Initial Study and Negative Declaration

Van Norman Bypass Reservoir Solar Project

Los Angeles, California

Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012

July 2010

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FIGURES

TABLES

ABBREVIATIONS AND ACRONYMS

AAQS	Ambient air quality standards
AC	alternating current
AQMP	Air Quality Management Plan
ARB	Air Resources Board
BRSP	Bypass Reservoir Solar Project
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CEQA	California Environmental Quality Act
CMP	Congestion Management Plan
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
DC	direct current
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	Greenhouse gas
IS	Initial Study
kV	Kilovolt
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LST	Localized Significance Threshold
ND	Negative Declaration
MG	Million gallons
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
O_3	Ozone
PF	Public Facilities
PM_{10}	particulate matter 10 microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PV	Photovoltaic
RPS	Renewable Portfolio Standard
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
URBEMIS	Urban emissions software model
VNC	Van Norman Complex

1.0 INTRODUCTION

1.1 PROPOSED PROJECT

The Los Angeles Department of Water and Power (LADWP) proposes to install and operate solar photovoltaic (PV) modules on the roof of the existing Van Norman Bypass Reservoir (Bypass Reservoir) at the Van Norman Complex (VNC) located in the Granada Hills community of Los Angeles (*Figure 1: Regional Location Map*). The proposed Van Norman Bypass Reservoir Solar Project (also referred to as BRSP and proposed project), would provide approximately five megawatts (MW) of generation capacity to help the City of Los Angeles meet its renewable energy goals. As currently planned, the project would be implemented over a six-month period in late 2011. The Bypass Reservoir is a rigid-cover reservoir with a roof surface area of approximately 575,000 square feet. The reservoir provides approximately 80 million gallons (MG) of treated drinking water storage for the City. It is located in the west-central area of the VNC, which is a 1,340-acre property owned and operated by LADWP for the purposes of drinking water treatment and storage, electrical power generation and transmission, and regional flood control.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed BRSP constitutes a project as defined by CEQA (California Public Resources Code §21065). LADWP, as a municipal utility, would fund, implement, and operate the proposed project and will therefore act as the CEQA lead agency. This Initial Study and Negative Declaration (IS/ND) has been prepared in accordance with CEQA guidelines to evaluate the potential environmental effects of the project; based on the analysis described in the IS, none of the potential effects of the project would result in significant adverse impacts on the environment.

1.3 PROJECT NEED AND BACKGROUND

The California Global Warming Solutions Act (Assembly Bill 32) was passed by the Legislature in 2006, establishing a statewide goal of reducing greenhouse gas emissions to 1990 levels by the year 2020 and to 80 percent below 1990 levels by 2050. The City of Los Angeles has further established the goal of reducing greenhouse gas emissions to 35 percent below 1990 levels by 2030. A primary source of greenhouse gases, particularly carbon dioxide (CO_2), is the combustion of fossil fuels for electrical generation. The goal of the state's renewable portfolio standard (RPS) program, as established in Senate Bill 1078 (2002) and modified by Senate Bill 107 (2006), requires attaining 20 percent aggregate annual retail energy sales from eligible renewable resources by 2010. Municipal utilities, such as LADWP, were exempted from the specific provisions set forth in the bills, which applied only to investor-owned utilities; however, in 2005, LADWP nonetheless adopted a similar RPS to provide 20 percent of its energy sales to retail customers from renewable resources by 2010. In addition, through Executive Orders S-14-08 (2008) and S-21-09 (2009), the Governor of California established a target RPS for the state of 33 percent by 2020 and also included publically owned as well as investor-owned utilities under this mandate. LADWP has furthermore established an RPS aimed at achieving 35 percent of its energy sales from renewable power resources by 2020.

