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Filer:	Megan Knight
Organization:	Rincon Consultants, Inc.
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Appendix H

Reclamation Plan



Darden Clean Energy Project

Reclamation Plan

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Reclamation Plan

This Reclamation Plan (Plan) outlines the framework for decommissioning and reclamation of the Darden Clean Energy Project (Project). The Plan describes the means and methods that may be used to remove all structures, foundations, underground cables, and equipment and to reclaim and restore the land altered during the construction and operation of the Project to its pre-development conditions to the extent feasible. This Plan will be updated prior to commencing decommissioning activities based on final Project layout and design, existing site conditions, and current local, state, and federal regulations.

Present Use of the Site

The majority of the Project area will be located on retired agricultural lands. Some farming occurs on these parcels and others have been fallowed for many years due to contaminated soils with high levels of salt and selenium buildup. When not being farmed, Westlands Water District discs the parcels to control weeds and pests. Most parcels along the generation intertie (gen-tie) corridor are actively farmed.

Project Facilities and Equipment

IP Darden I, LLC and Affiliates,¹ wholly owned subsidiaries of Intersect Power, LLC propose to construct, operate, and eventually repower or decommission the Project on approximately 9,500 acres in western Fresno County. The Project is anticipated to remain in operation for approximately 35 years from completion of construction, and up to at least 50 years with equipment upgrades and repowering. The primary Project components are:

- 1,150 megawatt (MWac) solar photovoltaic (PV) facility (solar facility)
- Up to 4,600 MW-hour battery energy storage system (BESS)
- Up to 1,150 MW green hydrogen facility
- 34.5-500 kilovolt (kV) grid step-up substation (step-up substation)
- 10- to 15-mile 500 kV generation intertie (gen-tie) line
- Pacific Gas and Electric Company (PG&E) owned 500 kV utility switchyard along the Los Banos-Midway #2 500 kV transmission line
- Operations and maintenance (O&M) facility, access roads, and fencing

Photovoltaic Modules and Support Structures

The solar facility would include approximately 3,100,000 solar panels. The panel mounting system will depend on the market conditions and environmental factors. Either mono-facial or bi-facial panels could be used, and panels would either be mounted in a portrait orientation as single panels,

¹ "Affiliates" means IP Darden II, LLC, IP Darden III, LLC, IP Darden IV, LLC, IP Darden BESS I, LLC, IP Darden BESS II, LLC, IP Darden BESS II, LLC, IP Darden II H2, LLC, IP Darden II H2, LLC, and IP Darden BAAH, LLC. IP Darden I, LLC and Affiliates are indirect subsidiaries of Intersect Power, LLC.

or mounted in a landscape orientation and stacked two high on a north-south oriented single-axis tracking system that would track the sun from east to west during the day.

The single axis tracking systems would be oriented along a north/south axis with panels facing east in the early morning, lying flat during high noon, and facing west during later afternoon and evening hours. Spacing between each row would be a minimum of 10 feet. Panel faces would be minimally reflective, dark in color, and highly absorptive. The solar panel array would generate electricity directly from sunlight, which would be collected, converted to alternating current (AC), stored, and delivered to the on-site Project substation.

Structures supporting the PV panels would consist of steel piles (e.g., cylindrical pipes, H-beams, helical screws, or similar structures) driven into the soil spaced approximately 18 feet apart. For the tracking system, piles typically would be installed to a reveal height of approximately 1 foot above grade (but could be higher to compensate for terrain variations and clearance due to water/flooding). For the tracking system, piles typically would be higher to compensate for terrain variations and clearance due to approximately 1 foot above grade (but could be higher to compensate for terrain variations and clearance due to a clearance due to water/flooding).

Structures supporting the PV panels would consist of steel piles (e.g., cylindrical pipes, H-beams, helical screws, or similar structures). The piles typically would be spaced 18 feet apart. For the tracking system, piles would be installed to a height of approximately 4 to 6 feet above grade (minimum 1 foot clearance between bottom edge of panel and ground).

