirement  
19 to begin preparation of the formal CEQA document. We  
20 expect that to be an Environmental Impact Report.

21 There will be a joint scoping meeting held with  
22 FERC and the City and Water Authority at the beginning of  
23 that process, but FERC does not prepare joint documents,  
24 so after that scoping meeting with the same scoping  
25 comments, FERC will go off on its business to prepare its

1 independent EIS, and the Water Authority and the City  
2 will separately prepare their own Environmental Impact  
3 Report.

4 And then in -- we expect that to be about a  
5 two-year process to complete the environmental review  
6 process and the review of the applications, that we would  
7 then have a water -- a decision about the Water Quality  
8 Certification in about 2020, and a decision following  
9 that water quality cert decision, assuming that the water  
10 quality certification is a positive decision.

11 If it is a negative decision, then FERC has  
12 nothing to act upon, but with a positive decision, then  
13 it falls to FERC to make its decision about the license,  
14 and we anticipate that as happening in about 2021, about  
15 five years from now.

16 Next. So FERC guidance on the comments. You  
17 are, of course, welcome to comment on anything you like,  
18 but FERC is very specifically looking particularly for --  
19 for your role as -- as resource agencies and tribal  
20 representatives, looking for very specific comments from  
21 you about the studies that are proposed to be prepared  
22 and about -- and what you would like to see in those  
23 studies, if you think that what's proposed either is not  
24 enough, or you think there is something that has been  
25 missed, or you just want to emphasize what it is your



1 agency very specifically will be looking for in the  
2 results of those studies and what you would look for in  
3 mitigation planning as well.

4 So identifying and -- we have this in handouts,  
5 if you like, it's also -- I believe it is part of what I  
6 sent to all of you as confirmation of this meeting, but  
7 identifying the studies that need to be performed in our  
8 development of the license application, and the basis for  
9 it, of course for most of you the basis is what is  
10 prescribed in law and Endangered Species Act, the  
11 California Endangered Species Act, or pursuant to the  
12 various habitat conservation planning processes that you  
13 all have engaged in, and then the resource issues and  
14 your goals and objectives for those resources as you  
15 believe they are affected by the uses prescribed -- or  
16 proposed for this project.

17 Next, Andrea. And then if -- if there are  
18 specific methodologies that you are requesting be  
19 employed for those studies, just an explanation about  
20 that methodology and why you're recommending it,  
21 particularly if it is a unique suggestion relative to  
22 this project; and then documenting that each study  
23 methodology is a generally accepted practice and  
24 explaining how the studies relate to your own resource  
25 goals and objectives.

1 But that is what FERC is very specifically  
2 looking for in your comments. So I know that all of you  
3 have commented many times on many projects and understand  
4 how to do this, but we wanted just to make very clear,  
5 because is this a FERC process, and a hydropower  
6 licensing process that is maybe not as familiar for  
7 Southern California resource agencies, that we share this  
8 legal guidance with you.

9 Next. Obviously no comments cards for you.  
10 That concludes our formal part of the presentation, and  
11 we'll be happy to open it up to any questions you might  
12 have to clarify about the project, clarify anything we  
13 said in presentation; or if there were preliminary  
14 comments that you would like to share with indications of  
15 what it is you expect to be telling us in your more  
16 formal written comments.

17 Lan, Kelly, any other closing remarks?

18 LAN WIBORG: No. We are just here to clarify  
19 anything that has been presented at this time. And I  
20 think Kevin also has some thoughts to share, correct?

21 KEVIN DAVIS: I just wanted to clarify one  
22 thing. When Jeff talked about the pumped storage  
23 project, talking about the fisheries, he mentioned 1 cfs.  
24 What he meant was one foot per second velocity.

25 JEFFREY HARVEY: I'm sorry, yes.

1 KEVIN DAVIS: And just -- I wanted the court  
2 reporter to get that correct. So that it is --

3 JEFFREY HARVEY: It is a velocity, not a  
4 volume.

5 KEVIN DAVIS: So the velocity going in and out  
6 of the intake will be less than 1 foot per second.

7 LAN WIBORG: Have you all met Kevin Davis? Can  
8 you perhaps introduce yourself, Kevin?

9 KEVIN DAVIS: I'm sorry. I'm Kevin Davis. I'm  
10 with Black & Veatch. We were the consultants that did  
11 the feasibility study.

12 JEFFREY HARVEY: Thanks for that clarification.  
13 That is an important one.

14 I know it is getting a little warm in here.  
15 We're working on the air conditioning right now.

16 Any questions or comments?

17 Jason Price from the California Department of  
18 Fish and Wildlife.

19 JASON PRICE: The power line, is there going to  
20 be a road associated with that electric power line?

21 JEFFREY HARVEY: There will have to be, for the  
22 segment that extends from the powerhouse, there will be a  
23 road to the powerhouse and to that segment. We  
24 understand that the Sunrise Power Link, or a portion of  
25 that line, was constructed using helicopters so they

1 could avoid having to have a road across the whole thing.  
2 And we would look at doing the same thing for this. And  
3 we are not trying to create new roads where none exist  
4 for the power line, and where there is a road that  
5 accesses the Sunrise Power Link we should be able to  
6 utilize that for access as well, but that will be -- that  
7 will be part of what we will have to determine as we move  
8 forward in the engineering design.

9 JASON PRICE: Then you mentioned cultural  
10 studies. I didn't see a lot of historical written into  
11 that, in utilizing the old Foster Truck Trail. Studies  
12 on new roads, that -- are you considering, you know,  
13 expanding that as a new road, or is that an existing  
14 road? I didn't see anything on the studies on the  
15 existing road.

16 JEFFREY HARVEY: We have not had anyone  
17 identify the existing road as historic resource.  
18 Historic resource is definitely part of the cultural  
19 resources investigation, is prehistoric and historic  
20 resources both, and so the first I heard of that as a  
21 historic resource that -- then, yes, that would obviously  
22 have to be included, and we would have to determine  
23 whether extension of that road or construction of another  
24 access road was most appropriate. You are talking about  
25 the road that would lead from the lower reservoir up to

1 the Foster Canyon site?

2 JASON PRICE: From the 67 down all the way  
3 through to the dam site.

4 JEFFREY HARVEY: Okay. The upper reservoir  
5 site.

6 JASON PRICE: Upper reservoir.

7 JEFFREY HARVEY: Yes, very good. Thank you.  
8 Any others? Jennifer first and then Art.

9 Jennifer Price with the County Department of  
10 Parks and Recreation.

11 JENNIFER PRICE: How large is the reservoir in  
12 feet or acres?

13 KELLY RODGERS: 100 acres.

14 JEFFREY HARVEY: Is the surface area of the  
15 upper reservoir.

16 JENNIFER PRICE: And then do you already know  
17 how many acres would be on Boulder Oaks Preserve?

18 KELLY RODGERS: Not off the top of my head.

19 JEFFREY HARVEY: No.

20 JASON PRICE: All right.

21 JEFFREY HARVEY: No, I don't know, but we'll  
22 definitely generate those numbers.

23 JENNIFER PRICE: And then I was also curious,  
24 how would you mitigate for impacts to Boulder Oaks  
25 Preserve, building the reservoir itself?