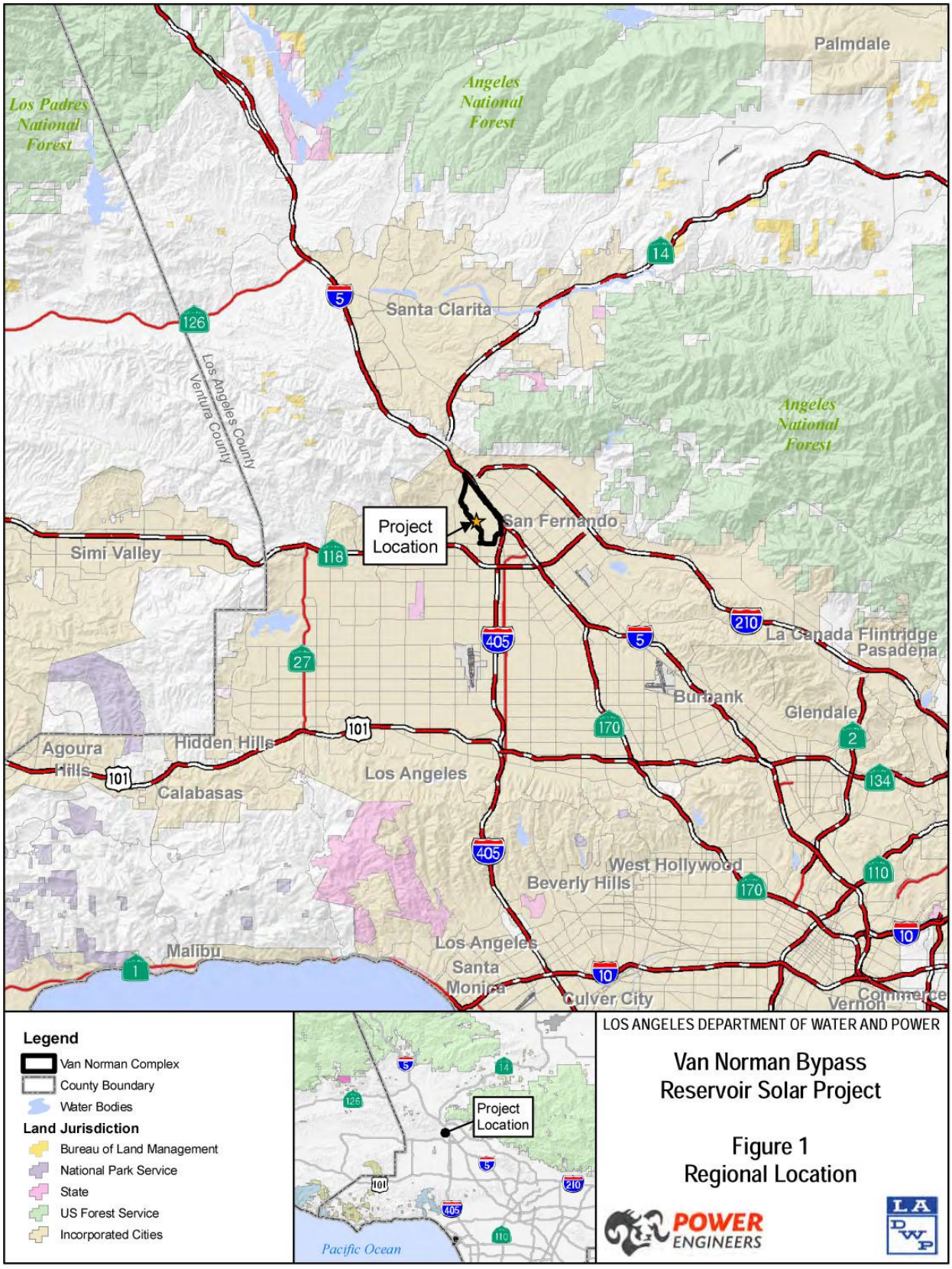
Against the backdrop of this need to reduce the combustion of fossil fuels for energy production, demand for energy continues to increase in the LADWP service area. Despite considerable progress in conservation in the City of Los Angeles through both energy efficiency and load management programs, the overall demand for electricity has continued to grow at a moderate pace since the early 1990s, driven primarily by increases in population, which is projected to expand in the City by approximately 25 percent between 2000 and 2025. As a result, the annual growth in demand for electricity in Los Angeles is expected to increase at an average annual rate of about 0.6 percent over the next 20 years, regardless of

increasingly aggressive conservation efforts. It is estimated that between the years 2009 and 2030, growth in peak demand will necessitate an average increase of 62 MW in generation capacity per year. This would represent a 1,300 MW, or approximately 23 percent, increase in capacity (from approximately 5,650 MW in 2009 to 6,950 MW in 2030).