Inverters, Transformers, and Electrical Collection System

The solar facility would be designed and laid out primarily in sub-arrays of installed rows of panels, ranging in capacity from 4 to 7 MW. Each sub-array would include a direct current (DC) to AC inverter and medium voltage transformer equipment area (i.e., inverter-transformer station) measuring 40 feet by 25 feet. The inverter-transformer station would be constructed on either a concrete pad or steel skid centrally located within the surrounding rows of panels. Sub-arrays would be designed and sized as appropriate to accommodate the irregular shape of the Project footprint. The precise sub-array dimensions and configuration would be dependent on available technology and market conditions. Each inverter-transformer station would contain an inverter, a transformer, a battery enclosure, and a switchboard.

The inverter-transformer station would contain a security camera at the top of an approximately 20foot wood or metal pole. If required based on site meteorological conditions, an inverter shade structure would be installed at each inverter-transformer station. The shade structure would consist of wood or metal supports and a durable outdoor material shade structure (metal, vinyl, or similar). The shade structure, if utilized, would extend up to 10 feet above the ground surface.

Panels would be electrically connected into panel strings using wiring secured to the panel racking system. Underground cables would be installed to convey the DC electricity from the panels via combiner boxes or combiner harnesses with a trunk bus system located throughout the PV arrays, to inverters that would convert the DC to AC electricity. The output voltage of the inverters would be stepped up to the required collection system voltage at the medium voltage pad mount transformer located in close proximity to the inverter. The 34.5 kV level collection cables would be buried underground in a trench about 4 feet deep, with segments installed overhead on wood poles to connect all of the solar facility development areas to the onsite step-up substation, which may or may not involve an overhead or underground road crossing. Thermal specifications require 10 feet

of spacing between the medium voltage lines, and in some locations closer to the onsite substation interconnection, more than 20 medium voltage AC lines run in parallel.

In locations where the collection system crosses a road or pipelines overhead, direct embedded wood poles would be used on a case-by-case basis. Wood poles spaced up to 250 feet apart could be installed on the site. The typical height of the poles would be approximately 60 to 100 feet, with an embedment depth of 10 to 15 feet depending on the type of crossing, and diameters varying from 12 to 20 inches.

BESS Facility Components

The storage system consists of battery banks housed in electrical enclosures and buried electrical conduit. The system requires air conditioners or heat exchangers and inverters. Between 610 and 1,220 electrical enclosures measuring approximately 52 feet by 8 feet and 8.5 feet high would be installed on concrete foundations. The Project could use any commercially available battery technology, including but not limited to lithium ion, LFP (lithium iron phosphate), NMC (nickel manganese cobalt), and NCA (nickel cobalt aluminum) batteries.

Project Substation

The solar Project substation would step up the medium voltage of the PV collector system from 34.5 kV to 500 kV. The Project substation would be located on approximately 20 acres adjacent to the solar facility. The substation would terminate the medium voltage solar feeders to several common medium voltage busses and transform the power at these busses to the high voltage required for transmission on the gen-tie line to the Utility switchyard. The internal arrangements for the substation would include:

- Power and auxiliary transformers with foundations
- Prefabricated control building(s) to enclose the protection and control equipment, including relays and low voltage switchgear
- Metering stand
- Capacitor bank(s)
- Circuit breakers and disconnect switches
- Up to two microwave towers
- Dead-end structure(s) to connect the step-up Project substation to the grid

Green Hydrogen Facility Components

The primary components of the hydrogen facility will include an electrolyzer and a water treatment plant (WTP). The WTP will have reverse osmosis (RO) and Electrodeionization (EDI) facilities and ancillary equipment such as filters, storage tanks, backwash systems, and chemical dosing systems. Additionally, the electrolyzer will include various electrical equipment such as transformers and rectifiers for the electrolyzer cell stacks. A dry cooling system would be used to reject heat from this equipment. Furthermore, a hydrogen dryer may be required to reduce the moisture content of the hydrogen product.