1 JEFFREY HARVEY: That is definitely part of  
2 what we want to initiate consultation with all of you on  
3 to talk about, what it is that we need to do. We  
4 understand that there are some cornerstone lands involved  
5 there and that the habitat values are important. And  
6 you -- your letters in response to the Pre-Application  
7 Document process, we took those under advisement, and we  
8 understand that we need to work very closely with Fish  
9 and Wildlife Service, Cal Fish and Wildlife, and Parks  
10 and Recreation to identify the land that would be  
11 appropriate for mitigation, and when we need to obtain  
12 those; and what else we might need to do as mitigation.

13 JENNIFER PRICE: Great.

14 KELLY RODGERS: I can give you just a  
15 preliminary rough figure on Boulder Oaks, what -- that is  
16 upper reservoir, 100 acres; approximately a quarter to a  
17 third of it appears to be Boulder Oaks, so we can get you  
18 details of that.

19 JEFFREY HARVEY: A precise number.

20 JENNIFER PRICE: Thank you.

21 JEFFREY HARVEY: Art Bunce is an attorney  
22 representing the Barona Band of Mission Indians.

23 ART BUNCE: I may be an attorney, but don't  
24 hold it against me.

25 JEFFREY HARVEY: We don't at all. Welcome, and

1     thank you for coming.

2             ART BUNCE: Barona has two main concerns. One  
3     is, we would like to know a bit more about the process  
4     that was used to select this site out of the four  
5     alternate sites. We would really like to know how solid  
6     that choice was, because one of the other sites is partly  
7     on reservation land, and that entails a whole separate  
8     process under the Federal Power Act. So we just want to  
9     make sure that the selected site is going to remain the  
10    selected site, and somebody is not going to decide at a  
11    later stage that, well, because of hydrology or geology  
12    or topography or some other engineering consideration,  
13    that another site is superior.

14            So we would like to know more about how that  
15    choice was made and how defensible it is.

16            And second is the obvious one, we would like to  
17    know a whole lot about how you intend to handle the  
18    cultural resources. Just from the preliminary material  
19    we've seen so far, there have been at least two  
20    habitation sites with midden identified already, and that  
21    tells us that there is no doubt more, and we would like  
22    to know how you intend to handle those things.

23            JEFFREY HARVEY: Very good. We haven't done  
24    the studies, and I don't have the answers for you today,  
25    but we understand the concerns.

1           ART BUNCE: That is the kind of thing we're  
2 looking for.

3           JEFFREY HARVEY: And maybe just a quick reply  
4 to the first, we did go through a whole engineering  
5 design analysis that looked at four alternatives, and the  
6 Foster Canyon site, the site we are now looking at,  
7 emerged from those studies as the preferred site; but as  
8 both part of the California Environmental Quality Act and  
9 the National Environmental Policy Act processes, both of  
10 those require examination of alternatives. So I can't  
11 tell you that there will never be another look at  
12 alternative sites and that they might not turn back to  
13 some of the sites that were determined to at least have  
14 the physical capacities to -- to act as upper reservoir  
15 site. Those were the logical ones to look at as  
16 alternatives.

17           But right now the focus is on the site that was  
18 the closest and provided the greatest hydraulic head, and  
19 therefore for the least amount of money and the greatest  
20 amount of power generation, which is the Foster Canyon  
21 site.

22           ART BUNCE: Barona is not against the project.  
23 Barona likes the idea of lakefront property.

24           JEFFREY HARVEY: Very good. There will be a  
25 full cultural resources investigation. We understand



1 this is a sensitive environment, as it is for biological  
2 sources.

3 Any others?

4 Jason Price again.

5 JASON PRICE: On the map it shows the basic  
6 road, the line. Has that actually been determined, or is  
7 that just to kind of show the basic gist of where the  
8 road is actually going to be from the upper reservoir to  
9 the reservoir?

10 JEFFREY HARVEY: Kevin, can you answer that?

11 KEVIN DAVIS: I think John would probably be a  
12 better person to answer that.

13 JEFFREY HARVEY: John Bekmanis from Black &  
14 Veatch.

15 JOHN BEKMANIS: So it is just a preliminary  
16 evaluation based on roadways that we were able to  
17 identify from aerial work to try to utilize those systems  
18 where it is applicable, versus identifying new roadways  
19 to get to the different sites for construction, either  
20 from Highway 67 or between the reservoirs.

21 So wherever possible we are trying to use  
22 existing roadways that were there, knowing that we have  
23 to make improvements to them, but we also identified area  
24 where we need new roadways to construction. So it is not  
25 written in stone.

1 JASON PRICE: But that is not laid in stone?

2 JOHN BEKMANIS: It is not laid in stone by any  
3 means. It is preliminary level investigation.

4 JEFFREY HARVEY: Yes, Jennifer Price from Parks  
5 and Recreation.

6 JENNIFER PRICE: So I'm concerned about the  
7 transmission -- the transmission alignment. Was that  
8 determined -- was the alignment determined based on where  
9 the Sunrise Power Link is, or, like, why was the route  
10 chosen?

11 JEFFREY HARVEY: In consultation with San Diego  
12 Gas & Electric, they identified that the Sycamore Canyon  
13 substation was the most likely point of their connection.  
14 We will have to do a full interconnection study to  
15 determine that that is the extent of where we would go.  
16 So with that information in hand, we then looked at the  
17 best route to get from the power generation site to the  
18 Sycamore Canyon substation and trying to co-locate as  
19 much as possible with an existing utility corridor,  
20 knowing that a whole new utility corridor was less  
21 desirable.

22 JENNIFER PRICE: Okay. So it's a -- I'm just  
23 curious because it goes through Sycamore Canyon through  
24 the ranch again, you know, because we had the Sunrise  
25 Power Link go through there, so it is more impact to the

1 preserve. So that's -- that's why I'm questioning it.

2 So the whole new -- so all new transmission  
3 line poles and everything is brand new?

4 JEFFREY HARVEY: Our understanding is that what  
5 is out there right now was specifically engineered and  
6 designed for the lines that are on it, so that we are not  
7 able to simply go out and hang new lines on the existing  
8 pole system. We will need to have our own transmission  
9 towers and line system. And these are large trans --  
10 large capacity transmission lines, 230 KV.

11 KELLY RODGERS: I think something to add to it,  
12 that is exactly right, Jeff, but we are willing to  
13 revisit that with SDG&E to see if that is possible.

14 JEFFREY HARVEY: Right, as part of what we  
15 studied. Right.

16 JENNIFER PRICE: Thank you.

17 JEFFREY HARVEY: Thank you. Any others?

18 ERIC HOLLENBECK: I should probably just  
19 mention that the department would, in terms of biology  
20 studies and how it impacts the MSCP -- we will be looking  
21 for an analysis of -- of how it would -- not just  
22 replacement of habitat for mitigation, an appropriate  
23 habitat that way, but also how it affects the assembly of  
24 the preserve for MSCP; so whether or not it is possible  
25 through corridor analysis or just the overall preserve,

1 whether or not that is still going to be made whole if we  
2 end up with some of that missing that needs to be  
3 mitigated for.