In the face of this increasing energy demand and the need to reduce its dependence on fossil fuels, LADWP has embarked on an aggressive renewable power program that includes solar, wind, geothermal, biomass, and small hydroelectric power sources. LADWP's Solar Incentive Program has encouraged the development of over 19 MW of solar power through both residential and commercial rooftop installations since 1999. The Department is also developing a program to significantly increase solar installations on large commercial and government building rooftops. However, in order to achieve its aggressive RPS goals and provide for increasing peak energy demand, LADWP must also implement mid- to large-scale solar power projects. Among the key factors that influence the feasibility of implementing these larger-scale solar projects are land ownership and existing transmission facilities with adequate capacity. The BRSP responds to these factors because it would be located on LADWP-owned property, and it would utilize existing electrical distribution facilities that are located close to the center of demand and possess adequate capacity to deliver the solar energy generated. The VNC solar installation would help meet the RPS goals of reducing greenhouse gas emissions as well as other air pollutant emissions by displacing an equivalent amount of fossil fuel generation required to meet currently projected energy demand.

1.4 ENVIRONMENTAL DOCUMENT FORMAT AND CONTENT

This IS/ND contains an introduction, a project description, a CEQA environmental checklist and impact evaluation, and information about study preparers and references. The document is composed of five sections. Section 1 provides an introduction to the project and information about the environmental document and lead agency. A description of the proposed project (Section 2) provides a discussion of project components, construction, and operation. The environmental evaluation and CEQA Checklist are included as Section 3 and provide the analysis of potential environmental impacts that could occur from project implementation. A list of references and a list of the Lead Agency staff and consultants participating in the study are provided in Sections 4 and 5, respectively.


Palmdale
Angeles National Forest
Los Padres National Forest
Santa Clarita
Los Angeles County
Ventura County
Angeles National Forest
Project Location
San Fernando
Simi Valley
La Canada Flintridge
Pasadena
Burbank
Glendale
Agoura Hills
Hidden Hills
Calabasas
Los Angeles
West Hollywood
Beverly Hills
Malibu
Los Angeles
Santa Monica
Culver City
Vernon
Commerce
Legend
Van Norman Complex
County Boundary
Water Bodies
Land Jurisdiction
Bureau of Land Management
National Park Service
State
US Forest Service
Incorporated Cities
Project Location
Pacific Ocean
LOS ANGELES DEPARTMENT OF WATER AND POWER
Van Norman Bypass Reservoir Solar Project
Figure 1
Regional Location
POWER ENGINEERS
LA DWP

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2.0 DESCRIPTION OF THE PROPOSED PROJECT

2.1 PROJECT SETTING

The VNC is located at 13101 Sepulveda Boulevard in the City of Los Angeles, along the west side of Interstate Highway 5 (Golden State Freeway) and Interstate Highway 405 (San Diego Freeway) as shown on Figure 1. It consists of 1,340-acres of LADWP-owned property that is largely disturbed from the construction and operation of facilities devoted primarily to the production, storage, and/or transmission of drinking water and electricity, or to regional flood control functions (*Figure 2: Existing Van Norman Complex*). Other than an approximately 12-acre area in the southwestern corner of the VNC (along Rinaldi Street) occupied by public gardens and youth baseball fields, the property is inaccessible by the public. The perimeter of the complex is fenced or walled, and 24-hour manned security is provided.

The VNC has been an integral component of the City of Los Angeles drinking water supply system since early in the previous century, when the Lower and Upper San Fernando Dams were constructed, creating the Lower and Upper Van Norman Reservoirs at the terminus of the Los Angeles Aqueduct, which delivered water from the Owens Valley starting in 1913. These reservoirs occupied the majority of the existing VNC property until the Lower San Fernando Dam was severely damaged during the 1971 Sylmar Earthquake and both reservoirs were taken out of service.

The VNC is surrounded by residential development along Rinaldi Street to the south, residential development along Woodley Avenue to the west, the Metropolitan Water District Jensen Water Filtration Plant to the northwest, and the Golden State and San Diego Freeways to the east. Various residential, commercial, and institutional uses lie to the east of the freeways.

