DOCKETED	
Docket Number:	23-OPT-02
Project Title:	Darden Clean Energy Project
TN #:	263099-2
Document Title:	Staff Memorandum on Record of Proceedings_Attachment 1
Description:	N/A
Filer:	Ngoc Tran
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	5/15/2025 9:04:42 AM
Docketed Date:	5/15/2025

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From:	Watson, Carol@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
.	(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=84E32D50C7DC47D89812B468A50090ED-WATSON, CAR]
Sent:	1/30/2025 9:24:10 PM
10:	Swanberg, Carrie@Wildlife [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=user89842a86]; Vang, Jim@Wildlife [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=32237e96460546779116e0d64096b692-WildlifeJim]; Crisp, Ann@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b89c4de7ece742679d19e1e3ee713dc2-Crisp, Ann@]
Subject:	Darden Conditions Review
Location:	Microsoft Teams Meeting
Start: End: Show Time As:	1/31/2025 10:00:00 PM 1/31/2025 11:00:00 PM Tentative
Recurrence:	(none)
Required Attendees:	Swanberg, Carrie@Wildlife; Vang, Jim@Wildlife; Crisp, Ann@Energy
TOPICS:	

BUOW/SWHA and then BNLL and Nesting birds/TRBL

Microsoft Teams Need help?

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For organizers: Meeting options | Reset dial-in PIN

From	Cosontino Andu@CALEIRE [Andu Cosontino@fire co gov]
Sent:	
To:	agreenberg [/o-Eychange] abs/ou-Eychange Administrative Group
CC:	(FYDIBOHF23SPDLT)/cn=Recipients/cn=b9bfa77aaf044a8ca270ce3bcef10093-9afec475-67]; Fooks, Brett@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=870df74143964b71ada0039bf13c5a9a-Fooks, Bret] Hail, Dustin@CALFIRE [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cce56d6eca514a4ca05e8d317a7cf0a8-CALFIREdhai]; Michaels, Ryan@CALFIRE [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cce56d6eca514a4ca05e8d317a7cf0a8-CALFIREdhai]; Michaels, Ryan@CALFIRE [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0d0f8ddf3e174a70965e9c4095c54517-CALFIREfrmic]: Wittwer
	Jeremiah@CALFIRE [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=18c9fdf967b745fcb0ed1c9c785022d5-CALFIREJWit]
Subject:	FCFPD Response Letter
Attachments:	FCFPD IP Darden Response Letter.pdf
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sender and kno	w the content is safe.

Good Afternoon,

Attached to this email is the response from the Fire District as requested. Please let us know if you need anything further. It has been a pleasure working through this process with you.

Thank you,



Andy Cosentino Assistant Chief Proudly Serving CAL FIRE Fresno County Fire 210 S. Academy Avenue Sanger, CA 93657 (559)569-5099 Cell



From:Marisa Mitchell [marisa@intersectpower.com]Sent:1/27/2025 2:12:35 AMTo:Huber, Elizabeth@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=93f40660c3d446578d63390926fd5e5a-Huber, Eliz]CC:Luke Dunnington [luke@intersectpower.com]Subject:Monday morning discussion topicsAttachments:2024-09-05_Intersect Power Avain Fatality Assessment Memo.pdf

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Dear Elizabeth,

As requested, below and attached is a summary of the discussion items for tomorrow morning.

Marisa Mitchell Head of Environmental and Permitting INTERSECT POWER 415.846.0730 marisa@intersectpower.com www.linkedin.com/in/marisa-n-mitchell

Darden's Draft EIR is on the cusp of setting important precedents that will have direct impact on the trajectory of solar development in the SJ Valley - this is arguably the most well supported, least controversial, lowest impact project anywhere, and we expect very few significant impacts, and therefore very little mitigation in compliance with law.

CEQA requires lead agencies to require mitigation only for significant impacts, not speculative ones, and mitigation must be roughly proportional to the impact - we're counting on CEC leadership to ensure Staff follows the law, because we've seen numerous violations of this by well meaning staffers and consultants who just don't know the size of the check they're forcing companies to write when imposing poorly conceived mitigation measures or using the "precautionary principle" instead of the "rough proportionality" standard, the latter being the decision rule of law. Here are the most common areas we see violations of rough proportionality:

•

- The so-called "lake effect"
- •
- •
- It's a hypothesis that has been vaguely supported by poorly conducted research that pools results across CSP and PV technologies, and across old and new PV tech - forthcoming paper demonstrates that modern PV projects (post 2014) demonstrate no avian attraction, no presence of water birds; the lake effect has been debunked; even Audubon Society agrees
- 0
- As there is no impact, there should be no mitigation; however, public agencies have sometimes imposed multi-million dollar post-construction mortality

monitoring programs with adaptive management; this is highly inappropriate and not in compliance with law.

- 0
- 0
 - We've prepared a memo with supporting information (see attached)
- 0
- Summary: expect no agency-imposed mortality monitoring expenses outside of our proposed SWHA conservation strategy.
- •
- Agriculture: setting a critical precedent w/ AB 205 on how to view significance of impacts to prime agriculture given SGMA mandates and associated massive land retirements, which is occurring/will continue to occur almost entirely on lands designated prime
- ٠
- •
- o 9000 acre solar site is retired/non-prime ag, no WA contract
- 0
- 0
- PG&E switching station 40-acre parcel is technically designated prime ag by DOC
- 0
- Our application used the modified threshold, which is more applicable in a SGMA world: "Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use, excepting those lands that would be expected to be converted or retired even without the project due to insufficient water resources for continued commercial agriculture, land subsidence due to historic groundwater over-pumping, soil contamination due to inadequate drainage, or the local weather effects of climate change?"
- 0
- 0
- Landowner letter demonstrates that the site would be repurposed to energy or another use given water insecurity - no significant impact on agriculture
- 0
- 0
- Finding no significant impact is warranted, and either way, no mitigation is warranted (consistent with numerous county precedents finding that no mitigation is available even if ag conversion impacts are significant)
- ٠
- •
- **CESA protected species**: Setting a critical precedent with regard to Swainson's hawk (SWHA) and burrowing owl (BUOW) the SWHA conservation strategy IS the mitigation because we're committing to no net loss of foraging and nesting conditions at the project site, and take is highly unlikely anyway; anticipate significant uplift in habitat conditions relative to baseline
- •
- 0
- No offsite compensatory mitigation is warranted

- 0
- 0
- Conservation easement for the strip of land to protect rows of existing and new trees is 0 feasible
- 0 0
- Revegetation seed mix can't be all natives not roughly proportional to/ commensurate
- 0 w/ any impact - very expensive (would at least double, likely triple the price of land); requiring native seed mix has no nexus with our incidental take coverage or any other impact because hawks only care about vegetation structure, not composition
- 0

0

If offsite compensatory mitigation were to be imposed, this would be a \$100M pricetag 0 and set a dangerous precedent that would chill development in the SJV and encourage development in the desert, with far greater impacts to sensitive habitats and protected species

TETRA TECH

Memo

То:	Intersect Power
From:	Karl Kosciuch, PhD, Wildlife Program Manager, Tetra Tech, Inc.
Date:	September 5, 2024
Subject:	Avian Fatality Assessment for PV Solar Projects

On behalf of Intersect Power, Tetra Tech, Inc. developed this memo to evaluate bird fatality patterns at photovoltaic (PV) solar and provide a description bird mortality at PV solar facilities developed in agricultural landscapes. Based on my review of the current peer-reviewed and gray literature, and my experience studying bird interactions with solar facilities for nine years, I have reached primary conclusions to a reasonable degree of certainty, which I discuss in more detail in the memorandum that follows:

- 1. Bird fatalities at tall features on the landscape (e.g., communications towers, buildings, wind turbines) are several orders of magnitude higher than at PV solar facilities, and comparative fatality events have not been observed at PV solar facilities (Gehring et al. 2009, Kosciuch et al. 2020, Loss 2016).
- 2. High rates of aquatic bird mortality are specific to one PV solar facility that has fixed panels and lacks anti-reflective coating in the Southwest, similar patterns have not been observed any other PV solar facility, and a similar rate of aquatic bird mortality is not expected at newly installed PV solar facilities (Kosciuch et al. 2020, Kosciuch et al. 2021).
- 3. Aquatic birds were observed inside and outside a PV solar facility in an agricultural landscape in the Imperial Valley, and bird carcasses were found inside and outside of the facility suggesting no clear pattern of attraction to the solar facility (Kosciuch et al. 2021).
- 4. A recent study concluded that populations of some species of birds are vulnerable to morality at solar energy developments (Conkling et al. 2022). However, the study examined species almost exclusively affected by concentrating solar power and not PV solar development and do not pertain to species most often detected as carcasses at PV solar.
- An on-going camera monitoring study by Argonne National Lab at PV solar facilities has documented over 17,000 instances of bird activity but has recorded zero collision events, supporting conclusions from the fatality monitoring results that collisions are rare (Hamada et al. 2024).
- 6. The conversion of an agricultural landscape to a naturally vegetated landscape within a PV solar facility can improve habitat and increase bird species richness (Jarčuška et al. 2024) without increasing fatality risk.

BIRD COLLISIONS WITH ANTHROPOGENIC STRUCTURES

Bird fatalities resulting from tall anthropogenic structures have been extensively studied, with estimates reaching billions of fatalities annually. Loss (2016) reported U.S. fatality estimates from domestic free-ranging cats at 1.4 – 4.0 billion birds per year followed by buildings (365 – 988 million), automobiles (200 – 340 million), and power lines (8 – 57 million). Fatality estimates associated with PV solar installations, which are not vertical structures, have been significantly lower than with other anthropogenic structures. Walston et al. (2016) estimated between 37,800 – 138,600 bird fatalities per year for all utility-scale solar facilities (14-gigawatt capacity, including operational or under construction) in the U.S. at the time of publication. Similarly, Kosciuch et al. (2020) estimated 10,920 total bird fatalities per year based on a capacity of 6-gigawatts of PV solar in southern California. In the same region, fatality estimates produced by Walston et al. (2016) for buildings (~7.8 million), automobiles (~453,000), and wind turbines (~29,000) far exceed the bird fatality estimate for PV solar.