4 JEFFREY HARVEY: For the record, that is Eric  
5 Hollenbeck from the California Department of Fish and  
6 Wildlife.

7 Any others? Oscar, are you going to wait to  
8 ask us in writing?

9 OSCAR BIONDI: Done.

10 JEFFREY HARVEY: Okay, very good.

11 All right, if there are no other questions or  
12 comments, we look forward to your written comments, and,  
13 again, thank you very much for making the time to come  
14 out today. I apologize that we couldn't have arranged  
15 better weather for you for the site visit, but it is  
16 interesting to see the completed dam project in any case.

17 KELLY RODGERS: Comments are due January 8th,  
18 right?

19 JEFFREY HARVEY: Deadline for comments to be  
20 postmarked by January 8, 2016. Of course you are welcome  
21 to submit them sooner than that, if you like, and any  
22 questions or comments, please -- you have Kelly Rodgers'  
23 contact information, and the website was also included on  
24 the agenda, and any -- any new information about the  
25 project will be posted regularly as we update the

1 website.

2 All right. For the transcript, that concludes  
3 our meeting. Thank you.

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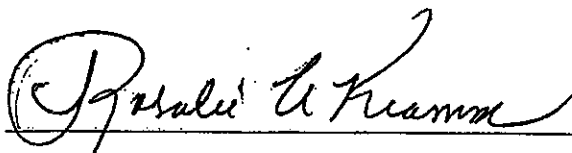
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## 1 STENOGRAPHER'S CERTIFICATE

2  
3 I, Rosalie A. Kramm, Certified Shorthand  
4 Reporter for the State of California, Notary Public, do  
5 hereby certify:

6 That the proceedings were reported  
7 stenographically by me and were transcribed through  
8 computerized transcription by me; that the foregoing is a  
9 true record of the meeting and proceedings taken at that  
10 time; and that I am not interested in the event of the  
11 action.

12 Witness my hand dated December 4, 2015.  
13  
14

15   
16  
17 ROSALIE A. KRAMM, CSR NO. 5469, CRR  
18  
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San Vicente Pumped Storage Study  
City of San Diego and the San Diego County Water Authority  
FERC PAD/NOI Meeting - San Vicente Conference Room A  
November 9, 2015

Page 1 of 2

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EXHIBIT B  
WIT. SDCWA  
DATE 11-9-15  
KRAMM COURT REPORTING

San Vicente Pumped Storage Study  
City of San Diego and the San Diego County Water Authority  
FERC PAD/NOI Meeting - San Vicente Conference Room A  
November 9, 2015

Page 2 of 2

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SAN VICENTE PUMPED STORAGE STUDY  
JOINT MEETING ON THE PRE-APPLICATION DOCUMENT  
(FERC NO. 14642-000)  
NOVEMBER 9, 2015

TRANSCRIPT OF MEETING

Transcribed by: Rosalie A. Kramm, CSR, RPR, CRR

1 APPEARANCES

2

3 KELLY RODGERS

4 ENERGY PROGRAM MANAGER

5 SAN DIEGO COUNTY WATER AUTHORITY

6

7 LAN WIBORG

8 DEPUTY DIRECTOR LONG RANGE PLANNING and

9 WATER RESOURCES, CITY OF SAN DIEGO

10

11 JEFF HARVEY

12 PRINCIPAL and SENIOR SCIENTIST

13 HARVEY CONSULTING GROUP

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1 I N D E X

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3 EXHIBIT A - SAN VICENTE PUMPED STORAGE POWERPOINT

4 PRESENTED AT MEETING

5 EXHIBIT B - SIGN-IN SHEET OF ALL ATTENDEES

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1 NOVEMBER 9, 2015 6:13 P.M. LAKESIDE, CALIFORNIA

2 JEFF HARVEY: Patt, welcome to you. Thank you  
3 very much for coming. And since you're it, we'll address  
4 you very personally.

5 PATT BIXBY: This is not the one where I can  
6 sneak in.

7 JEFF HARVEY: We're all looking away right now.  
8 Here's your chance.

9 Patt, just so you know, we do have a court  
10 reporter here who is doing a formal transcript. It is  
11 required by FERC rules. It is not because of any legal  
12 proceeding or courtroom kind of activity here at all.

13 Welcome to the San Vicente Pumped Storage Joint  
14 Meeting. I have the pleasure of introducing Kelly  
15 Rodgers, who is the Environmental Program Manager for the  
16 San Diego County Water Authority.

17 KELLY RODGERS: Energy.

18 JEFF HARVEY: What did I say, environmental?  
19 Energy Program Manager.

20 And Lan Wiborg is the Deputy Director of Long  
21 Range Planning and Water Resources for the City of  
22 San Diego Utility Department.

23 Bob Mulvey is the Assistant Director, behind  
24 you, for the City, Assistant Director of Public Utilities  
25 for the City of San Diego.

1           And the City of San Diego and the San Diego  
2 County Water Authority are jointly proposing the project.  
3 They'll talk about that in just a few minutes.

4           We don't need to go through too much formality  
5 here, just welcome, and I think they talked to you about  
6 the speaker slips and comment cards at the front if you  
7 have anything you want to comment on.

8           The purpose of the meeting is to introduce the  
9 project, talk about the environmental studies that will  
10 be done to support the license application, and then to  
11 solicit any comments that you might have about studies  
12 that should be added and -- and/or modifications to the  
13 studies that are proposed.

14           So we'll go through starting with the  
15 description and overview of the project. The purpose of  
16 this is a FERC joint meeting. It is targeted at resource  
17 agencies, tribes, and the public that may have an  
18 interest in the project. It is to present the  
19 co-applicants, the City and the Water Authority, their  
20 proposal to develop a pumped storage hydroelectric  
21 project, and an overview of the first document that was  
22 submitted to FERC, the pre-application document, what is  
23 in that document and the studies that it describes.

24           And this is -- one thing we want to emphasize  
25 is that this is the very first step in a long process

1 that will extend over about four or five years. So it is  
2 a three-stage pre-filing process, and, Patt, we'll be  
3 happy to get you a copy of this presentation as well at  
4 the end.

5 PATT BIXBY: Oh, perfect.

6 JEFF HARVEY: The three-stage process that  
7 starts with Stage 1 is the pre-application document that  
8 we filed with FERC July 28 of this year, and it was also  
9 sent out to the mailing list, which included resource  
10 agencies, tribes, and about 100 names of local landowners  
11 and other members of the public that have expressed  
12 interest in knowing about anything the Water Authority  
13 and the City do.

14 Based on input that we get during that process,  
15 we did formulate the number of studies that will be  
16 prepared. Those studies will be done during Stage 2, and  
17 that will take about two years in formulation of a formal  
18 license application that will be submitted to FERC. That  
19 license application includes multiple exhibits, one of  
20 which is the environmental report, and the environmental  
21 exhibit, Exhibit E.

22 And once we complete those studies and complete  
23 development of the license application, Stage 3, the  
24 final stage in this pre-filing process, is to actually  
25 file the license application, which starts the whole

1 process for FERC to begin, reviewing the license  
2 application and determining its adequacy, perhaps issuing  
3 requests for additional information; and then -- then  
4 from there FERC will go on to its environmental review  
5 process under the National Environmental Policy Act.