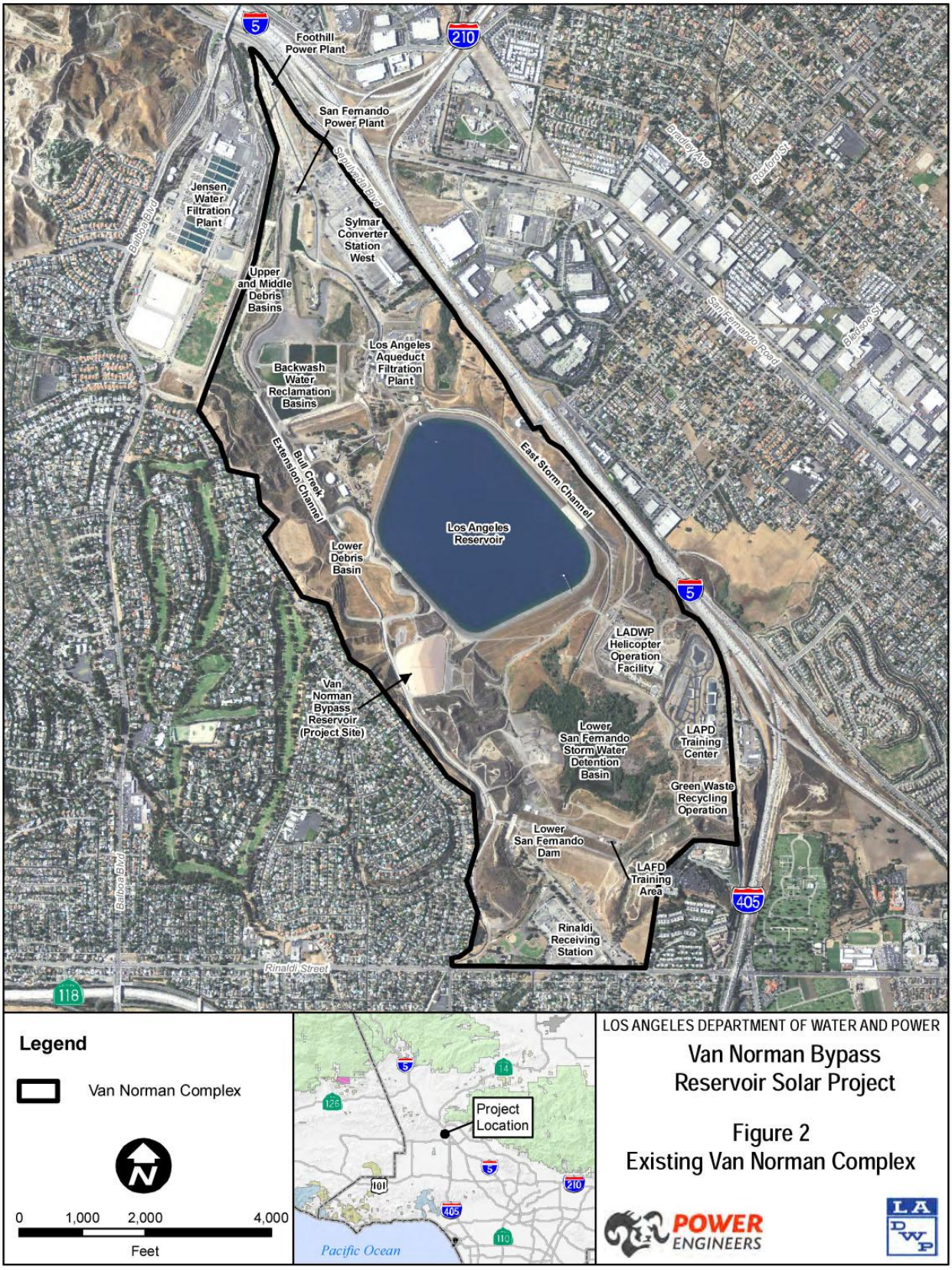
The VNC still serves as the terminus for the First and Second Los Angeles Aqueducts, which provide over one-third of the City's water supply during normal precipitation and water use years. In addition to the 80-MG Bypass Reservoir, major facilities related to water treatment and storage include the Los Angeles Reservoir, an uncovered 3.3-billion gallon drinking water reservoir located in the central part of the VNC, just northeast of the Bypass Reservoir. The Los Angeles Reservoir, which was constructed along with the Bypass Reservoir in the 1970s to replace the Lower and Upper Van Norman Reservoirs, is contained by the earthen Los Angeles Dam and has a surface area of approximately 170 acres. The Los Angeles Aqueduct Filtration Plant occupies an approximately 25-acre parcel north of the Los Angeles Reservoir. The filtration plant is the primary treatment facility for water from the First and Second Los Angeles Aqueducts, which is delivered via an open inlet channel that extends from the northernmost corner of the VNC southward to the filtration plant. Numerous large settling basins that process the backwash water from the filtration plant occupy approximately 30 acres west of the plant and northwest of the Los Angeles Reservoir. A number of appurtenant facilities related to water treatment, including pump stations, clear wells, chlorination and chloramination stations, and a chemical storage depot, are located throughout the VNC. Additional chloramination stations are also under construction at the property. Currently planned water treatment facilities include an ultraviolet disinfection plant located just south of the filtration plant, construction of which will not begin until 2012. The installation of additional ultraviolet treatment apparatus at the outlet of the Los Angeles Reservoir is also currently under consideration but, if implemented, construction of this facility would not begin until 2013.