Gen-tie Facility Components

The Project will include a 500 kV gen-tie line to interconnect the Project to the utility switchyard. The Project 500 kV gen-tie line(s) would be located within an up to 275-foot right-of-way and be constructed with either monopole tubular steel poles or steel H-frame structures. Gen-tie structures would be at least 120 feet tall, with a maximum height of 200 feet. There would be a total of approximately 80 poles and dead-end structures. The total number of gen-tie poles would be determined by the final design of the gen-tie.

Utility Switchyard

The Utility switchyard will serve as a termination point for the Project gen-tie and will loop into the Los Banos-Midway #2 500 kV transmission line. Following completion of construction the switchyard will transfer ownership to PG&E, who will assume responsibility for operations of the Utility switchyard. Therefore, the switchyard facility is not included in this Reclamation Plan.

Decommissioning Procedures

All decommissioning, reclamation, and restoration activities will adhere to the requirements of appropriate governing authorities, and will be in accordance with all applicable federal, state, and local permits.

It is anticipated that the decommissioning activities for the Project can be completed in up to a 3year period. The estimated timing for decommissioning is tied to assumptions about the amount of equipment mobilized, the crew sizes, weather and climate conditions, and the productivity of the equipment and crews.

Decommissioning will include the removal and transportation of all Project components from the Facility site. All dismantling, removal, recycling, and disposal of materials generated during decommissioning will comply with rules, regulations, and prevailing Federal, State, and local laws at the time decommissioning is initiated and will use approved local or regional disposal or recycling sites as available. Recyclable materials will be recycled to the furthest extent practicable. Non-recyclable materials will be disposed of in accordance with State and Federal law.

Decommissioning of the solar facility will include removing the solar panels, solar panel racking, steel foundation posts and beams, inverters, transformers, overhead and underground cables and lines, equipment pads and foundations, equipment cabinets, and ancillary equipment. The electrolyzer facility and WTP will be dismantled and removed. The civil facilities, access road, security fence, and drainage structures and sedimentation basins will also be removed. Standard decommissioning practices will be utilized, including dismantling and repurposing, salvaging/recycling, or disposing of the solar energy improvements.

During decommissioning, all landowners will be contacted to communicate the extent and type of work to be completed. Some Facility infrastructure, such as the access roads, may be left in place at the landowners' requests. Underground utility lines, if at a depth that will not impede agriculture, may be left in place to minimize land disturbance and associated impacts to future land use.

Decommissioning of Project Components

Solar Panels

The solar panels will be inspected for physical damage, tested for functionality, disconnected, and removed from racking. Functioning panels will be packed, palletized, and shipped to an offsite facility for reuse or resale. Non-functioning modules will be shipped to the manufacturer or a third party for recycling or disposal. The panels anticipated to be used for the Project are designed for high-value recycling to maximize material recovery at end-of-life, enabling recovery of more than 90 percent of panel materials for reuse.

Racking

Racking and racking components will be disassembled and removed from the steel foundation posts, processed to appropriate size, and sent to a metal recycling facility.

Steel Foundation Posts

All structural foundation steel posts will be pulled out to full depth, removed, processed to appropriate size, and shipped to a recycling facility. The posts will be removed using back hoes or similar equipment. During decommissioning, the area around the foundation posts may be compacted by equipment and, if compacted, the area will be decompacted in a manner to adequately restore the topsoil and sub-grade material to a density consistent for vegetation.

Overhead and Underground Cables and Lines

All underground cables and conduits will be removed to full depth. Topsoil will be segregated and stockpiled for later use prior to any excavation and the subsurface soils will be staged next to the excavation. The subgrade will be compacted per standards. Topsoil will be redistributed across the disturbed area. The gen-tie transmission line will be removed from the site and taken to a recycling facility. Gen-tie monopoles or H-frames will be removed and reconditioned and reused or recycled.

Inverters, Transformers, and Ancillary Equipment

All electrical equipment will be disconnected and disassembled. All parts will be removed from the site and reconditioned and reused, sold as scrap, recycled, or disposed of appropriately, consistent with applicable regulations and industry standards.