6 And with that I'm going to ask Lan Wiborg to  
7 explain the project. Do you want the pointer at all?

8 LAN WIBORG: Oh, yeah. Thank you, Jeff. The  
9 City of San Diego is happy to partner with the Water  
10 Authority on this project, which has the potential to  
11 generate revenue for our rate payers and offset future  
12 water rate increases. For the next few minutes I'll be  
13 showing you a couple of slides and provide a description  
14 of proposed projects.

15 So to begin, what you have up here is a map  
16 that shows the extent of San Vicente Reservoir, which is  
17 owned and operated by the City of San Diego. Both the  
18 City and the Water Authority own water storage capacity  
19 in the reservoir, and the existing reservoir will be part  
20 of the project, along with the existing electrical  
21 transmission corridor, that connects to the regional  
22 grid.

23 Using these existing infrastructures of San  
24 Vicente Reservoir as a foundation, the Water Authority  
25 and the City are studying the potential for developing a

1 500-megawatt pump storage project that will help meet the  
2 region's energy needs during peak demand periods. It can  
3 generate up to 4,000 megawatt hours of energy per day,  
4 enough to serve approximately 325,000 homes annually.

5 The project would involve creating a small  
6 upper reservoir, which is about 8,000 acre-feet, above  
7 the existing San Vicente Reservoir, along with a tunnel  
8 system and underground powerhouse to connect the two  
9 water bodies. The powerhouse would contain four  
10 reversible pump turbines. The upper reservoir will be in  
11 an area with no natural lake or stream, and this system  
12 is what is known as closed loop, where it does not have  
13 any connection to natural streams or rivers.

14 So if we move on to the next schematic, as I  
15 mentioned earlier, if built as currently envisioned, the  
16 project would have up to 500 megawatt capacity over eight  
17 hours, which means that we as a region will be able to  
18 store and generate up to 4,000 megawatt hours of energy  
19 available to meet demands.

20 It is important to clarify that this is an  
21 energy storage project, and it is essentially a large  
22 battery. Typical operation would entail generating  
23 during peak energy demand periods, and storage of low  
24 cost energy such as renewables when demands are low for  
25 later use. During off-peak periods, when power is



1 inexpensive and renewable supplies from wind, solar  
2 facilities may exceed demand, turbines would pump water  
3 to the upper reservoir, which could act as a battery of  
4 stored potential energy.

5 During peak energy demand, the system would  
6 create carbon-free energy by allowing the water to run  
7 downhill through the turbines.

8 The exchange between the two systems, two  
9 reservoirs, would not consume water of any significant  
10 amount. Studies are planned to determine whether it  
11 would interfere with water supply, water quality,  
12 fisheries, or recreational use of San Vicente Reservoir.  
13 Initial indications are that there would be no  
14 significant impacts to other uses at a reservoir.

15 So power generated at the San Vicente pumped  
16 storage facility will be delivered to the regional energy  
17 grid via transmission lines mostly parallel to the  
18 existing corridor of the Sunrise Power Link. The new  
19 lines will connect with an existing electrical substation  
20 about 8 miles away.

21 So just to recap essentially the goals and  
22 objectives of this project, there are four: One is to  
23 utilize the existing water resources for the City and the  
24 Water Authority; two is to contribute to the state goals  
25 for renewable power integration and greenhouse gas

1 reductions; three is to develop existing conditions for  
2 closed loop hydroelectric energy system to minimize  
3 adverse effects; and lastly, the revenue generated from  
4 this project will help to control the increase of water  
5 costs in the region.

6 So with that I'm going to turn this over to  
7 Kelly.

8 KELLY RODGERS: Thanks, Lan.

9 So now I'm going to go over where we are at in  
10 the FERC process, and some -- some things we've completed  
11 and activities yet to come. The process for obtaining a  
12 federal license and related permitting is complex, and  
13 this preliminary application document and joint meeting  
14 is the beginning of the process.

15 On this slide you can see key steps that  
16 highlight the entire process is expected to take four to  
17 five years, and that's including many additional  
18 opportunities to engage with resource agencies, tribes,  
19 and stakeholders. We have completed two steps so far,  
20 and that we have a preliminary permit issued to the City  
21 and Water Authority as joint permittees, from FERC. And  
22 we also submitted, City and Water Authority, a  
23 preliminary application document, Notice of Intent to  
24 FERC in July of 2015. During that time we declared that  
25 we'd like to use the traditional licensing process as we

1 move forward, and on September 28th, 2015, FERC approved  
2 the use of that process.

3 So future steps include conducting the studies  
4 outlined in the study plan that Jeff will go over, and  
5 submitting a full FERC license application should we move  
6 forward with the project, and sometime before 2018.

7 Other longer-term steps span from 2018 to 2021,  
8 and those steps include applying for water quality  
9 certification with the State Water Resources Control  
10 Board, performing all environmental reviews and documents  
11 that -- to satisfy both California Environmental Quality  
12 Act and the National Environmental Quality Act  
13 requirements. We -- we expect that we would have a  
14 decision on the water quality and FERC licensing by 2021,  
15 and that would be before construction.

16 And each step will include noticing, as was  
17 done for this meeting, mailings, newspaper notices, and  
18 information posted on the Water Authority website.

19 So with that I'd like to turn it over to Jeff  
20 so he can talk more about these studies.

21 JEFF HARVEY: In our review of the project in  
22 preparation of the pre-application document, we were able  
23 to utilize a number of environmental reports that you are  
24 probably familiar with that had been done on other recent  
25 projects in the area, including the recently constructed

1 Sunrise Power Link transmission line, the San Vicente Dam  
2 Raise Project, prior to that the emergency storage  
3 project, the EIR for the San Vicente Reservoir is a big  
4 part of, and then there are a number of habitat  
5 conservation plans and multi-species conservation plans  
6 that affect the land surrounding the reservoir, and all  
7 of those were available as a backup on biological  
8 information and resources.

9           So based upon our review of those collective  
10 documents and of this project, we've developed a list of  
11 studies that we will prepare as part of the license  
12 application, and as part of the environmental  
13 documentation will become part of the Environmental  
14 Impact Report for the project, and will become the  
15 Exhibit E, which is the foundation for the Federal Energy  
16 Regulatory Commission to use in the development of their  
17 environmental review, the document.

18           And those include geology and soils. The  
19 upper -- the lower reservoir, of course, exists, the  
20 San Vicente Reservoir, so no studies are needed there,  
21 but the upper reservoir will have several small dams that  
22 will create that water empoundment, that reservoir, and  
23 so there needs to be geotechnical investigation to  
24 determine the suitability of the integrity -- the  
25 integrity of the geologic substructure; for engineering

1 specifications that will go into the dams, the tunnel  
2 system that will interconnect the upper reservoir and the  
3 lower reservoir; and then at either end of the tunnel is  
4 what is called an inlet/outlet structure, which is where  
5 the water is either pulled in when the water is pumped up  
6 to the upper reservoir, or the water is released back out  
7 when the water is going to be dropped from the upper  
8 reservoir through the powerhouse to generate electricity  
9 and then return to the lower reservoir.