It is well-documented that large-scale mortality events occur at tall anthropogenic structures, particularly impacting nocturnal migrant birds. In contrast, bird carcasses found at PV solar facilities typically involve a small number of common ground-dwelling bird species. Erickson et al. (2001) reported hundreds of birds killed in a single night at tall structures such as communication towers, while the highest single mortality events of aquatic birds at PV solar sites were documented by Kosciuch et al. (2020). Large-scale mortality events at tall structures such as buildings and communication towers are generally linked to lighting and nights with low cloud ceilings (Larkin 2000, Gehring et al. 2009), poor weather, or other factors, such as wet parking lots (Roberts et al. 2014). Since PV solar facilities do not contain tall structures such as buildings and communication towers of nocturnal migrants have not occurred at PV solar facilities.

BIRD MORTALITY PATTERNS AT PHOTOVOLTAIC SOLAR FACILITIES IN THE SOUTHWEST

Current knowledge on how birds interact with PV solar facilities is primarily derived from a small number of observational studies in the southwestern U.S. The unexpected presence of aquatic birds, such as ducks, loons, and grebes, found stranded or deceased at a PV solar facility in the southwestern U.S., has sparked interest among stakeholders such as developers, government agencies, and non-governmental organizations. In 2014, Kagan et al. determined that nearly half (48% or 27/56) of the bird remains found at a single PV solar facility, Desert Sunlight, in southern California were from aquatic species. The unexpected presence of aquatic birds could mistake the PV solar facility prompted the "lake effect" hypothesis, which suggests aquatic birds could mistake the PV solar panels for water and collide with the panel surface (Upton 2014). Broadening the number of studies summarized, Kosciuch et al. (2020) reached four primary conclusions in an assessment of 13 fatality monitoring studies at 11 PV solar facilities in the southwestern U.S.; 1) most evidence of fatalities were feather spots with unknown cause of mortality, 2) most evidence of fatalities was from common ground-dwelling birds with large regional population sizes, 3) no relatively large fatality events were detected, and 4) most carcasses were detected in fall.

PV Solar Fatality Summary

Bird fatality data from Desert Sunlight has been presented in several studies and is noted for the high numbers of aquatic bird carcasses (Kagan et al. 2014, Walston et al. 2016, Kosciuch et al. 2020). However, Desert Sunlight, developed in 2015 in Riverside County, California differs from development methods used for modern PV solar facilities. Most notably, Desert Sunlight uses fixed-tilt panels without anti-reflective coating as illustrated by the Google Earth image, which shows reflection off the solar panels (Figure 1). Therefore, it is reasonable to conclude that the panels can look like water. Unlike Desert Sunlight, most modern solar PV facilities (including the proposed Darden Solar Facility) use single axis tracking technology, which allows the panels to tilt in accordance with the angle of the sun, and panels with anti-reflective coating . Figure 2 shows the different panel orientation of fixed-axis and tracker panels at the same time of day. Single axis tracking technology and anti-reflective coatings reduce glint and glare reflected by the panels and allow panels to absorb more sunlight. Thus, the panel type and configuration used at Desert Sunlight, which creates glint and glare, will not be used at Darden.

Conkling et al. (2022) evaluated impacts of mortality at solar facilities on bird populations using data from different types of solar facilities in California including concentrating solar power tower (Ivanpah Solar Electric Generating System), concentrating solar trough (Genesis Solar), and PV solar (Blythe Solar, Desert Sunlight, McCoy Solar, Mojave Solar). After modeling the effects of additional mortality of 1,000 and 5,000 individuals on species identified as potentially sensitive, the authors concluded that populations of nocturnal migrant bird species were vulnerable to solar (Conkling et al. 2022). However, their conclusion requires specific context about solar technology and risk to birds. The migrant birds included in the analysis were primarily found at Ivanpah, which creates concentrated solar flux at receiver towers that causes singe mortality of birds, an effect not found at PV solar. Thus, concentrating solar power could affect populations of nocturnal migrant birds if additional concentrating solar power towers are developed and mortality patterns are similar. However, the conclusions about migrant bird population vulnerability do not apply to PV solar because PV facilities do not have concentrated solar flux.

LAKE EFFECT AND BIRD MORTALITY AT A PV SOLAR FACILITY IN AN AGRICULTURAL LANDSCAPE

The lake effect hypothesis was developed based on data from a single PV solar facility, Desert Sunlight, and it was unclear whether the presence of aquatic bird carcasses was unique to the Desert Sunlight facility or a widespread pattern in utility-scale solar energy projects. In a summary of 13 fatality monitoring studies, Kosciuch et al. (2020) found that in the Sonoran and Mojave Desert (SMD) Bird Conservation Region (BCR), 90% of studies reported aquatic bird carcasses at PV facilities, while outside the SMD BCR, this was noted in only one out of three studies. However, the fatality studies were not completed with the intent of examining ideas around lake effect and provided limited inference into potential causes of mortality.

The lack of specific questions about aquatic birds prompted a subsequent study (Kosciuch et al. 2021) comparing bird populations at PV solar facilities and a small regional lake. The authors found that aquatic bird diversity was lower at the solar facilities compared to the lake, and overall use by aquatic birds was an order of magnitude higher at the lake than at the PV solar facilities (Kosciuch et al. 2021). Aquatic birds did occur at solar facilities, but flocks did not exhibit landing behavior or circle the facilities (Kosciuch et al. 2021). However, though small numbers of aquatic bird carcasses were detected at PV solar facilities in the desert

PV Solar Fatality Summary

environment, no carcasses were found in the reference areas, suggesting that aquatic birds may be attracted to the PV solar facilities in desert environments. The study concluded there is limited evidence of aquatic birds being broadly attracted to PV solar facilities. Rather, the findings suggest that attraction is likely a nuanced phenomenon that is species-specific and context-dependent; not a constant signal of water to all aquatic birds (Kosciuch et al. 2021). The specific causes of attraction to PV solar facilities and the conditions for such occurrences remain unclear, and additional studies are being conducted with federal funding.

A unique aspect of the study design in Kosciuch et al. (2021) was that fatality monitoring and bird use surveys were completed at a solar facility and reference areas in an irrigated agricultural landscape in the Imperial Valley of California, which is more similar to the Central Valley than the desert environments studied previously. The authors detected five carcasses and observed 715 birds flying over or within the facility and detected six carcasses and observed 860 birds flying over or within the reference area. In conclusion, the authors stated "Thus, in the agricultural landscape context, it is difficult to untangle attraction (i.e., lake effect) from other sources of mortality (e.g., predation) for some species…because possible attraction is obscured in agricultural landscapes, which can be hybrid or novel ecosystems inhabited by aquatic habitat birds."

INFERENCE INTO BIRD MORTALITY PATTERNS AT PV SOLAR FACILITIES IN AGRICULTURAL LANDSCAPES

Since Desert Sunlight was the first PV solar facility included in bird fatality summaries, there was an expectation that patterns of aquatic bird mortality at other facilities would be similar (Kagan et al. 2014, Upton 2014). However, recent studies in the southwestern U.S. and Alberta, Canada have shown that to not be the case (Kosciuch et al. 2021, Kosciuch et al. 2022). In fact, fatality patterns at Desert Sunlight have not been seen at any other PV solar facility with available monitoring data. It is likely that either two standard industry practices, which began around 2014, has reduced collision risk for birds. These are 1) installing of single-axis tracker panels, and/or, 2) the addition of anti-reflective coating.

Argonne National Laboratory is completing a study at seven PV solar facilities in four regions in the U.S. by installing cameras to monitor bird activity. The camera system detected 17,608 bird activities and no collisions with panels (Hamada et al. 2024). Birds were observed flying above, flying through, and perching on solar panels during the study (Figure 3). This study shows that collisions are rare, and that mitigation would not be needed at any of their study sites.

Kosciuch et al. (2021) demonstrated that birds live within agricultural landscapes and bird mortality occurs on this landscape independent of PV solar facilities. The authors observed birds flying over and within a PV solar facility and found a small number of carcasses compared to the number of live birds detected. Thus, it is possible that some evidence of bird fatalities will be detected at PV solar facilities developed in agricultural landscapes but based on existing studies, the mortality patterns are difficult to untangle from background mortality (EPRI 2021). In other words, determining the cause of mortality of a carcass found at a PV solar facility is complicated by the presence of background mortality. Further, the fatality rates are expected to be relatively low compared to the number of birds inhabiting the area. Converting an agricultural landscape to a natural landscape will remove inputs (e.g., fertilizer, pesticide) and potentially restore habitat for birds (Struthio and Knapp 2023) and overall should be a net positive for birds and biodiversity. Fatality monitoring

is costly for solar developers and reduces the funding available for other activities and studies that could create and demonstrate benefits to birds including revegetation, habitat restoration, and bird community monitoring.

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Figure 1. Aerial image of Desert Sunlight Solar Farm, Riverside County, California, taken February 6, 2016, which uses fixed-axis panels without anti-reflective coating.



Figure 2. A mixture of fixed-axis (a) panels a tracker panels (b) at a solar facility in Imperial County, California.



Figure 3. Slide from Hamada et al. (2024) showing bird activity during the study.