The VNC includes two hydroelectric generating plants that utilize the force provided by falling water in the Los Angeles Aqueducts as they enter the property after descending on their final leg through the San Gabriel Mountains north of the VNC. The Foothill Power Plant has approximately 10 MW of generating capacity, and the San Fernando Power Plant, which consists of two separate units, has approximately 6 MW of total generating capacity. Several high-voltage electrical transmission and distribution lines, owned by both LADWP and Southern California Edison, cross the VNC along both the eastern and western sides of the property. The Sylmar Converter Station West occupies approximately 45 acres of

land near the northern end of the property. The converter station was once the major electrical substation facility at the southern terminus of the Pacific Intertie, which delivers power to the Los Angeles area via high-voltage direct current (DC) transmission lines from the Pacific Northwest. However, because of age, reliability issues, and damage sustained at the station during the 1994 Northridge Earthquake, the function of converting the DC power delivered by the Pacific Intertie transmission lines to alternating current (AC) usable in the LADWP distribution system has been relocated to the Sylmar Converter Station East, located 0.25 miles east of the VNC. However, while portions of the Sylmar Converter Station West have been decommissioned, it continues to operate as a primary switching station to distribute power to the LADWP service area. Facilities at the station are also being utilized for training and administrative functions by LADWP. The Rinaldi Receiving Station, where high-voltage power is converted for lower-voltage local distribution, occupies approximately 25 acres along the southern boundary of the VNC, outside the original Lower San Fernando Dam impoundment area. Several smaller electrical switching facilities are also located throughout the VNC property.

Primary flood control facilities at the VNC include the Lower San Fernando Storm Water Detention Basin, which occupies a large portion of the VNC south of the Los Angeles Reservoir. It is confined by the Lower San Fernando Dam, which was the original impoundment dam for the Lower Van Norman Reservoir. A large drain outlet that conveys collected storm water beneath the Lower San Fernando Dam and into the local storm drainage system is located at the southern end of the detention basin. The detention basin serves as a regional flood control facility capable of accommodating flows from a probable maximum precipitation event in the surrounding area. Several smaller debris basins are located within the VNC, including the Upper and Middle Debris Basins, located along the northwestern perimeter of the property; Yarnell Debris Basin, located north of the Los Angeles Reservoir; and the Lower Debris Basin, located directly west of the Los Angeles Reservoir and north of the Bypass Reservoir. Two large concrete storm water channels located within the VNC convey water through the property and to and from the various on-site debris and detention basins. The Bull Creek Extension Channel conveys storm water along the western side of the VNC from the Middle Debris Basin, through the Lower Debris Basin, and eventually off site at the southwest corner of the property. The East Storm Channel conveys storm water from the area south of the filtration plant along the eastern edge of the Los Angeles Reservoir and discharges into the Lower San Fernando Storm Water Detention Basin. Future flood control facility projects currently under consideration at the VNC include relocating the Lower Debris Basin overflow structure to the Lower San Fernando Storm Water Detention Basin, severing the Lower Debris Basin spillway into the Los Angeles Reservoir, and realigning portions of the Bull Creek Extension Channel. If implemented, construction of these improvements would not begin until 2014.

An approximately ten-acre storage yard for pipe sections and other construction materials is located southeast of the Los Angeles Reservoir. LADWP maintains a parking area for department vehicles and equipment adjacent to the storage yard. Several other smaller areas located throughout the VNC are also used for supplies and materials storage. An approximately 50-acre site along the southeastern boundary of the VNC property has been developed as a major Los Angeles Police Department (LAPD) training facility that includes classrooms, a driver training track, and an indoor shooting range. LADWP maintains an approximately two-acre helicopter base located northwest and adjacent to the LAPD training facility. The helicopter facility includes aircraft parking aprons, an administrative building, and a maintenance hangar. An approximately five-acre site located south of the LAPD facility is dedicated to a green waste recycling operation, which grinds landscape cuttings from City maintenance activities into mulch. Much of the mulch from this operation has been spread throughout the VNC property. The Los Angeles Fire Department (LAFD) operates an approximately one-acre fire fighting training facility in the southern part of the VNC, north of and adjacent to the Lower San Fernando Dam. The facility consists of several mock-up structures where fire suppression is practiced.