10 And we also have transmission lines, eight  
11 miles of transmission lines. All of that will be studied  
12 as part of the geology as well.

13 Patt, since it is just you, feel free to stop  
14 me at any point if you have questions along the way. You  
15 don't have to wait until the end.

16 PATT BIXBY: Oh, okay. Because I have a  
17 couple. But I'll turn this in after, I guess?

18 JEFF HARVEY: That will be fine.

19 PATT BIXBY: So the Sunrise -- was this always  
20 going to be part of using the Sunrise Power Link?

21 JEFF HARVEY: No. No, this is actually not  
22 part of using the Sunrise Power Link. We were able to  
23 use the document -- the transmission line for this  
24 project mostly parallels the route of the existing  
25 Sunrise Power Link --

1                   PATT BIXBY: Yeah.

2                   JEFF HARVEY: -- so we were able to look at the  
3 environmental documents that had been done for that  
4 project to understand the kinds of environmental  
5 conditions that we would have to deal with for our new  
6 transmission line as well.

7                   PATT BIXBY: Okay. Did the tribe have any  
8 issues, Barona?

9                   JEFF HARVEY: The tribe was at -- we had met  
10 with the tribe and we had their initial input, and they  
11 have not expressed any issues. They want to know about  
12 the project, and they want to make sure -- you'll see  
13 later on in the slides, I have -- one of the studies  
14 we're going to do is on cultural resources, and they know  
15 that there are cultural resources out there, and they  
16 want to make sure we do a very thorough study and that we  
17 coordinate with them about the results of that study.

18                  PATT BIXBY: So they have a tribal geologist or  
19 somebody there?

20                  JEFF HARVEY: Well, not a geologist, but  
21 they'll have an archeologist, yes.

22                  PATT BIXBY: Archeologist, that is what I  
23 meant.

24                  JEFF HARVEY: They'll have a tribal  
25 representative that will be part -- particularly during

1 construction, of helping to monitor. During the studies  
2 we will consult with them and we will have their input.

3 PATT BIXBY: Thank you.

4 JEFF HARVEY: So onto the study plans, the  
5 water resources, water quality modeling is being done for  
6 this project in tandem with studies that the City is  
7 performing for its use of the reservoir augmentation  
8 project, the Pure Water Project, as it is called; and  
9 water supply and water quality are the primary uses of  
10 the reservoir, and so these water quality studies are  
11 very important to understanding how this project might  
12 affect those, and if it does affect them adversely, it  
13 would be a basis for making a counter decision about the  
14 project.

15 Fish and aquatic resources, there is the risk  
16 of fish being entrained in the intake structure when  
17 water is being pumped up, and so we'll be studying the --  
18 what the likelihood is for fish to be killed in that  
19 process, what we need to do to mitigate and restock fish.  
20 There are no natural, native population of fish, but  
21 there are stocked fish, and it is a very important  
22 recreational fishery.

23 And so the effects on the fishery will be  
24 studied and what we can do to minimize those effects, and  
25 what -- what we can expect with the new upper reservoir

1 in terms of the fish population as well.

2 PATT BIXBY: How often do they stock it?

3 JEFF HARVEY: I don't know. I know they do it  
4 periodically. Maybe at the end we can get that question  
5 answered by somebody in the room. That's been done for a  
6 long time.

7 Patt, the only reason we need that is so that  
8 it can be recorded, so you are part of the record.

9 Wildlife and botanical resources, complete  
10 biological surveys, vegetation mapping, surveys for all  
11 of the known or suspected species that are protected  
12 under federal and state Endangered Species Acts, and  
13 other biological assessment for rare plants and so forth.

14 And then evaluation of the consistency of this  
15 project, and particularly the upper reservoir site within  
16 the context of the -- of the existing multi-species  
17 conservation plans and area sub-plans, protecting  
18 biological resources in that region.

19 The floodplains, this is right out of FERC  
20 regulations, but basically what this applies to is the  
21 shoreline area of San Vicente Reservoir. And there will  
22 be some disturbance during construction for the  
23 construction of the inlet/outlet works and tunnel system.  
24 After construction there will be no -- no disturbance of  
25 the shoreline area, except that the reservoir, as being



1 operated for pump back operations will have -- it will  
2 have about a 2-foot fluctuation in the level of the  
3 reservoir, for --

4 PATT BIXBY: During that time?

5 JEFF HARVEY: During -- for operations, for the  
6 lifetime of the project.

7 PATT BIXBY: Oh, lifetime.

8 JEFF HARVEY: Water is pumped up to be stored  
9 in the upper reservoir, then will create a draw-down  
10 about 2 feet to the lower reservoir.

11 I already mentioned rare and threatened  
12 species, that full surveys and full accounting, including  
13 not just the affected lands, but surrounding lands  
14 that -- that could also be indirectly affected; and for a  
15 range of species, not just listed species, bats, hawks,  
16 owls, the whole range of -- of species that are known to  
17 occur out there.

18 For recreational land use, recreation at  
19 San Vicente Reservoir is important, and so it's important  
20 that the project not interfere with recreational uses of  
21 the reservoir.

22 During construction obviously there will be  
23 some portions of the reservoir that will not be  
24 accessible for recreational use while they construct the  
25 inlet/outlet works, but thereafter, for the life of the

1 project, the project is not expected to interfere with  
2 recreational uses. No recreational uses of the upper  
3 reservoir are proposed. That will be off-limits, simply  
4 because the small water level will fluctuate heavily, and  
5 it is in protected habitat areas, and no point inviting  
6 more public uses of that land, particularly when you have  
7 such rich recreational opportunities at San Vicente  
8 Reservoir.

9 Aesthetic resources is mainly looking at the  
10 effects of the project on the visual character of the  
11 landscape, most of this -- some of this during  
12 construction, with the staging areas and the grading for  
13 the roads, for example, but really mostly to do with the  
14 effects of the new transmission line that will be visible  
15 for the life of the project. And I think we mentioned  
16 that the transmission line was intentionally sited to  
17 coincide with the existing Sunrise Power Link to try to  
18 minimize that kind of thing.

19 For cultural resources, full surveys by  
20 qualified archeologists of all of the project's lands,  
21 what's called by the State the area of potential effects,  
22 so that's the directive, footprint of the project; and  
23 the surrounding areas that could be indirectly affected,  
24 and that will include the entire transmission line  
25 corridor, all of the tunnel areas and upper reservoir

1 area. And that will be done in consultation with the  
2 local tribe, particularly Barona, because their  
3 reservation lands are so close out there, but also with  
4 the Native American Heritage Commission and with the  
5 State Historic Preservation officer, and will include  
6 both prehistoric and historic resources.

7 Tribal resources will be consultation with the  
8 tribes themselves to determine any sensitivity of lands  
9 or features that they are concerned about, and sharing  
10 all of the survey results and data of findings with the  
11 tribal representatives. And if there are enough of the  
12 right kinds of resources that are found and detected  
13 during the surveys, there will be a formal historic  
14 properties management plan that is prepared that  
15 specifies how those resources will be protected and  
16 managed for -- during construction and for the life of  
17 the project. And that also will be done in full  
18 consultation with the tribes and with the Native American  
19 Heritage Commission and the State Historic Preservation  
20 officer.