From:	Worrall, Lisa@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4bbc7048b38485084bdb03fb494b25b-Worrall, Li]
Sent:	1/30/2025 1:24:07 AM
То:	Becky Moores [becky.moores@intersectpower.com]
Subject:	Re: Re: Darden- Questions in response to Preliminary Stormwater Report and 2D hydraulic analysis report

Yes, please.

From: Becky Moores <becky.moores@intersectpower.com>
Sent: Wednesday, January 29, 2025 5:22 PM
To: Worrall, Lisa@Energy <Lisa.Worrall@energy.ca.gov>
Subject: Re: Re: Darden- Questions in response to Preliminary Stormwater Report and 2D hydraulic analysis report

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Lisa - were the responses on stormwater sufficient? Would you like me to submit that information, along with those land use figures, to the docket?

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Thu, Jan 23, 2025 at 12:16 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Thanks Becky.

From: Becky Moores <<u>becky.moores@intersectpower.com</u>> Sent: Thursday, January 23, 2025 10:36 AM To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> Cc: Knight, Eric@Energy <<u>Eric.Knight@energy.ca.gov</u>>; Chang, Kaycee@Energy <<u>kaycee.chang@energy.ca.gov</u>>; Crisp, Ann@Energy <<u>Ann.Crisp@energy.ca.gov</u>>; Abulaban, Abdel-Karim@Energy <<u>Abdel-Karim.Abulaban@energy.ca.gov</u>>; Watson, Carol@Energy <<u>Carol.Watson@energy.ca.gov</u>>; Ackerman, James@Energy <<u>james.ackerman@energy.ca.gov</u>>; Will Lutkewitte <<u>will.lutkewitte@intersectpower.com</u>>

Subject: Re: Re: Darden- Questions in response to Preliminary Stormwater Report and 2D hydraulic analysis report

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Lisa,

See attached responses related to stormwater management.

Thank you,

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Wed, Jan 15, 2025 at 9:13 AM Becky Moores <<u>becky.moores@intersectpower.com</u>> wrote:

Lisa - just wanted to let you know we are working on these questions and will get you back responses as soon as possible.

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Mon, Jan 13, 2025 at 6:34 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote:

Hi Becky,

Here is bio's question:

A description of the predicted frequency that standing water would occur, and the length of time to percolate. For example, is standing water expected on site most years during rainy season? Or only during a 100 year storm? What about standing water during a 5 year storm, an event more likely to occur during the project's lifetime than the modeled 100 year storm.

Thanks,

Lisa

From: Worrall, Lisa@Energy Sent: Monday, January 13, 2025 1:22 PM To: Becky Moores <<u>becky.moores@intersectpower.com</u>> Cc: Knight, Eric@Energy <<u>Eric.Knight@energy.ca.gov</u>>; Chang, Kaycee@Energy <<u>kaycee.chang@energy.ca.gov</u>>; Crisp, Ann@Energy <<u>Ann.Crisp@energy.ca.gov</u>>; Abulaban, Abdel-Karim@Energy <<u>Abdel-Karim.Abulaban@energy.ca.gov</u>>; Watson, Carol@Energy <<u>Carol.Watson@energy.ca.gov</u>>; Ackerman, James@Energy <<u>james.ackerman@energy.ca.gov</u>> Subject: RE: Re: Darden- Questions in response to Preliminary Stormwater Report and 2D hydraulic analysis report

I was waiting for questions from bio, but in the meanwhile, here are the questions that Water Resources have.

We need to get these resolved so it doesn't affect our document publication timing.

From: Ackerman, James@Energy <<u>james.ackerman@energy.ca.gov</u>> Sent: Friday, January 10, 2025 9:05 AM

To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>>

Cc: Knight, Eric@Energy <<u>Eric.Knight@energy.ca.gov</u>>; Chang, Kaycee@Energy

<<u>kaycee.chang@energy.ca.gov</u>>; Crisp, Ann@Energy <<u>Ann.Crisp@energy.ca.gov</u>>; Abulaban, Abdel-

Karim@Energy <<u>Abdel-Karim.Abulaban@energy.ca.gov</u>>; Watson, Carol@Energy

<<u>Carol.Watson@energy.ca.gov</u>>

Subject: Re: Darden- Questions in response to Preliminary Stormwater Report and 2D hydraulic analysis report

Lisa: I can't speak for BIO, but I suggest the following questions regarding stormwater control. "The irregular shapes of the detention basins shown in Sheet 5 of the Preliminary Stormwater Plan and the lack of details in the Project Description and the Water Resources sections of the application result in questions concerning stormwater control:

- According to the Water Resources section of the application and the Preliminary Stormwater Plan, the ground surface of the solar facility will be vegetated;
 - Will the detention basins be constructed solely of soil berms that will eventually be vegetated?
- Based on Preliminary Stormwater Plan Sheet 5, detention basins would be located in the northeast corners of each solar facility drainage area based on the general slope of the topography;
 - Will the detention basins be open, or unbermed to the southwest?
 - Will berms only be constructed along the northern and eastern margins of the drainage area northeast corner?
 - What will be the length of the berms?
 - If the berms are not long enough, will drainage area stormwater flow be adequately captured without escape to adjacent areas?
- Both the Water Resources section of the application and the Preliminary Stormwater Plan state that detention basins will capture and treat stormwater.
 - How will the detention basins treat stormwater?
- The Preliminary Stormwater Plan, Stormwater Management Practices section states that the detention basins will be designed with a minimum 1 foot of freeboard from the top of the berm.
 - What design element will ensure this freeboard?
- Would it be possible to get a schematic design drawing of the typical detention basin?"

James Ackerman, PG #6493 Engineering Geologist California Energy Commission Siting, Transmission and Environmental Protection Division Direct: (530) 878-4966 Email: james.ackerman@energy.ca.gov



From:	Worrall, Lisa@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
	(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E4BBC7048B38485084BDB03FB494B25B-WORRALL, LI]
Sent:	2/5/2025 6:04:14 PM
To:	Becky Moores [becky.moores@intersectpower.com]
CC:	Qian, Wenjun@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4421be8df5f40ec851d73affcbff913-Qian, Wenju]; Record,
	Jacquelyn@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=80a752975c1d44efbd17fb602595a1e7-Leyva, Jacq]; Ding, Yifan@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=49ee78637b0648578196965a7385b6f2-6d1c78d5-11]; Mayer, Alex@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=1a7ef7ec23eb4292abd2748ce1b69948-ef756fa8-50]; Cabrera,
	Crystal@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=ed6e32a127144ccfa19a6f4347765a9e-00a33618-ff]; Cusato,
	Anthony@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=92bb3e53fa2c490d87929b4b84ce28c9-b8359c82-60]; Knight, Eric@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=be42548337f44852a291a9845f226f62-Knight, Eri]; Chang, Kaycee@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=dd3d2fc8670840bda4acdc455903e787-Chang, Kayc]
Subject:	Darden- Notification of submittal of the Draft ATC from the SJVAPCD to the project's docket.

Hi Becky,

I wanted to give you a heads up that we will be submitting the Draft ATC to the project's docket, but will be noting our in-lieu permitting authority, as SJVAPCD indicated otherwise.

This Draft ATC would be part of the Administrative Record, but submitting it to the docket will give us a reference to cite to in our Air Quality analysis.

Thanks,

Lisa Worrall Senior Environmental Planner California Energy Commission Siting, Transmission and Environmental Protection Division 715 P Street, MS-40, Sacramento, CA 95814 Direct: (916) 661-8367 Email: lisa.worrall@energy.ca.gov



From:	Worrall, Lisa@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
	(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E4BBC7048B38485084BDB03FB494B25B-WORRALL, LI]
Sent:	2/4/2025 10:29:57 PM
To:	Becky Moores [becky.moores@intersectpower.com]
CC:	Crisp, Ann@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=b89c4de7ece742679d19e1e3ee713dc2-Crisp, Ann@]; Watson,
	Carol@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=84e32d50c7dc47d89812b468a50090ed-Watson, Car]; Chang,
	Kaycee@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=dd3d2fc8670840bda4acdc455903e787-Chang, Kayc]; Knight, Eric@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=be42548337f44852a291a9845f226f62-Knight, Eri]
Subject:	Darden Clean Energy Project - TetraTech memo
Attachments:	2024-09-05_Intersect Power Avain Fatality Assessment Memo.pdf

Hi Becky,

We received this from Marisa and we understand you would like us to review and consider it in our analysis. It would be helpful if you could submit this to the docket.

Thanks kindly,

Lisa Worrall Senior Environmental Planner California Energy Commission Siting, Transmission and Environmental Protection Division 715 P Street, MS-40, Sacramento, CA 95814 Direct: (916) 661-8367 Email: <u>lisa.worrall@energy.ca.gov</u>



TETRA TECH

Memo

То:	Intersect Power
From:	Karl Kosciuch, PhD, Wildlife Program Manager, Tetra Tech, Inc.
Date:	September 5, 2024
Subject:	Avian Fatality Assessment for PV Solar Projects

On behalf of Intersect Power, Tetra Tech, Inc. developed this memo to evaluate bird fatality patterns at photovoltaic (PV) solar and provide a description bird mortality at PV solar facilities developed in agricultural landscapes. Based on my review of the current peer-reviewed and gray literature, and my experience studying bird interactions with solar facilities for nine years, I have reached primary conclusions to a reasonable degree of certainty, which I discuss in more detail in the memorandum that follows:

- 1. Bird fatalities at tall features on the landscape (e.g., communications towers, buildings, wind turbines) are several orders of magnitude higher than at PV solar facilities, and comparative fatality events have not been observed at PV solar facilities (Gehring et al. 2009, Kosciuch et al. 2020, Loss 2016).
- 2. High rates of aquatic bird mortality are specific to one PV solar facility that has fixed panels and lacks anti-reflective coating in the Southwest, similar patterns have not been observed any other PV solar facility, and a similar rate of aquatic bird mortality is not expected at newly installed PV solar facilities (Kosciuch et al. 2020, Kosciuch et al. 2021).
- 3. Aquatic birds were observed inside and outside a PV solar facility in an agricultural landscape in the Imperial Valley, and bird carcasses were found inside and outside of the facility suggesting no clear pattern of attraction to the solar facility (Kosciuch et al. 2021).
- 4. A recent study concluded that populations of some species of birds are vulnerable to morality at solar energy developments (Conkling et al. 2022). However, the study examined species almost exclusively affected by concentrating solar power and not PV solar development and do not pertain to species most often detected as carcasses at PV solar.
- An on-going camera monitoring study by Argonne National Lab at PV solar facilities has documented over 17,000 instances of bird activity but has recorded zero collision events, supporting conclusions from the fatality monitoring results that collisions are rare (Hamada et al. 2024).
- 6. The conversion of an agricultural landscape to a naturally vegetated landscape within a PV solar facility can improve habitat and increase bird species richness (Jarčuška et al. 2024) without increasing fatality risk.