Foothill Power Plant
San Fernando Power Plant
Jensen Water Filtration Plant
Sylmar Converter Station West
Upper and Middle Debris Basins
Backwash Water Reclamation Basins
Los Angeles Aqueduct Filtration Plant
Bull Creek Extension Channel
East Storm Channel
Los Angeles Reservoir
Lower Debris Basin
Van Norman Bypass Reservoir (Project Site)
LADWP Helicopter Operation Facility
Lower San Fernando Storm Water Detention Basin
LAPD Training Center
Green Waste Recycling Operation
Lower San Fernando Dam
LAFD Training Area
Rinaldi Receiving Station
Rinaldi Street
Balboa Blvd
Bradley Ave
Roxford St
San Fernando Road
Bledsoe St
Sepulveda Blvd
Legend
Van Norman Complex
0 1,000 2,000 4,000
Feet
Project Location
Pacific Ocean
LOS ANGELES DEPARTMENT OF WATER AND POWER
Van Norman Bypass Reservoir Solar Project
Figure 2
Existing Van Norman Complex
POWER ENGINEERS
LA DWP

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Except for a small area of Commercial use zoning (C2-1) located in the northern end of the property, the VNC is zoned entirely as either Open Space ([Q]OS-1XL) or Public Facilities (PF). Open Space zones are located in the southern portion of the complex and along the eastern and western perimeters, where fewer facilities exist. PF zones are located primarily in the northern portion of the complex, where most drinking water and electrical system facilities are located, as well as at the site of the LAPD training facility along the southeastern perimeter of the VNC and at the site of the Rinaldi Receiving Station along the southern perimeter. The Bypass Reservoir is located within the PF zone, consistent with approved uses related to drinking water and electrical power production and distribution.

2.2 PROJECT SITE

As discussed above, the Bypass Reservoir is a covered 80-MG treated drinking water storage reservoir with a roof surface area of approximately 575,000-square feet *(Figure 3: Bypass Reservoir Site)*. It has perimeter concrete side walls approximately five feet tall. The rigid roof consists of corrugated aluminum supported by a system of columns, trusses, and beams. The roof slopes slightly downward towards the perimeter from a central east-west directional peak to allow for drainage. The reservoir is entirely surrounded by an asphalt surface road. It is accessible by paved roads from the north and south. Unpaved areas surrounding the reservoir consist of disturbed, low-growing vegetation (*Figures 4 thru 6: Site Photos*). Appurtenant facilities surrounding the Bypass Reservoir include the reservoir dam (located along the southeasterly edge of the reservoir), control buildings, and water distribution line junction structures. Several high-voltage electrical transmission and distribution lines cross over or adjacent to the reservoir. At the nearest point, the Bypass Reservoir is located approximately 325 feet from the ridgeline that forms the western boundary of the VNC. Residential properties that abut this boundary lie on the opposite side of the ridgeline from the VNC.

2.3 PROJECT FACILITIES

Solar modules would be installed in rows on an aluminum framework that would be attached to the roof of the Bypass Reservoir. No structural modifications would need to be made to the reservoir itself to accommodate the load of the solar modules. The modules may be installed flat on the reservoir roof surface or oriented south at a slight angle from horizontal, depending on which configuration provides the greatest efficiency relative to power generation for the entire system. Flat installations minimize shadows that interfere with solar energy collection, but they are also oriented less favorably to most effectively collect solar radiation. The determination regarding the angle of the modules would be made during detailed design, but it would not affect the overall nature of the solar installation. Individual rows of modules would be grouped into electrical circuits known as "strings." These strings would in turn be combined to function as a single electrical array. Because the solar power system would create DC power, inverters would be required to change the power to AC usable in the electrical distribution system. Each one-MW array would require an inverter unit. Transformer units would also be required to step up the voltage of the power from each inverter before it entered the distribution system. The BRSP would be connected to an existing LADWP distribution line adjacent to the Bypass Reservoir. The total output of solar energy system to be installed would be about five MW.