21 So that's it for studies. That takes us to the  
22 steps that we are in. Kelly already went through the  
23 schedule, but just to recap a little bit, we start with  
24 where we are now in preparation of the pre-application  
25 document, and the joint meeting that we're having here

1     tonight.

2             We will then go on in the next two years in  
3     completing all those studies I just described and all of  
4     the other parts of the license application, the  
5     engineering, design, economic analysis. There is quite a  
6     bit that goes into that license application beyond the  
7     environmental studies that we're focused on in this  
8     meeting tonight, that will culminate in the preparation  
9     of a draft license application that gets submitted to  
10    FERC, right now scheduled for about April of 2018, to be  
11    submitted.

12            And at about the same time we will -- the  
13    co-applicants, the City and the Water Authority, will  
14    apply to the State Water Resources Control Board. Under  
15    the Federal Power Act we are required to get water  
16    quality certification from the State. So we will make  
17    that application to the State in 2018, 2019, and that  
18    will trigger the beginning of the State environmental  
19    review process, preparation of the Environmental Impact  
20    Report to satisfy requirements of the California  
21    Environmental Quality act.

22            And at that same time, FERC will begin review  
23    of the license that we've submitted, and after they're  
24    satisfied that the license is -- the license application  
25    is complete, they make their formal determination of

1 ready for environmental analysis, and that triggers their  
2 environmental review process separate from the  
3 Environmental Impact Report for the State. The federal  
4 agency does its own environmental documenting process.

5 And then when those two are completed, we'll  
6 get a decision from the State regarding the water quality  
7 certification; and if that's a favorable decision, then  
8 FERC can act on and make their formal decision about the  
9 license. We would expect that to be in the 2020, 2021  
10 time frame.

11 So that's the kind of process we're engaged in.  
12 It is a lengthy process, and this is the very beginning,  
13 the very start of that.

14 PATT BIXBY: So the EIR should be around 2020?

15 JEFF HARVEY: Around 2019, 2020, yes, available  
16 for -- so when we get to that point we will have a public  
17 scoping meeting.

18 PATT BIXBY: That's what I was wondering.

19 JEFF HARVEY: And then when the draft EIR is  
20 complete we'll have meeting for review -- a public  
21 meeting for review of the draft EIR, and then, of course,  
22 it is at a formal hearing that the City and Water  
23 Authority consider the final EIR and make their decision  
24 about whether to adopt that. That goes then to the  
25 State, who also has a formal hearing as part of their

1 process to render their decision about the water quality  
2 certification.

3 So comments, Patt, I believe that you're here  
4 as a reporter, and not intending to file comments. If  
5 you are intending to file comments, FERC -- we -- no. We  
6 have -- I'm going to go over this very quickly. We have  
7 very specific guidance from FERC about what it is they  
8 want comments on on the study plans and on specific  
9 methodologies, if you were to request additional studies,  
10 then the methodologies for that. And that is what we've  
11 included here. This information is also on the comment  
12 card, if you have interest in studying that any further.

13 That is the end of our presentation. Thank you  
14 very much for coming and being a part of it.

15 PATT BIXBY: I had a couple of other questions.

16 JEFF HARVEY: Please.

17 PATT BIXBY: When you said no guarantee -- you  
18 didn't say it, but I'm asking. Does this mean there is  
19 no guarantee that this is all going to work?

20 JEFF HARVEY: That is correct. We are at the  
21 very early part of the study. There has been a  
22 feasibility study for the project done by Black & Veatch,  
23 and it indicates that there is reason to believe that  
24 this could be a very successful project, and that you  
25 would be able to build it.

1           And we have conditions in the State with  
2   renewable portfolio standards that are going to bring a  
3   lot of renewable energy into the region that needs to be  
4   managed in the transmission grid; this project and its  
5   ability to store surplus energy and then dispatch that  
6   energy in a way that supports intermittent renewable  
7   energy generation is very important to the state  
8   transmission operator, the California Independent System  
9   Operator, CalISO, you may have heard of.

10           So there are lots of reasons why this project  
11   adds value right now, and is being very seriously  
12   considered. But we have a lot of study to go through,  
13   and we have a lot of final engineering to go through; and  
14   the co-applicants have to determine that they believe  
15   that it's worth their financial investment to go forward.

16           So there are a lot of stages and a lot more  
17   study that needs to be done, and with each one of those  
18   studies, decisions that have to be made about whether or  
19   not to go forward with the project. It is not a -- it is  
20   not set in stone. That is correct.

21           PATT BIXBY: So does the public have any  
22   financial responsibility as you are going along?

23           JEFF HARVEY: No.

24           PATT BIXBY: There's nothing?

25           JEFF HARVEY: Correct. Those will be -- the

1 studies will be strictly funded by the two agencies, by  
2 the City of San Diego and by the Water Authority.

3 PATT BIXBY: And then could you explain the  
4 battery concept a little bit more?

5 JEFF HARVEY: There aren't very many ways to  
6 store energy. Batteries, of course, is one way that we  
7 are all very much familiar with, and so the analogy is  
8 that with this project, you are, during periods of either  
9 surplus energy generation or off-peak energy -- where  
10 there is energy in the system and not needed, you are  
11 using that energy to pump water up to the upper  
12 reservoir, and then that water is being held up in  
13 storage; and just because it is now able to use gravity  
14 to drop back down, it is -- it is like a battery. But it  
15 is just an analogy. It is not actually a battery. But  
16 it operates the same way in the system, that that energy  
17 that was available in the system and not being used, is  
18 now stored rather than simply being lost, and when you  
19 need that energy back in the system, you drop the water  
20 back down by gravity, and as it drops, it spins the  
21 turbine and generates electricity.

22 PATT BIXBY: That was the part that I was --

23 JEFF HARVEY: Right. And then that water goes  
24 right back into the lower reservoir, and is available  
25 when there is surplus energy to pump right back up to



1 store -- store that energy potential in the upper  
2 reservoir.

3 So the water is a working fluid just moving  
4 back and forth between the two reservoirs, connected by  
5 that powerhouse that has reversible turbines. It can  
6 pump water up when needed, and when the water is coming  
7 back down, the turbines spin and produce electricity.

8 PATT BIXBY: So during times of drought, for  
9 instance now, and the water drops, is that going to  
10 affect your flow?

11 JEFF HARVEY: That could affect flow, and in  
12 most hydroelectric schemes it would. In this case we are  
13 dealing with a water storage reservoir that is supplied  
14 with imported water, and so we are definitely buffered  
15 against drought and the likelihood that the reservoir  
16 would be too low to use for that purpose.

17 Kelly, would you like to add to that?

18 KELLY RODGERS: No, I think that is accurate.  
19 I think I just want to highlight, water stays in the  
20 reservoir. So as you said, the water drains into the  
21 dam, we raise the dam to be able to store not only the  
22 city's water for operational purposes and serving the  
23 customers, but for the Water Authority looking at  
24 regional use in the event of an earthquake, and imported  
25 water supply curtailment or drought, where we keep that

1 water in there. It's a pretty steady elevation. It  
2 doesn't fluctuate. It shouldn't really affect operations  
3 of this potential facility.