BIRD COLLISIONS WITH ANTHROPOGENIC STRUCTURES

Bird fatalities resulting from tall anthropogenic structures have been extensively studied, with estimates reaching billions of fatalities annually. Loss (2016) reported U.S. fatality estimates from domestic free-ranging cats at 1.4 – 4.0 billion birds per year followed by buildings (365 – 988 million), automobiles (200 – 340 million), and power lines (8 – 57 million). Fatality estimates associated with PV solar installations, which are not vertical structures, have been significantly lower than with other anthropogenic structures. Walston et al. (2016) estimated between 37,800 – 138,600 bird fatalities per year for all utility-scale solar facilities (14-gigawatt capacity, including operational or under construction) in the U.S. at the time of publication. Similarly, Kosciuch et al. (2020) estimated 10,920 total bird fatalities per year based on a capacity of 6-gigawatts of PV solar in southern California. In the same region, fatality estimates produced by Walston et al. (2016) for buildings (~7.8 million), automobiles (~453,000), and wind turbines (~29,000) far exceed the bird fatality estimate for PV solar.

It is well-documented that large-scale mortality events occur at tall anthropogenic structures, particularly impacting nocturnal migrant birds. In contrast, bird carcasses found at PV solar facilities typically involve a small number of common ground-dwelling bird species. Erickson et al. (2001) reported hundreds of birds killed in a single night at tall structures such as communication towers, while the highest single mortality events of aquatic birds at PV solar sites were documented by Kosciuch et al. (2020). Large-scale mortality events at tall structures such as buildings and communication towers are generally linked to lighting and nights with low cloud ceilings (Larkin 2000, Gehring et al. 2009), poor weather, or other factors, such as wet parking lots (Roberts et al. 2014). Since PV solar facilities do not contain tall structures such as buildings and communication towers of nocturnal migrants have not occurred at PV solar facilities.

BIRD MORTALITY PATTERNS AT PHOTOVOLTAIC SOLAR FACILITIES IN THE SOUTHWEST

Current knowledge on how birds interact with PV solar facilities is primarily derived from a small number of observational studies in the southwestern U.S. The unexpected presence of aquatic birds, such as ducks, loons, and grebes, found stranded or deceased at a PV solar facility in the southwestern U.S., has sparked interest among stakeholders such as developers, government agencies, and non-governmental organizations. In 2014, Kagan et al. determined that nearly half (48% or 27/56) of the bird remains found at a single PV solar facility, Desert Sunlight, in southern California were from aquatic species. The unexpected presence of aquatic birds could mistake the PV solar facility prompted the "lake effect" hypothesis, which suggests aquatic birds could mistake the PV solar panels for water and collide with the panel surface (Upton 2014). Broadening the number of studies summarized, Kosciuch et al. (2020) reached four primary conclusions in an assessment of 13 fatality monitoring studies at 11 PV solar facilities in the southwestern U.S.; 1) most evidence of fatalities were feather spots with unknown cause of mortality, 2) most evidence of fatalities was from common ground-dwelling birds with large regional population sizes, 3) no relatively large fatality events were detected, and 4) most carcasses were detected in fall.

PV Solar Fatality Summary

Bird fatality data from Desert Sunlight has been presented in several studies and is noted for the high numbers of aquatic bird carcasses (Kagan et al. 2014, Walston et al. 2016, Kosciuch et al. 2020). However, Desert Sunlight, developed in 2015 in Riverside County, California differs from development methods used for modern PV solar facilities. Most notably, Desert Sunlight uses fixed-tilt panels without anti-reflective coating as illustrated by the Google Earth image, which shows reflection off the solar panels (Figure 1). Therefore, it is reasonable to conclude that the panels can look like water. Unlike Desert Sunlight, most modern solar PV facilities (including the proposed Darden Solar Facility) use single axis tracking technology, which allows the panels to tilt in accordance with the angle of the sun, and panels with anti-reflective coating . Figure 2 shows the different panel orientation of fixed-axis and tracker panels at the same time of day. Single axis tracking technology and anti-reflective coatings reduce glint and glare reflected by the panels and allow panels to absorb more sunlight. Thus, the panel type and configuration used at Desert Sunlight, which creates glint and glare, will not be used at Darden.

Conkling et al. (2022) evaluated impacts of mortality at solar facilities on bird populations using data from different types of solar facilities in California including concentrating solar power tower (Ivanpah Solar Electric Generating System), concentrating solar trough (Genesis Solar), and PV solar (Blythe Solar, Desert Sunlight, McCoy Solar, Mojave Solar). After modeling the effects of additional mortality of 1,000 and 5,000 individuals on species identified as potentially sensitive, the authors concluded that populations of nocturnal migrant bird species were vulnerable to solar (Conkling et al. 2022). However, their conclusion requires specific context about solar technology and risk to birds. The migrant birds included in the analysis were primarily found at Ivanpah, which creates concentrated solar flux at receiver towers that causes singe mortality of birds, an effect not found at PV solar. Thus, concentrating solar power could affect populations of nocturnal migrant birds if additional concentrating solar power towers are developed and mortality patterns are similar. However, the conclusions about migrant bird population vulnerability do not apply to PV solar because PV facilities do not have concentrated solar flux.

LAKE EFFECT AND BIRD MORTALITY AT A PV SOLAR FACILITY IN AN AGRICULTURAL LANDSCAPE

The lake effect hypothesis was developed based on data from a single PV solar facility, Desert Sunlight, and it was unclear whether the presence of aquatic bird carcasses was unique to the Desert Sunlight facility or a widespread pattern in utility-scale solar energy projects. In a summary of 13 fatality monitoring studies, Kosciuch et al. (2020) found that in the Sonoran and Mojave Desert (SMD) Bird Conservation Region (BCR), 90% of studies reported aquatic bird carcasses at PV facilities, while outside the SMD BCR, this was noted in only one out of three studies. However, the fatality studies were not completed with the intent of examining ideas around lake effect and provided limited inference into potential causes of mortality.

The lack of specific questions about aquatic birds prompted a subsequent study (Kosciuch et al. 2021) comparing bird populations at PV solar facilities and a small regional lake. The authors found that aquatic bird diversity was lower at the solar facilities compared to the lake, and overall use by aquatic birds was an order of magnitude higher at the lake than at the PV solar facilities (Kosciuch et al. 2021). Aquatic birds did occur at solar facilities, but flocks did not exhibit landing behavior or circle the facilities (Kosciuch et al. 2021). However, though small numbers of aquatic bird carcasses were detected at PV solar facilities in the desert

PV Solar Fatality Summary

environment, no carcasses were found in the reference areas, suggesting that aquatic birds may be attracted to the PV solar facilities in desert environments. The study concluded there is limited evidence of aquatic birds being broadly attracted to PV solar facilities. Rather, the findings suggest that attraction is likely a nuanced phenomenon that is species-specific and context-dependent; not a constant signal of water to all aquatic birds (Kosciuch et al. 2021). The specific causes of attraction to PV solar facilities and the conditions for such occurrences remain unclear, and additional studies are being conducted with federal funding.

A unique aspect of the study design in Kosciuch et al. (2021) was that fatality monitoring and bird use surveys were completed at a solar facility and reference areas in an irrigated agricultural landscape in the Imperial Valley of California, which is more similar to the Central Valley than the desert environments studied previously. The authors detected five carcasses and observed 715 birds flying over or within the facility and detected six carcasses and observed 860 birds flying over or within the reference area. In conclusion, the authors stated "Thus, in the agricultural landscape context, it is difficult to untangle attraction (i.e., lake effect) from other sources of mortality (e.g., predation) for some species…because possible attraction is obscured in agricultural landscapes, which can be hybrid or novel ecosystems inhabited by aquatic habitat birds."

INFERENCE INTO BIRD MORTALITY PATTERNS AT PV SOLAR FACILITIES IN AGRICULTURAL LANDSCAPES

Since Desert Sunlight was the first PV solar facility included in bird fatality summaries, there was an expectation that patterns of aquatic bird mortality at other facilities would be similar (Kagan et al. 2014, Upton 2014). However, recent studies in the southwestern U.S. and Alberta, Canada have shown that to not be the case (Kosciuch et al. 2021, Kosciuch et al. 2022). In fact, fatality patterns at Desert Sunlight have not been seen at any other PV solar facility with available monitoring data. It is likely that either two standard industry practices, which began around 2014, has reduced collision risk for birds. These are 1) installing of single-axis tracker panels, and/or, 2) the addition of anti-reflective coating.