2.4 INSTALLATION OF SOLAR MODULES AND EQUIPMENT

The installation of the solar modules would involve several tasks, which would generally be completed concurrently, including the actual module installation and wiring, the installation of power inverters and transformers, and the interconnection of the solar power facility to the City electrical distribution system. Installation and commissioning would take approximately six months to complete, from July 2011 to December 2011. Five crews consisting of about five personnel each would work simultaneously on separate sections of the aluminum roof, installing modules and completing the wiring. During this task, an average of less than three truck deliveries per day for the solar modules and about two additional

deliveries per week for other components would be required. An on-site truck crane would be required to offload the modules. The proposed project construction activities would generally occur only on weekdays and, on those days, would be limited to between the hours of 7:00 a.m. and 6:00 p.m. Although not anticipated, if occasional Saturday work were required, it would not commence before 8 a.m., and it would cease by 6:00 p.m. No construction work would occur on Sundays or national holidays.

Five 35,000-pound pre-assembled inverter-transformer skids (one per MW of power generation) would be required. This equipment would need about 2,000 square feet of area and be located adjacent to the Bypass Reservoir perimeter road, probably near the existing control building and electrical panels on the north side of the reservoir. The skid-mounted inverters and the transformer would each be delivered by a single truck. Each skid-mounted unit would be approximately 35 feet in length, up to 12 feet in width, and up to 8 feet in height. Each would require a concrete pad with a compacted aggregate base or concrete pier foundation, depending on geotechnical studies conducted during detailed engineering design. This would entail a total of approximately five truck deliveries for the aggregate, reinforcing steel, and concrete. A backhoe would also be required to excavate the area for the pads, and a small crane would be required to offload and position the transformer and inverters on the pads. This task would generally involve fewer than eight personnel and would take approximately two months to complete, including up to one month for the concrete pads to cure. However, the work would be entirely concurrent with the installation of the solar modules.

The interconnection of the solar power units to the distribution system would involve running new feeder lines from the transformer to an existing distribution line located on the VNC property adjacent to the Bypass Reservoir. This interconnection would be accomplished by overhead electrical cable on wood poles approximately 30 to 35 feet tall. This task would occur concurrently with the installation of the solar modules. Once all of this work was completed, the final test, inspection, and commissioning of the system would occur. Other than the inverters and transformers and the interconnection to the existing on-site distribution system, no elements of the solar installation would be located beyond the roof surface of the Bypass Reservoir itself.

Because some of the tasks involved in the solar power installation would occur concurrently, the peak on-site personnel would reach approximately 35 (during the simultaneous installation of the solar modules and skid-mounted inverters and transformers). Truck deliveries would average about three per day, but a slightly higher number of daily truck trips may occur when both solar array components and foundation material for the inverters and transformer are delivered on the same day. Little equipment would be operating on site other than a truck crane and, for brief periods during the transformer and inverter foundation installation, a backhoe, soil compactor, and concrete truck. Because the solar installation would be located almost entirely on the roof of the existing Bypass Reservoir, there would be essentially no change to existing runoff or drainage patterns at the site. No hazardous materials, other than typical vehicle fuels and lubricants, would be required during installation. Except for the preparation of the relatively small area required for the inverters and transformers, no grading or site preparation would be required. Other than the trips required for the delivery of materials and supplies to the site, all activities, including materials laydown and worker parking, would be confined to the VNC in already disturbed areas near the Bypass Reservoir.


575,000 sq. ft. Total
PV Panel System Area
Inverter and Tranformer Pad(s)
Proposed Electrical Connection to Existing Distribution Line
Existing 34.5 kV Line
0
100
200
400
Feet
Project Location
Pacific Ocean
LOS ANGELES DEPARTMENT OF WATER AND POWER
Van Norman Bypass Reservoir Solar Project
Figure 3
Bypass Reservoir Site
POWER ENGINEERS
LA DWP

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FIGURE 4 SITE PHOTOS A AND B

Photo A. Reservoir profile from north side looking westerly

Photo B. Reservoir profile from north side looking easterly.

FIGURE 5 SITE PHOTOS C AND D

Photo C. Reservoir profile from west side looking southerly.

Photo D. Reservoir corrugated metal roof; looking southerly.

FIGURE 6 SITE PHOTOS E AND F

Photo E. Reservoir corrugated metal roof; looking northeasterly.

Photo F. Reservoir corrugated metal roof; looking easterly.