4 PATT BIXBY: Would you keep -- would you import  
5 more water simply to keep this going?

6 KELLY RODGERS: No. No. Water -- for  
7 everything, water pumps -- this project, our water, our  
8 operational -- operation for the reservoir is solely  
9 water. This is an added plus.

10 LAN WIBORG: In some ways it actually creates  
11 slightly increased increment of storage, if you can  
12 imagine, 8,000 acre-feet. And as we move this water back  
13 and forth, in addition to that water being conserved,  
14 stored, it is not being lost, but it also helps us  
15 generate energy and revenue from that energy.

16 PATT BIXBY: Thank you.

17 KELLY RODGERS: And reduces evaporation, too,  
18 in the operations, where -- we have to study it further,  
19 it's likely that it will reduce evaporation, because it's  
20 not sitting there, it is being circulated.

21 PATT BIXBY: This is a maybe, in other words?

22 LAN WIBORG: We have done some water modeling;  
23 preliminary results suggest that because the movement of  
24 the water increases, it can increase the mixing in the  
25 lower reservoir, it is possible that it will reduce the

1 temperature to such an extent that it will reduce  
2 evaporation. But those are very preliminary results.  
3 They need confirmation.

4           PATT BIXBY: Thank you. I think that's all I  
5 had.

6           JEFF HARVEY: Thank you very much for coming  
7 and for sitting through your custom presentation.

8           LAN WIBORG: I think we have one more member of  
9 the public who joined us. Do you have any questions for  
10 us?

11           MALE SPEAKER: No.

12           LAN WIBORG: Sorry to put you on the spot. We  
13 just want to make sure your questions are -- any  
14 questions are addressed.

15           MALE SPEAKER: I'm fine. We are just learning.

16           JEFF HARVEY: We are available while we're  
17 cleaning up here. If you have any questions you want to  
18 ask of anybody here, we have a number of people around  
19 the room that would be happy to talk to you.

20           With that I think we can close our formal  
21 meeting. Thank you very much.

22           PATT BIXBY: Thank you for you guys all  
23 staying.  
24  
25

## 1 STENOGRAPHER'S CERTIFICATE

2  
3 I, Rosalie A. Kramm, Certified Shorthand  
4 Reporter for the State of California, Notary Public, do  
5 hereby certify:

6 That the proceedings were reported  
7 stenographically by me and were transcribed through  
8 computerized transcription by me; that the foregoing is a  
9 true record of the meeting and proceedings taken at that  
10 time; and that I am not interested in the event of the  
11 action.

12 Witness my hand dated December 4, 2015.  
13  
14

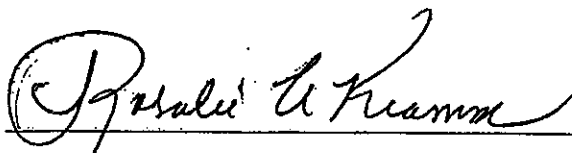
15   
16  
17 ROSALIE A. KRAMM, CSR NO. 5469, CRR  
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EXHIBIT B  
WIT. SDCWBA  
DATE 11-9-15  
KRAMM COURT REPORTING

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# San Vicente Pumped Storage Study Joint Meeting

November 9, 2015



San Diego County  
Water Authority

EXHIBIT A  
WIT. SDCWBA  
DATE 11-9-15  
KRAMM COURT REPORTING

# Introductions

## **Kelly Rodgers**

Energy Program Manager,  
San Diego County Water  
Authority



## **Lan Wiborg**

Deputy Director Long  
Range Planning and  
Water Resources,  
City of San Diego



## **Jeff Harvey**

Principal and Senior  
Scientist,  
Harvey Consulting  
Group



# Meeting Format

- Welcome
- Meeting purpose
- Housekeeping
- Speaker slips and comment cards



# Agenda

Topic	Time
Purpose	6:00p.m.-6:30p.m.
Project Description and Overview	
Overview of Federal Energy Regulatory Commission (FERC) Process	
Pre-Application Document	
Study Plans	
Schedule and Next Steps	
Comments	6:30p.m.-7:45p.m.

## Purpose

- FERC requirements for a “Joint Meeting”
- Present Co-Applicant’s proposal and potential environmental impacts
- Overview of the Pre-Application Document
- Discuss data to be obtained and studies to be conducted as part of the pre-filing consultation process
- Meeting is the first in long process



# FERC 3-Stage Pre-filing Process

- **Stage 1.** Pre-Application Document to resource agencies, tribes, and members of the public, including a Joint Meeting and comments on subsequent studies to be completed
- **Stage 2.** Applicants conduct required studies to support a license application
- **Stage 3.** Filing of a License Application



# San Vicente Pumped Storage Study

## Upper Reservoir - Foster Canyon



SCALE (feet)  
0 1,000 2,000 4,000

- Proposed Reservoir Site
- Proposed Dam Locations
- Tunnel Alignment
- Existing Roads
- Proposed Roads
- Proposed Transmission Alignment
- Proposed Tower Locations
- Existing SunRise Powerlink
- Existing Substations
- Existing Transmission Lines

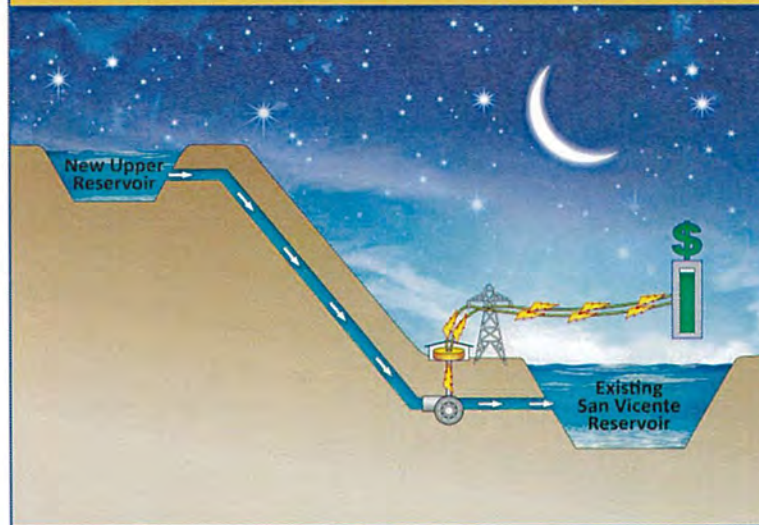




# San Vicente Pumped Storage Study

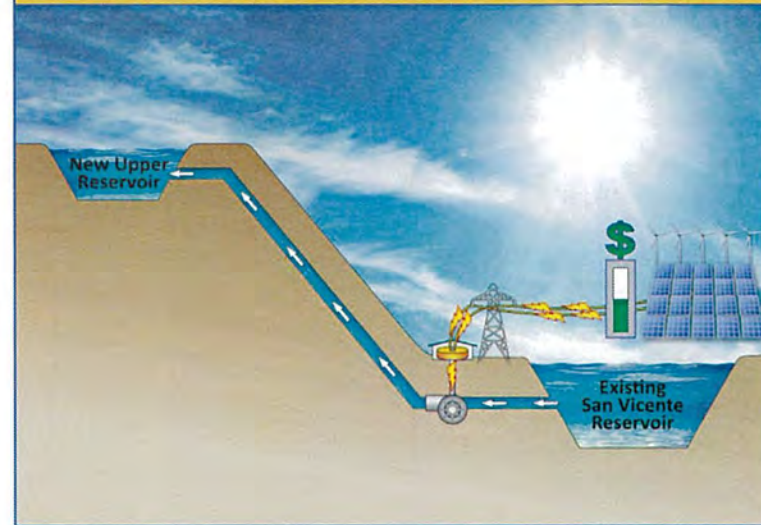
## Typical Power Generation

*Stored water flows downhill through turbines, providing energy during peak demand periods.*