Argonne National Laboratory is completing a study at seven PV solar facilities in four regions in the U.S. by installing cameras to monitor bird activity. The camera system detected 17,608 bird activities and no collisions with panels (Hamada et al. 2024). Birds were observed flying above, flying through, and perching on solar panels during the study (Figure 3). This study shows that collisions are rare, and that mitigation would not be needed at any of their study sites.

Kosciuch et al. (2021) demonstrated that birds live within agricultural landscapes and bird mortality occurs on this landscape independent of PV solar facilities. The authors observed birds flying over and within a PV solar facility and found a small number of carcasses compared to the number of live birds detected. Thus, it is possible that some evidence of bird fatalities will be detected at PV solar facilities developed in agricultural landscapes but based on existing studies, the mortality patterns are difficult to untangle from background mortality (EPRI 2021). In other words, determining the cause of mortality of a carcass found at a PV solar facility is complicated by the presence of background mortality. Further, the fatality rates are expected to be relatively low compared to the number of birds inhabiting the area. Converting an agricultural landscape to a natural landscape will remove inputs (e.g., fertilizer, pesticide) and potentially restore habitat for birds (Struthio and Knapp 2023) and overall should be a net positive for birds and biodiversity. Fatality monitoring

is costly for solar developers and reduces the funding available for other activities and studies that could create and demonstrate benefits to birds including revegetation, habitat restoration, and bird community monitoring.

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Figure 1. Aerial image of Desert Sunlight Solar Farm, Riverside County, California, taken February 6, 2016, which uses fixed-axis panels without anti-reflective coating.



Figure 2. A mixture of fixed-axis (a) panels a tracker panels (b) at a solar facility in Imperial County, California.



Figure 3. Slide from Hamada et al. (2024) showing bird activity during the study.

From:Becky Moores [becky.moores@intersectpower.com]Sent:2/7/2025 11:28:50 PMTo:Worrall, Lisa@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4bbc7048b38485084bdb03fb494b25b-Worrall, Li]Subject:Re: 23-OPT-02 Darden - Preliminary Stormwater Report and Hydraulic ModelingCAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the
sender and know the content is safe.

Hey Lisa,

This was my next action item but I just saw in your email that you want all the attachments as well. I was planning to just upload the main document because the appendices are gigantic file sizes. If those need to also be docketed I will need to try and get those into smaller versions because unfortunately your system only allows 25mb or smaller per document.

Becky Moores INTERSECT POWER (e) becky.moores@intersectpower.com

On Wed, Feb 5, 2025 at 12:45 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Hi Becky,

The files you attached were 23-OPT-02 Darden - Preliminary Stormwater Report and Hydraulic Modeling. Can you submit these to the project's docket. We need to reference them in our analysis.

Once these are docketed, we can update the Water Resources section and send to formatting.

Thanks kindly,

Lisa

From: becky.moores@intersectpower.com Sent: Friday, December 6, 2024 12:34 PM To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>>; Crisp, Ann@Energy <<u>Ann.Crisp@energy.ca.gov</u>> Subject: 23-OPT-02 Darden - Preliminary Stormwater Report and Hydraulic Modeling

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becky.moores@intersectpower.com sent you a secure message

Access message

This message requires that you sign in to access the message and any file attachments.

From:Becky Moores [becky.moores@intersectpower.com]Sent:2/7/2025 11:18:06 PMTo:Worrall, Lisa@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4bbc7048b38485084bdb03fb494b25b-Worrall, Li]Subject:Re: Request for updated Figure 6 Aerial Simulation of Post-Construction Project Components. for DardenAttachments:Darden-Project-Simulation-Overview 02.jpg

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Lisa,

Sorry for the delay on this, it took a little time to get the updated image but please see attached and let me know if that will work.

Thanks,

Becky Moores INTERSECT POWER (e) becky.moores@intersectpower.com

On Fri, Jan 31, 2025 at 1:59 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Thanks so much Becky. That is so very helpful.

From: Becky Moores <<u>becky.moores@intersectpower.com</u>>
 Sent: Friday, January 31, 2025 12:06 PM
 To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>>
 Subject: Re: Request for updated Figure 6 Aerial Simulation of Post-Construction Project Components. for Darden

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I will have to request that from our consultant. I'll get that email out now and send you the image next week.

Thanks,

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Fri, Jan 31, 2025 at 12:56 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Can you put some lines in to show the PV. We liked the image you did previously. To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>>

Subject: Re: Request for updated Figure 6 Aerial Simulation of Post-Construction Project Components. for Darden

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Lisa - does this work?

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Fri, Jan 31, 2025 at 12:25 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Hi Becky,

Can you provide a compressed image of an updated visual simulation post construction as we would like to use it for our Staff Assessment cover page. A png or similar file would be great.

It would be helpful for the public if you docket a pdf of this too.

Figure 6 Aerial Simulation of Post-Construction Project Components. (TN 258491)

We would appreciate an update as soon as possible as we are working very hard to complete our Staff Assessment.

Thanks so much,

Lisa Worrall

Senior Environmental Planner

California Energy Commission

Siting, Transmission and Environmental Protection Division

715 P Street, MS-40, Sacramento, CA 95814

Direct: (916) 661-8367

Email: <u>lisa.worrall@energy.ca.gov</u>



From:	Worrall, Lisa@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4bbc7048b38485084bdb03fb494b25b-Worrall, Li]
Sent:	2/7/2025 11:23:59 PM
To:	Becky Moores [becky.moores@intersectpower.com]
Subject:	Re: Request for updated Figure 6 Aerial Simulation of Post-Construction Project Components. for Darden

Thanks so much Becky. That looks great. By the way, can you docket the preliminary Stormwater Report and Hydraulic Modeling as we need to reference it in our Water Resources section so can't send it to formatting until it is docketed.

We would also like all of the attachments that came with it.

Thanks kindly,

Lisa

From: Becky Moores <becky.moores@intersectpower.com>
Sent: Friday, February 7, 2025 3:18 PM
To: Worrall, Lisa@Energy <Lisa.Worrall@energy.ca.gov>
Subject: Re: Request for updated Figure 6 Aerial Simulation of Post-Construction Project Components. for Darden

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Hi Lisa,

Sorry for the delay on this, it took a little time to get the updated image but please see attached and let me know if that will work.

Thanks,

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Fri, Jan 31, 2025 at 1:59 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Thanks so much Becky. That is so very helpful.

From: Becky Moores <<u>becky.moores@intersectpower.com</u>> Sent: Friday, January 31, 2025 12:06 PM To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> Subject: Re: Request for updated Figure 6 Aerial Simulation of Post-Construction Project Components. for Darden

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Thanks,

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Fri, Jan 31, 2025 at 12:56 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Can you put some lines in to show the PV. We liked the image you did previously.

From: Becky Moores <<u>becky.moores@intersectpower.com</u>>
Sent: Friday, January 31, 2025 11:53 AM
To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>>
Subject: Re: Request for updated Figure 6 Aerial Simulation of Post-Construction Project Components. for Darden

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Lisa - does this work?

Becky Moores INTERSECT POWER (e) <u>becky.moores@intersectpower.com</u>

On Fri, Jan 31, 2025 at 12:25 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Hi Becky,

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It would be helpful for the public if you docket a pdf of this too.

Figure 6 Aerial Simulation of Post-Construction Project Components. (TN 258491)

We would appreciate an update as soon as possible as we are working very hard to complete our Staff Assessment.

Thanks so much,

Lisa Worrall Senior Environmental Planner California Energy Commission Siting, Transmission and Environmental Protection Division 715 P Street, MS-40, Sacramento, CA 95814 Direct: (916) 661-8367 Email: lisa.worrall@energy.ca.gov

DCEP0002547

From:	Worrall, Lisa@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E4BBC7048B38485084BDB03FB494B25B-WORRALL, LI]
Sent:	2/21/2025 7:12:29 PM
To:	Becky Moores [becky.moores@intersectpower.com]
CC:	Chang, Kaycee@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=dd3d2fc8670840bda4acdc455903e787-Chang, Kayc]
Subject:	Darden- Available dates for Staff Assessment Workshop

Hi Becky,

We are looking at a few possible dates for the Staff Assessment Meeting, March 25, March 26, April 1, April 2.

We will likely have discussions about biological resources and battery safety (fire), and I have reached out to staff to identify any other subjects that we might want to discuss.

We are also reaching out to the Harris Ranch Resort to check on the availability of space to host the meeting there, as it worked well last time.

This public meeting is a good opportunity to discuss any concerns you have about mitigation measures and also address any public concerns about the project.

Like our last meeting, this will be a hybrid meeting offering in-person and Zoom online participation options.

Please let me know if you and your team would be available on each of these dates. My goal is to have as many dates as possible so we have several to pick from.