Equipment Foundations and Ancillary Foundations

The ancillary foundations are pile foundations for the equipment pads. As with the solar array steel foundation posts, the foundation piles will be pulled out completely. Duct banks will be excavated to full depth. All unexcavated areas compacted by equipment used in decommissioning will be decompacted in a manner to adequately restore the topsoil and sub-grade material to a density similar to the surrounding soils. All materials will be removed from the site and reconditioned and reused, sold as scrap, recycled, or disposed of appropriately, consistent with applicable regulations and industry standards.

Fence

All fence parts and foundations will be removed from the site and reconditioned and reused, sold as scrap, recycled, or disposed of appropriately, consistent with applicable regulations and industry standards. The surrounding areas will be restored to pre-construction conditions to the extent feasible.

Access Roads

Facility access roads will be used for decommissioning purposes, after which removal of roads will be discussed with the landowner and one of the following options will be pursued:

- 1. After final clean-up, roads may be left intact through mutual agreement of the landowner and IP Darden unless otherwise restricted by federal, state, or local regulations.
- 2. If a road is to be removed, aggregate will be removed and shipped from the site to be reused, sold, or disposed of appropriately, consistent with applicable regulations and industry standards. Clean aggregate can often be used as "daily cover" at landfills for no disposal cost. Any ditch crossing connecting access roads to public roads will be removed unless the landowner requests it remains. The subgrade will be decompacted using a chisel plow or other appropriate subsoiling equipment. All rocks larger than four inches will be removed. Topsoil that was stockpiled during the original construction will be distributed across the open area. The access roads and adjacent areas that are compacted by equipment will be decompacted.

Substation

Decommissioning of the Project substation will be performed with the rest of the Facility. All steel, conductors, switches, transformers, and other components of the substation will be disassembled and taken off site to be recycled or reused. Foundations and underground components will be removed to a depth of four feet. The rock base will be removed using bulldozers and backhoes or front loaders. The material will be hauled from the site using dump trucks to be recycled or disposed of at an off-site facility. Additionally, any permanent stormwater treatment facilities (e.g., infiltration ponds and engineered drainage swales) will be removed.

Topsoil will be reapplied to match surrounding grade to preserve existing drainage patterns. Topsoil and subsoil will be decompacted to a minimum depth of 18 inches and the site will be revegetated to match pre-construction conditions.

Operations and Maintenance Building

The O&M Building is a sturdy, general purpose steel building. If the building is not repurposed, decommissioning will include disconnection of the utilities and demolition of the building structure, foundation, rock base parking lot, and associated vegetated/stormwater handling facilities. All associated materials will be removed from the site using wheeled loaders or backhoes and bulldozers and hauled off site in dump trucks. All recyclable materials will be taken to appropriate facilities and sold; the remaining materials will be disposed of at an approved landfill facility.

Subgrade soils will be decompacted and graded to blend with the adjacent topography. Topsoil will be reapplied to match existing surrounding grade to preserve existing drainage patterns, and the site will be tilled either to a farmable condition or re-vegetated, depending upon location.

Battery Energy Storage Systems (BESS)

The United States Environmental Protection Agency (EPA) has guidelines for responsible disposal and recycling of lithium-ion batteries that have reached end of life (Title 40 Code of Federal Regulations Part 273: Standards for Universal Waste Management). Additionally, lithium-ion batteries are classified by the U.S. Department of Transportation as Class 9 hazardous materials. All applicable requirements related to the packaging, labeling, transportation, and disposal or recycling of the lithium-ion batteries will be followed during the decommissioning process contained in the Code of Federal Regulations, Title 49, Subchapter C, Parts 171-180, or the applicable regulation will be followed.

Prior to commencing reclamation of the BESS site, all personnel on-site during the decommissioning process will receive a site-specific safety briefing and will be made aware of all electrical shock and arc flash risks when working within the battery containers. Hazmat training will also be conducted for all personnel handling lithium-ion (or other) batteries during the process.