## Typical Power Storage

*Low-cost energy (e.g. excess wind & solar energy) is used to pump water uphill for later use.*





# Overview of FERC Process and Related Permitting

- ✓ Preliminary Permit obtained in April 2015, and Pre-Application Document and Notice of Intent filed in July 2015
- ✓ Traditional Licensing Process (TLP) approved by FERC on September 28, 2015
- Consultation, Studies, and FERC License Application (2016-2018)
- Application for Water Quality Certification (WQC) with SWRCB (2018)
- Environmental Review and ultimate project decisions (2018-2020)
- WQC Decision (2020) and License Decision (2021)



# Study Plans

- Overview
- PAD development and comments received
- Potential effects
- Proposed studies



# Study Plans

- **Geology and Soils**

- Geotechnical investigation specific to the upper reservoir and dam, tunnels, inlet/outlet structures, access roads, and transmission lines.



## Study Plans (cont.)

- **Water Resources**

- Water quality modeling studies, including a shoreline erosion analysis to assess water quality effects of pumping operations and daily reservoir fluctuations for lower and upper reservoirs.

## Study Plans (cont.)

- **Fish and Aquatic Resources**
  - Assess the risk of: fish entrainment, expected mortality rates, potential for impacts to fish populations in the existing lower reservoir, and potential for fish populations to be supported in the proposed upper reservoir.



## Study Plans (cont.)

### ○ **Wildlife and Botanical Resources**

- Biological surveys and vegetation mapping, special-status species habitat assessment, and jurisdictional delineation of wetlands and waters of the U.S. and State.
- Protocol-level surveys and biological assessment for rare plants, Quino, Gnatcatcher, Vireo, and potentially other special-status species.
- Evaluate consistency with City and County MSCP and Subarea Plans, including siting and design criteria and need for amendments to applicable Resource Management Plans.

## Study Plans (cont.)

- **Floodplains, Wetlands, Riparian and Littoral Habitat**
  - Aquatic and riparian habitat analysis for jurisdictional delineation, focused on tunnels, roads, and powerline corridor.
  - Construction and operations affects on aquatic and riparian biological resources.



## Study Plans (cont.)

- **Rare and Threatened Endangered Species**
  - Reconnaissance surveys and habitat mapping for each listed species.
  - Protocol-level surveys for Arroyo toad, Gnatcatcher, Vireo and possibly others.
  - Surveys in adjacent areas for special-status species (bats, nesting raptors, and possibly others).

## Study Plans (cont.)

- **Recreation and Land Use**

- Recreational use and access at the San Vicente Reservoir during construction.
- Assess land use and management plans as they affect land acquisition, easements and mitigation.



## Study Plans (cont.)

### ○ **Aesthetic Resources**

- Assess existing visual character of the upper reservoir area and overall project area.
- Assess visual effects of project construction and staging areas, including terrain alteration and grading, construction equipment operation, and lighting.
- Assess long term visual effects of the proposed upper reservoir, and the proposed transmission line.

## Study Plans (cont.)

- **Cultural Resources**

- Cultural resource survey of the proposed Project's Area of Potential Effects (APE), including the upper reservoir area, gen-tie powerline corridor, and new access road.



## Study Plans (cont.)

### ○ **Tribal Resources**

- Consultation with affected tribes to identify locations requiring additional surveys.
- Survey results documented and reviewed with agency and tribal representatives.
- If applicable, a Historic Properties Management Plan will be prepared to identify appropriate measures of protection for identified cultural resource sites, including management and protection of Native American values.

# Schedule and Next Steps

## Near Term: 2016-2018

### Co-Applicants:

- Consultation, Studies and Preparation of License Application
- Deadline to submit study requests January 8, 2016
- Submit Draft License Application to Federal Energy Regulatory Commission (FERC) in 2018

### FERC and Public Review:

- Comment on Draft License Application in 2018

## Mid Term: 2019

### Co-Applicants:

- Water Quality Certification Application to State Water Resources Control Board (SWRCB)
- Triggering Formal California Environmental Quality Act (CEQA) Review
- Joint NEPA/CEQA Scoping Meeting

### FERC:

- Determination of Ready for Environmental Analysis (REA)
- Triggering Formal National Environmental Policy Act (NEPA) Review

## Long Term: 2020+

### Co-Applicants:

- Environmental Impact Report (EIR) Preparation and Public Comment Periods in 2020

### SWRCB:

- Decision Regarding Water Quality Certification with EIR Certification in 2020

### FERC:

- Decision on License ±2021



## Comments – FERC Guidance

**Pursuant to 18 C.F.R. 4.38(b)(5),** a resource agency, Native American tribe or member of the public requesting studies must provide the co-applicants with written comments:

- (i). Identifying its determination of necessary studies to be performed or the information to be provided by the co-applicants;
- (ii). Identifying the basis for its determination;
- (iii). Discussing its understanding of the resource issues and its goals and objectives for these resources;

## Comments – FERC Guidance (cont.)

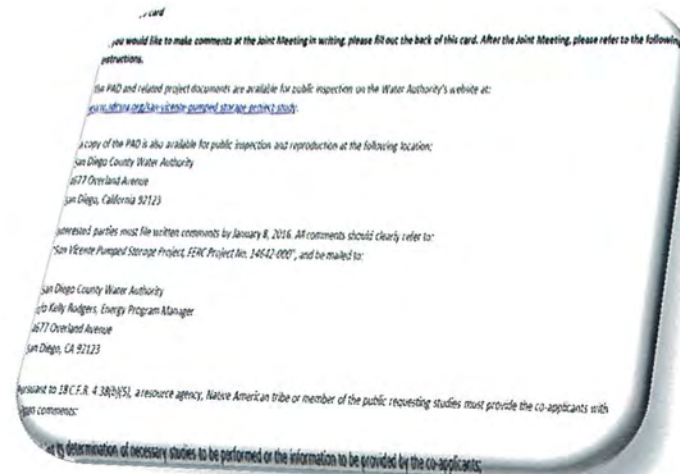
### **Pursuant to 18 C.F.R. 4.38(b)(5):**

- (iv). Explaining why each study methodology recommended by it is more appropriate than any other available methodology alternatives, including those identified in the PAD by the co-applicants;
- (v). Documenting that the use of each study methodology recommended by it is a generally accepted practice; and
- (vi). Explaining how the studies and information requested will be useful to the agency, Native American tribe or member of the public in furthering its resource goals and objectives that are affected by the proposed project.



# Comments

- Comment cards
- Opportunity to comment
  - postmarked by January 8, 2016



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