Thanks,

Lisa Worrall Senior Environmental Planner California Energy Commission Siting, Transmission and Environmental Protection Division 715 P Street, MS-40, Sacramento, CA 95814 Direct: (916) 661-8367 Email: lisa.worrall@energy.ca.gov



From:	Worrall, Lisa@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
	(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E4BBC7048B38485084BDB03FB494B25B-WORRALL, LI]
Sent:	2/27/2025 7:07:20 PM
To	Wilson Michelle [Michelle Wilson@cnuc ca gov]; Sison-Lehrilla Elaine [/o=ExchangeLahs/ou=Exchange
10.	Administrative Group (EVDIBOHE23SPDIT)/cn=Becinients/cn=5b28ad52bafd4f489ca5cbf9a5361f86-a8d83116-841;
	Errol Villegas [errol villegas@vallevair.org]; Vance_Julie@Wildlife [/o=EvchangeLabs/ou=Evchange Administrative
	Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=6520208b372048588fbfe79308ba3f9c-WildlifeJul]; Swanberg,
	Carrie@Wildlife [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=14e182d204a9453892624e45297fac1e-WildlifeCar]; Mulligan,
	Rhiannon@Wildlife [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=a62a013861764f1e8556eaf023a2cc94-WildlifeRhi]; Tomlinson,
	Krista@Wildlife [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=0b9c5c6ec182444e9150d634cfda0969-WildlifeKri]; Lorentzen, Wayne@DTSC
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=67ab2660d3724727a6074450f5a5e96d-DTSCWLorent]; Koch, Lori@DTSC
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=a3269442b99e4b6eac71ca1ce19d5078-DTSCLKoch]; Ferouz, Muzhda@DTSC
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=a5970a2c9e7942c19e64ec8ca6a4b057-DTSCMFerouz]: Scroggins.
	Matt@Waterboards [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=c470ea493fb242f7ba5e9520bbdcef35-Waterboards]:
	Tpiearcy@fresnocountyca.gov: dluchini@fresnocountyca.gov: dlynch@fresnocountyca.gov:
	ddotson@fresnocountyca.gov: Michaels, Rvan@CALEIRE [/o=Exchange] abs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=0d0f8ddf3e174a70965e9c4095c54517-CALFIRErmic]:
	brandon.pursell@fresnosheriff.org; drandall@fresnocountyca.goy; ishaw@fresnocountyca.goy;
	WaterandNaturalResources@fresnocountyca.gov: Russ Freeman [rfreeman@wwd.ca.gov]:
	OES@fresnocountyca.gov: HRRiskManagement@FresnoCountyCA.gov: Chrisman, Josh@CALFIRE
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=38613fbac7f6467cb63148a801820453-CALFIREichr]: Hail. Dustin@CALFIRE
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHE23SPDLT)/cn=Recipients/cn=cce56d6eca514a4ca05e8d317a7cf0a8-CALFIREdhai]: Coster.
	I vnn@Waterboards [/o=Exchange] abs/ou=Exchange Administrative Group
	(FYDIBOHE23SPDIT)/cn=Recipients/cn=40727eee7ecc43358146f3840a76982e-Waterboards]: Shupe.
	Christina@Waterboards [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=47d8a2edbad843a78fd2a80500315ff3-701fe11f-4fl: Crader.
	Phillip@Waterboards [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=7210c7994d3941d4a5501541b6a379f1-Waterboards]: Holmes.
	Kari@Waterboards [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=a0ab0fbf0cf247d7b972c7581b88d2ce-Waterboards]
CC:	Fooks. Brett@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=870df74143964b71ada0039bf13c5a9a-Fooks. Bret]: agreenberg
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=b9bfa77aaf044a8ca270ce3bcef10093-9afec475-67]; Abulaban, Abdel-
	Karim@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=c1ff1d38281a4068b2708271d22c0d94-Abulaban, Al: Crisp, Ann@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=b89c4de7ece742679d19e1e3ee713dc2-Crisp, Ann@]; Watson,
	Carol@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=84e32d50c7dc47d89812b468a50090ed-Watson, Car]; Ackerman,
	James@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=3cc35de240cf4253af9cc7d3d2cbb643-Ackerman, J]; Qian, Weniun@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4421be8df5f40ec851d73affcbff913-Qian, Weniu]; Record,
	Jacquelyn@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=80a752975c1d44efbd17fb602595a1e7-Levva. Jacal: Ding. Yifan@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=49ee78637b0648578196965a7385b6f2-6d1c78d5-111; Hughes.

Joseph@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7dd5e80572b644209e9607ba7bdcb630-Hughes, Jos]; Edirisuriya, Sudath@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=a5d6cd74e9024972b122d8344f69b3a8-Edirisuriya]; Paul Miller [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4d4ce365f8bd442a8cb7d479381e2476-8906af8e-0e] Darden Clean Energy Project Staff Assessment Public Meeting- March 26, 2025 3:30 pm to 6:00 pm

Hi all,

Subject:

We are scheduling a public meeting for the Darden Clean Energy Project on the recently released Staff Assessment (which includes a Draft EIR). and wanted to let you know in advance of the public notice.

We anticipate there will be a discussion about battery safety, especially as it relates to fire, and biological resources. We haven't received any comments on the Staff Assessment yet. The comment period closes on April 21, 2025 at 5 pm.

This public meeting will be a hybrid meeting with in-person participation at the Harris Ranch Resort in Coalinga, California and remote participation via Zoom. We have scheduled the meeting for March 26, 2025 from 3:30pm to 6:00p. The meeting may end before 6:00pm.

Thanks,

Lisa Worrall Senior Environmental Planner California Energy Commission Siting, Transmission and Environmental Protection Division 715 P Street, MS-40, Sacramento, CA 95814 Direct: (916) 661-8367 Email: <u>lisa.worrall@energy.ca.gov</u>



From:	Vang, Jim@Wildlife [Jim.Vang@wildlife.ca.gov]
Sent:	2/27/2025 10:00:18 PM
To:	Watson, Carol@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=84e32d50c7dc47d89812b468a50090ed-Watson, Car]; Swanberg,
	Carrie@Wildlife [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=user89842a86]; Tom Dietsch (Thomas_Dietsch@fws.gov)
	[Thomas_Dietsch@fws.gov]
CC:	Crisp, Ann@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=b89c4de7ece742679d19e1e3ee713dc2-Crisp, Ann@]
Subject:	RE: Darden Clean Energy Project Staff Assessment Public Meeting- March 26, 2025 3:30 pm to 6:00 pm
CAUTION: Th	is email originated from outside of the organization. Do not click links or open attachments unless you recognize the

sender and know the content is safe.

Thanks Carol.

Jim Vang Senior Environmental Scientist (Specialist) CA Department of Fish and Wildlife Central Region 1130 E. Shaw Avenue, Suite 206 Fresno, CA 93710 (559) 580-3203

From: Watson, Carol@Energy <Carol.Watson@energy.ca.gov>
Sent: Thursday, February 27, 2025 1:52 PM
To: Gragg, Carrie@Wildlife <Carrie.Gragg@wildlife.ca.gov>; Vang, Jim@Wildlife <Jim.Vang@wildlife.ca.gov>; Tom Dietsch (Thomas_Dietsch@fws.gov) <Thomas_Dietsch@fws.gov>
Cc: Crisp, Ann@Energy <Ann.Crisp@energy.ca.gov>
Subject: FW: Darden Clean Energy Project Staff Assessment Public Meeting- March 26, 2025 3:30 pm to 6:00 pm

WARNING: This message is from an external source. Verify the sender and exercise caution when clicking links or opening attachments.

Greetings,

There will be a public workshop on the Darden Project as listed below. More information to follow, but I wanted to give you an early heads up.

The draft is located here (too big to attach) <u>https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-OPT-02</u>. TN 261842.

Thank you again for your efforts on this project and as always, don't hesitate to contact me with any questions Carol Carol Watson Staff Biologist Siting, Transmission & Environmental Protection Division California Energy Commission 715 P Street Sacramento, CA 95814



Subject: Darden Clean Energy Project Staff Assessment Public Meeting- March 26, 2025 3:30 pm to 6:00 pm

Hi all,

We are scheduling a public meeting for the Darden Clean Energy Project on the recently released Staff Assessment (which includes a Draft EIR). and wanted to let you know in advance of the public notice.

We anticipate there will be a discussion about battery safety, especially as it relates to fire, and biological resources. We haven't received any comments on the Staff Assessment yet. The comment period closes on April 21, 2025 at 5 pm.

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Thanks,

From: Sent: To:	Luke Dunnington [luke@intersectpower.com] 2/25/2025 12:42:17 AM Huber, Elizabeth@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=93f40660c3d446578d63390926fd5e5a-Huber, Eliz]; Chiquita Coleman [chiquita.coleman@intersectpower.com]
CC: Subject:	Jackson-Ross, Lyndsay@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=95939be8b73e4b818c2cfaa52dcba862-2b2ba52b-2c]; Vorters, Dian@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2c5604e712a74c029e412542e0db72ac-Vorters, Di]; Bohan, Drew@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7dd07a25fcbc49b0bbb219cc3b788983-Bohan, Drew]; Lukanich, Kimberly@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3f1a946e58c54794950425a4010d35a4-e94335c9-4a]; Foggie, Mineka@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3f1a946e58c54794950425a4010d35a4-e94335c9-4a]; Foggie, Mineka@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3f1a946e58c54794950425a4010d35a4-e94335c9-4a]; Foggie, Mineka@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=39464d93867849a18c9e97fecdbb9765-Foggie, Min]; Chun, Robert@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5f577c5f89ca485b95eb541e5b66b0b0-cc0391ec-0f]; Marisa Mitchell [marisa@intersectpower.com] Re: Darden Site Tour Request by Chair Hochschild
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Lyndsay,

Great to meet you. Our CEO, and my Co-Founder, is Sheldon Kimber. He and Chair Hochschild know each other well and connect periodically. Sheldon's EA, Chiquita Coleman, is copied in and can help align on his schedule for this trip.

I've copied in Marisa Mitchell, who leads Permitting & Environmental for Intersect Power, if you could keep us both copied so that we can align schedules to attend as well.

My understanding from Elizabeth is that the goal is to have this tour on **or prior to** March 21st, so that flexibility earlier in March will likely be key to finding a time that works for Sheldon.