The battery facility will be fully discharged to the minimum state of charge required for removal and safe transportation as per battery manufacturer specifications. The battery modules will be removed from their racks, repackaged on site, and shipped intact to a regional recycling hub within 500 miles of the Project Site. No disassembly of battery modules will be required on-site, and the battery terminals will be taped off to avoid any potential for a short to occur. In the event of any breakage or damage to individual battery modules, such modules will be placed in individual, non-metallic inner packaging that completely encloses the cell.

The refrigerant/coolant from heating, ventilation, and air conditioning (HVAC) units will be collected into separate containers on site as per the code and industry standard practice. The coolant can be reused after processing. The HVAC units will be sent to the metal recyclers along with other recycling material. Similarly, all fire suppression units will be cleared of the suppression fluids and sent to the suppliers for reuse following the industry standard practice. All electrical equipment will be disconnected and disassembled. All parts will be removed from the site and reconditioned and reused, sold as scrap, recycled, or disposed of appropriately, consistent with applicable regulations and industry standards.

Finally, aggregate ground cover will be removed and shipped from the Project site to be reused, sold, or disposed of appropriately, consistent with applicable regulations and industry standards. Clean aggregate can often be used as "daily cover" at landfills for no disposal cost. All pile foundations will be pulled out completely. Underground cables and duct banks will be removed. Topsoil will be reapplied to the disturbed area. Soil and topsoil will be de-compacted, and the site will be restored to the pre-construction condition and revegetated in accordance with the stormwater pollution prevention plan and/or construction stormwater permits.

In all cases, IP Darden, or their subcontractor as applicable, shall ensure all applicable OSHA, security, safety and health requirements are complied with during the removal and decommissioning of the BESS and its related equipment.

Hydrogen Electrolyzer Facility

The hydrogen plant would be decommissioned and dismantled per an agency approved Closure and Decommissioning Plan. Upon ultimate decommissioning, a majority of Project components will be suitable for recycling (i.e., the electrolyzer stacks will be most likely resold to the original vendor for recycling of precious metals) or reuse (compressors, pumps, RO system, transformers, rectifiers), and Project decommissioning would be designed to optimize such salvage as circumstances allow

and in compliance with all local, state, and federal laws and regulations in effect at the time of decommissioning.

Decommissioning activities related to the hydrogen facility would require similar equipment and workforce as construction but would be substantially less intense and would involve the dismantling and removal of all above-ground equipment including the electrolyzer, WTP, RO/EDI systems, compressors, pumps, liquefaction facilities, rectifiers, truck and rail transport areas, and all electrical equipment. The tracker structures, mechanical assemblies, and pipe racks will be recycled. Drive controllers, inverters, transformers, rectifiers and switchgear can be either reused or their components recycled.

All recyclable materials will be brought to appropriate facilities and sold; the remaining materials will be disposed of at an approved landfill facility. Any permanent stormwater treatment facilities will be removed. Subgrade soils will be decompacted and graded to blend with the adjacent topography. Topsoil will be reapplied to match existing surrounding grade to preserve existing drainage patterns, and the site will be tilled either to a farmable condition or re-vegetated, depending upon location.

Reclamation

IP Darden will restore and reclaim the site to the extent practicable to pre-construction conditions consistent with site lease agreements and in coordination with landowners. After all equipment and infrastructure is removed during decommissioning, any holes or voids created by poles, concrete pads, and other equipment will be filled in with native soil to the surrounding grade. All access roads and other areas compacted by equipment during the decommissioning will be decompacted to a depth necessary to ensure proper density of topsoil, drainage of the soil, and root penetration prior to fine grading and tilling to a farmable condition consistent and compatible with the surrounding area and associated land use.

IP Darden assumes that most of the site will be returned to farmland and/or pasture after decommissioning through implementation of appropriate measures to facilitate such uses. Types of crops that may be planted by landowners following reclamation may include historically cultivated crops, particularly those that do not require supplemental irrigation. If no specific use is identified, IP Darden will vegetate the site with a grassland seed mix comprised of a combination of native and naturalized grasses and forbs. The goal of the reclamation will be to restore natural hydrology and vegetative cover to the greatest extent practicable while minimizing new disturbance and removal of existing vegetation.