Many thanks, Luke

Luke Dunnington President / Founder INTERSECT POWER (c) 510.421.1359 www.linkedin.com/in/lukedunnington1

On Mon, Feb 24, 2025 at 4:01 PM Huber, Elizabeth@Energy <<u>Elizabeth.Huber@energy.ca.gov</u>> wrote:

Hi Lyndsay, for STEP, Dian and myself. Drew has been on the tour and participated in the public meeting, so I defer to his preference as well as others. Thanks, EH

DCEP0002554

Elizabeth Huber (she/her) | Director

email: Elizabeth.huber@energy.ca.gov

Work (916) 776-0609

California Energy Commission

Siting, Transmission and Environmental Protection Division

715 P St, Sacramento, CA 95814



From: Jackson-Ross, Lyndsay@Energy <<u>Lyndsay.Jackson-Ross@Energy.ca.gov</u>>
Sent: Monday, February 24, 2025 3:47 PM
To: Huber, Elizabeth@Energy <<u>Elizabeth.Huber@energy.ca.gov</u>>
Cc: Luke Dunnington <<u>luke@intersectpower.com</u>>; Vorters, Dian@Energy <<u>Dian.Vorters@Energy.ca.gov</u>>;
Bohan, Drew@Energy <<u>Drew.Bohan@energy.ca.gov</u>>; Lukanich, Kimberly@Energy
<<u>Kimberly.Lukanich@Energy.ca.gov</u>>; Foggie, Mineka@Energy <<u>Mineka.Foggie@energy.ca.gov</u>>; Chun, Robert@Energy <<u>Robert.Chun@Energy.ca.gov</u>>
Subject: RE: Darden Site Tour Request by Chair Hochschild

Thank you for this information, Elizabeth. I will work with Luke (and his scheduler) directly to set up the tour for March 21. Will anyone else from CEC be joining the Chair for the tour?

Lyndsay Jackson-Ross (she/her/hers)

Administrative Assistant II

Chair Hochschild

From: Huber, Elizabeth@Energy <<u>Elizabeth.Huber@energy.ca.gov</u>>
Sent: Monday, February 24, 2025 12:02 PM
To: Jackson-Ross, Lyndsay@Energy <<u>Lyndsay.Jackson-Ross@Energy.ca.gov</u>>
Cc: Luke Dunnington <<u>luke@intersectpower.com</u>>; Vorters, Dian@Energy <<u>Dian.Vorters@Energy.ca.gov</u>>;
Bohan, Drew@Energy <<u>Drew.Bohan@energy.ca.gov</u>>; Lukanich, Kimberly@Energy

<<u>Kimberly.Lukanich@Energy.ca.gov</u>>; Foggie, Mineka@Energy <<u>Mineka.Foggie@energy.ca.gov</u>>; Chun, Robert@Energy <<u>Robert.Chun@Energy.ca.gov</u>> **Subject:** Darden Site Tour Request by Chair Hochschild **Importance:** High

Hi Lyndsay,

Hope all is well. The Chair called me this morning asking that we get on his calendar a tour of the Darden Clean Energy Project, located in West Fresno County. He has requested we coordinate with Intersect Power so he can attend the site tour with their CEO. Information on the project: <u>Darden Clean Energy Project | California Energy Commission</u>

I cc their regional VP, who can assist with connecting you to their CEO's scheduler. The preference is to have this site tour prior to an upcoming workshop. Therefore, if you could calendar on or before March 21, 2025, that would be great. Note that the Chair should be able to travel there an back in one day.

Please let me know if you have any questions.

Thanks,

Elizabeth

Elizabeth Huber (she/her) | Director

email: Elizabeth.huber@energy.ca.gov

Work (916) 776-0609

California Energy Commission

Siting, Transmission and Environmental Protection Division

715 P St, Sacramento, CA 95814

DCEP0002556



From:	Sandborn, Jeanmarie@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
	(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D55B8A46498A46549CC8E73C524B7566-2C99D0F6-F3]
Sent:	2/26/2025 5:11:06 PM
To:	Marisa Mitchell [marisa@intersectpower.com]
CC:	Chun, Robert@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=5f577c5f89ca485b95eb541e5b66b0b0-cc0391ec-0f]; Jackson-Ross,
	Lyndsay@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=95939be8b73e4b818c2cfaa52dcba862-2b2ba52b-2c]
Subject:	Re: Scheduling Darden Site Visit

Moving the Chair to BCC.

Hi Marisa,

Thanks for reaching out! We'd be happy to coordinate on this. I'm adding Lyndsay from our office to this chain as well. Earlier this week she had reached out to Sheldon's scheduler and they had blocked a tentative date (3/21).

Best, Jeanmarie

Jeanmarie Gonzalez Sandborn, PhD (she/her)

Special Advisor Office of Chair Hochschild Cell: 916-796-5990



From: Hochschild, David@Energy <david.hochschild@energy.ca.gov>
Sent: Wednesday, February 26, 2025 9:06 AM
To: Marisa Mitchell <marisa@intersectpower.com>; Sandborn, Jeanmarie@Energy
<Jeanmarie.Sandborn@Energy.ca.gov>
Cc: Chun, Robert@Energy <Robert.Chun@Energy.ca.gov>
Subject: Re: Scheduling Darden Site Visit

Thank you

Pls coordinate with Jeanmarie, copied here

David Hochschild Chair California Energy Commission Due to the volume of emails, I am not always able to respond. For immediate assistance, please contact my assistant Lyndsay.jackson-ross@energy.ca.gov or my chief of staff Robert.Chun@energy.ca.gov

From: Marisa Mitchell <marisa@intersectpower.com>
Sent: Wednesday, February 26, 2025 7:52:20 AM
To: Hochschild, David@Energy <david.hochschild@energy.ca.gov>
Subject: Scheduling Darden Site Visit

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

David,

I'm going to be leading a team to put together a site visit with you and Sheldon for March at the Darden project site. Who should I work with from your office for logistics and scheduling? Thanks

Marisa Mitchell Head of Environmental and Permitting INTERSECT POWER 415.846.0730 marisa@intersectpower.com www.linkedin.com/in/marisa-n-mitchell

From:	Marisa Mitchell [marisa@intersectpower.com]
Sent:	2/28/2025 6:54:51 PM
То:	Hochschild, David@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8ebbe6949d3a425ea7bd5f56679bdefe-Hochschild,]
Subject:	AB 205 Support Letter
Attachments:	2025-02-28_Darden_AB 205 letter to Gov Newsom.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

David,

Please see a letter to the Governor and leadership supporting AB 205 attached. This is being hand-delivered to the capitol today.

Marisa Mitchell Head of Environmental and Permitting INTERSECT POWER 415.846.0730 marisa@intersectpower.com www.linkedin.com/in/marisa-n-mitchell



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February 28, 2025

The Honorable Gavin Newsom Governor, State of California 1021 O Street, Suite 9000 Sacramento, CA 95814

The Honorable Mike McGuire President pro Tempore, California State Senate 1021 O St. Ste. 8518 Sacramento, CA 95814

The Honorable Robert Rivas Speaker, California State Assembly 1021 O St. Ste. 8330 Sacramento, CA 95814

RE: AB 205 Opt-In Certification Program

Dear Governor Newsom, Pro Tem McGuire, and Speaker Rivas:

Intersect Power is grateful for the Legislature and Administration's recognition that much has to be done to accomplish our many statewide goals related to clean energy, carbon reduction, as well as energy affordability, reliability, and accessibility. The AB 205 streamlined permitting process has been a tremendous success thus far and we look forward to taking advantage of the process for our projects in development that help the state make great strides in utility scale clean energy generation.

I write to thank you for your leadership in passing and signing AB 205 (2022), landmark legislation that is today transforming clean energy approvals in California, including for the Darden Clean Energy Project. Intersect Power is a clean energy company bringing innovative, scalable, and American-made, low-carbon solutions to its customers in global energy markets. We develop, own, and operate some of the world's largest grid-tied clean energy resources, as well as co-located facilities for large industrial loads, including data centers, e-fuels, and other energy-intensive products. As one of the largest developer-owner-operators of clean energy infrastructure in California, my company currently operates 724 megawatts (MWac) of solar photovoltaic (PV) generation and 1,448 megawatt-hours (MWh) of battery energy storage systems (BESS) in the state, with an additional 365 MWac of solar and 1,800 MWh of BESS planned to be online by 2029.

The Darden Renewable Energy Project

The Darden Renewable Energy Project is a \$5B, 1,150 MWac solar PV and 4,600 MWh BESS project proposed in western Fresno County on 9,000 acres of retired agricultural land unsuitable for continued agricultural cultivation. Darden will deliver \$59M in local sales tax benefits to Fresno County during construction in 2026 and 2027, and nearly \$2M of sales tax benefits per year of operations. It will result in \$26M per year in property tax benefits for the state and the County. Over 1000 union workers will be employed during construction, peaking at 1500 personnel, and 16 permanent jobs will be created to operate the project, all resulting in over \$160M in employee compensation for local families. The project expects to spend \$273M in direct procurement of local goods and services through the construction phase, lifting up local businesses. In addition, the project's supply chain is American made, including domestic modules from Ohio, batteries from California, transformers from Texas, steel



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piles from Texas, and EPC services from Minnesota. We will be building a new 500kV switchyard and transferring this facility to PG&E, allowing a vital new point of interconnection not only for the Darden project, but other clean energy generators, bolstering the statewide power grid. When complete, the Darden project will be the largest single solar-battery complex in the world.

AB 205 is a Success Story for California

The Darden project opted in to the CEC's AB205 permitting pathway not because the project is controversial – in fact, it enjoys broad support from a wide array of stakeholders – but because AB 205 promised schedule-certainty and expedited judicial review, backed by expert staff, and plentiful consulting support, elements that are critically important to our investors, offtakers, and other partners. And I'm happy to say that AB205 does *not* disappoint. After the Darden application was deemed complete on September 19, 2024, CEC Staff released the Draft EIR and Staff Report in only 150 days on February 18, 2025, recommending approval of the project. The Draft EIR is detailed without being overly complicated, comprehensive without being overwhelming, and it strikes a balance between the protection of local environmental resources and community values, all while ensuring that mitigation is roughly proportional to the impact as required under law.

California must add 70,000 MWac of utility-scale solar and 192,000 MWh of utility-scale BESS by 2045 to meet our ambitious SB 100 goals, and my company is placing a big bet on AB 205 continuing to serve its purpose. We have a second project currently in the AB 205 application phase just behind Darden, and on its heels, yet another three gigawatts of projects sited on some of the San Joaquin Valley's hundreds of thousands of acres of retiring agricultural lands. The state should plan for CEC staffing to accommodate this increased workload to ensure clean air, a livable environment, local economic development, and safe, reliable, low-cost energy for Californians.

Respectfully,

Sheldon Kimber Chief Executive Officer Intersect Power, LLC

cc: The Honorable Josh Becker Senator, California State Senate

The Honorable Cottie Petrie-Norris Assemblymember, California State Assembly

Wade Crowfoot Secretary, California Natural Resources Agency

David Hochschild Chair, California Energy Commission

From:	Fooks, Brett@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
	(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=870DF74143964B71ADA0039BF13C5A9A-FOOKS, BRET]
Sent:	3/4/2025 6:12:18 PM
To:	Srinivasan, Lakshmi [LSRINIVASAN@epri.com]; Shaw, Stephanie [sshaw@epri.com]
CC:	Hughes, Joseph@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=7dd5e80572b644209e9607ba7bdcb630-Hughes, Jos]; Qian, Wenjun@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4421be8df5f40ec851d73affcbff913-Qian, Wenju]
Subject:	Darden Clean Energy Project DEIR

Morning Lakshmi and Stephanie,

It was great to meet the both of you last week. I wanted to give you an opportunity to review our Darden Clean Energy Project staff analysis to see if there is anything else that we should be addressing. It has the latest and greatest analysis and COCs as well. I have provided the link below and the page numbers that I think you should review.

https://efiling.energy.ca.gov/GetDocument.aspx?tn=261842&DocumentContentId=98317

Chapter 3 - Project Description - pages 3-1 through 3-40.

Chapter 4.4 - Worker Safety and Fire Protection - pages 4.4-15 through 4.4-23. The Conditions of Certification (permit conditions) are on pages 4.4-28 through 4.4-34.

Chapter 5.7 - Hazards, Hazardous Materials/Waste, and Wildfire - pages 5.7-32 through 5.7-33. The Conditions of Certification (permit conditions) are on pages 5.7-49 through 5.7-54.

Please let me know if you have any questions or concerns. And I look forward to future collaboration.

Regards,

Brett Fooks (he, him, his)

Manager Safety & Reliability Branch Siting, Transmission and Environmental Protection Division 1-916-931-9603

California Energy Commission Website: <u>www.energy.ca.gov</u>



From:	Gallardo, Noemi@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=6D80AF906F4F4846958A22A1FBFC0795-GALLARDO, N]
Sent:	3/6/2025 8:46:19 PM
To:	Jamie Katz [jbkatz@leadershipcounsel.org]; Worrall, Lisa@Energy [/o=ExchangeLabs/ou=Exchange Administrative
	Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e4bbc7048b38485084bdb03fb494b25b-Worrall, Li]; Angulo,
	Armand@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=c8689c4b941c4f26b280dd50cc25188d-Angulo, Arm]; Mariela Loera
	[mloera@leadershipcounsel.org]; Mariana Alvarenga [malvarenga@leadershipcounsel.org]
CC:	Huber, Elizabeth@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=93f40660c3d446578d63390926fd5e5a-Huber, Eliz]; Qaqundah,
	James@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=7da5ec0923de49488685fdaa76c71e51-Qaqundah, J]
Subject:	Re: Darden Clean Energy Project

Thanks Jamie for following up and being gracious with the community input and suggestions.

I'm amenable to shift to a 5pm start time. Staff will need to check with the venue to determine if that's feasible. Staff can also check on shuttles and scheduling.

Yes, moving forward, we'd definitely appreciate suggestions regarding venues that are conducive to community attendance. We need A/V capacity for hybrid meeting and ample space for attendees to sit. Sometimes we have challenges finding locations that meet these requirements.

Let us know if there's anything else we should consider for the meeting.

Sincerely, Noemí

Get Outlook for iOS

From: Jamie Katz <jbkatz@leadershipcounsel.org>
Sent: Thursday, March 6, 2025 12:06:55 PM
To: Worrall, Lisa@Energy <Lisa.Worrall@energy.ca.gov>; Gallardo, Noemi@Energy <noemi.gallardo@energy.ca.gov>; Angulo, Armand@Energy <armand.angulo@energy.ca.gov>; Mariela Loera <mloera@leadershipcounsel.org>; Mariana Alvarenga <malvarenga@leadershipcounsel.org>
Subject: Re: Darden Clean Energy Project

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Thank you for the update. I'm consolidating a few different conversations here.

We've talked with Canuta residents. They request a 5 or 6 pm start time to enable as much participation as possible. A shuttle service would be really helpful. Residents request as much advance notice as possible, including notice of when the shuttle can bring them back to Canuta.

As far as dates, we suggest contacting the Golden Plains United School District to avoid conflicting with spring break if possible.

Finally, we understand that you all have reserved this location already, but in the future residents would like to be consulted earlier so the location can be as close as possible to communities close to the project. We would suggest this as a best practice for the opt-in permitting process going forward.

Thank you.

On Wed, Mar 5, 2025 at 10:17 AM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: We have reserved the South Ballroom in the Harris Ranch Resort, 24505 West Dorris Avenue, Coalinga, California 93210

From: Jamie Katz <<u>jbkatz@leadershipcounsel.org</u>> Sent: Wednesday, March 5, 2025 10:13 AM To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> Subject: Re: Darden Clean Energy Project

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Thank you, Lisa. Do you know where you anticipate holding the meeting? We have heard from many residents of Cantua Creek that they want to provide comments or ask questions. We want to make sure they are able to attend.

Jamie

On Tue, Mar 4, 2025 at 2:29 PM Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> wrote: Hi Jamie,

We are working on scheduling a public meeting for the Staff Assessment. We will notice the public meeting 10 days in advance of the meeting. We anticipate holding the meeting towards the end of March/early April. The notice will be posted to the project's docket.

Regards,

Lisa

From: Energy - STEP Siting <<u>STEPsiting@energy.ca.gov</u>> Sent: Monday, March 3, 2025 1:40 PM To: Worrall, Lisa@Energy <<u>Lisa.Worrall@energy.ca.gov</u>> Subject: FW: Darden Clean Energy Project To: Energy - STEP Siting <<u>STEPsiting@energy.ca.gov</u>> Subject: Re: Darden Clean Energy Project

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Lisa Worrall,

Has the CEC set a date for a public meeting on the draft EIR? I do not see anything on the project's website or docket. Thank you.

Jamie Zweifler-Katz (She/They)

Staff Attorney

Leadership Counsel for Justice & Accountability

2210 San Joaquin Street

Fresno, CA 93721

From:	Gallardo, Noemi@Energy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
	(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=6D80AF906F4F4846958A22A1FBFC0795-GALLARDO, N]
Sent:	3/8/2025 12:58:51 AM
To:	Mariana Alvarenga [malvarenga@leadershipcounsel.org]
CC:	Jamie Katz [jbkatz@leadershipcounsel.org]; Worrall, Lisa@Energy [/o=ExchangeLabs/ou=Exchange Administrative
	Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e4bbc7048b38485084bdb03fb494b25b-Worrall, Li]; Angulo,
	Armand@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=c8689c4b941c4f26b280dd50cc25188d-Angulo, Arm]; Mariela Loera
	[mloera@leadershipcounsel.org]; Huber, Elizabeth@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=93f40660c3d446578d63390926fd5e5a-Huber, Eliz]; Qaqundah,
	James@Energy [/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=7da5ec0923de49488685fdaa76c71e51-Qaqundah, J]; Badie, Mona@Energy
	[/o=ExchangeLabs/ou=Exchange Administrative Group
	(FYDIBOHF23SPDLT)/cn=Recipients/cn=4230574616834c8a8b023cf986dc310c-Badie, Mona]
Subject:	RE: Darden Clean Energy Project

Hi Mariana –

We will have Spanish interpretation services available.

We'll definitely let you know asap. We'd appreciate your help with outreach. Thank you!

Warmest regards, Noemí Otilia Osuna Gallardo (she/her, ella) Commissioner



From: Mariana Alvarenga <malvarenga@leadershipcounsel.org> Sent: Friday, March 7, 2025 12:07 PM

To: Gallardo, Noemi@Energy <noemi.gallardo@energy.ca.gov>

Cc: Jamie Katz <jbkatz@leadershipcounsel.org>; Worrall, Lisa@Energy <Lisa.Worrall@energy.ca.gov>; Angulo, Armand@Energy <armand.angulo@energy.ca.gov>; Mariela Loera <mloera@leadershipcounsel.org>; Huber, Elizabeth@Energy <Elizabeth.Huber@energy.ca.gov>; Qaqundah, James@Energy <James.Qaqundah@energy.ca.gov> **Subject:** Re: Darden Clean Energy Project

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you, Noemi! We appreciate you being flexible with the time to accommodate more participation from residents. Once you confirm that 5 pm works and the transportation details, we can start outreach on our end.

Also, I want to note that residents will need Spanish interpretation in case you aren't already planning for this.

DCEP0002567

Mariana Alvarenga (she/her) Climate Policy Coordinator Leadership Counsel for Justice and Accountability 2210 San Joaquin St, Fresno, CA 93721 C: 559-577-2920