2.5 PROJECT OPERATIONS

No additional personnel would be required at the VNC on a daily basis to maintain and operate the proposed solar power installation. A small number of personnel may be required during brief periods when certain maintenance operations must be performed. The solar arrays would be monitored by automated methods to ensure that they are generating electricity to the specified capacity. Static PV arrays generate electricity without moving parts, and general maintenance requirements are characteristically low. Maintenance activities, such as troubleshooting, repairing, replacing, or optimizing system components, would occur on an event-driven basis. Occasional washing of the solar modules may be required in order to restore generation efficiency. However, such washing would involve approximately 0.07 to 0.15 acre-feet of water per year, which is much less than the one acre-foot of water per year used by a typical Los Angeles household. Washing would be performed only as needed to maintain system performance and the manufacturer's warranties on electrical equipment.

2.6 PERMITS AND APPROVALS

The BRSP would be installed under the auspices of the City of Los Angeles (LADWP) and would not require discretionary or regulatory permits from any other governmental agency.

3.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

PROJECT INFORMATION

1. **Project title:**
   Van Norman Bypass Reservoir Solar Project

2. **Lead agency name and address:**

   Los Angeles Department of Water and Power (LADWP)
   Environmental Services
   111 North Hope Street, Room 1044
   Los Angeles, California 90012

3. **Contact person and phone number:**
   Julie Van Wagner
   Environmental Specialist
   Los Angeles Department of Water and Power
   213 367-5295

4. **Project location:**
   The Van Norman Complex (VNC) is located at 13101 Sepulveda Boulevard in the Granada Hills community of the City of Los Angeles. The Bypass Reservoir is located in the west-central portion of the VNC, adjacent to the Los Angeles Reservoir.

5. **Project sponsor's name and address:**
   Same as lead agency (see Item 2 above)

6. **City Council District:**
   District 12

7. **Neighborhood Council:**
   Granada Hills North

8. **General plan designation:**
   Public Facilities (City of Los Angeles General Plan, Granada Hills-Knollwood Community Plan area).

9. **Zoning:**
   Public Facilities (PF).

10. **Description of project:**
    LADWP proposes to install and operate solar PV modules on the roof of the existing Van Norman Bypass Reservoir at the VNC located in the Granada Hills community of Los Angeles. The proposed Bypass Reservoir Solar Project would provide approximately five megawatts of generation capacity to help the City of Los Angeles meet its renewable energy goals. No structural modifications would need to be made to the reservoir itself to accommodate the solar modules. See Sections 2.3 through 2.5 of this document for additional information.

11. Surrounding land uses and setting:

The proposed project is situated within the west-central portion of the VNC. The VNC contains 1,340-acres of LADWP-owned property that is largely disturbed from the construction and operation of facilities devoted primarily to the production, treatment, storage, and/or transmission of drinking water and electricity, or to regional flood control functions. Other than an approximately 12-acre area in the southwestern corner of the VNC (along Rinaldi Street) occupied by public gardens and youth baseball fields, the property is inaccessible by the public. The perimeter of the complex is fenced or walled, and 24-hour manned security is provided. The VNC is surrounded by residential development along Rinaldi Street to the south, residential development along Woodley Avenue to the west, the Metropolitan Water District Jensen Water Filtration Plant to the northwest, and the Golden State and San Diego Freeways to the east. Various residential, commercial, and institutional uses lie to the east of the freeways. See Section 2.1 of this document for additional information.

12. Other public agencies whose approval is required:

The BRSP would be installed under the auspices of the City of Los Angeles (LADWP) and would not require discretionary or regulatory permits from any other governmental agency.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

X	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Charles C. Holloway — 7/14/2010

Charles C. Holloway
Manager of Environmental Planning and Assessment
Los Angeles Department of Water and Power

Date

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ENVIRONMENTAL EVALUATION

The following discussion of potential environmental effects was completed in accordance with Section 15063(d) (3) of the California Environmental Quality Act (CEQA) Guidelines (2010) to determine if the project may have a significant effect on the environment.

3.1 AESTHETICS

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

No Impact. Because of its original singular function as a major reservoir site, the VNC is set largely within a basin. This low-lying setting, in combination with the terrain, vegetation, and structural features of the surrounding area, limits visibility of the complex from locations outside the property boundaries. From the east, the Golden State and San Diego Freeways obstruct most views of the VNC. Intermittent views of the eastern portions of the VNC from the Golden State Freeway itself are available for a short duration as the freeway parallels the reservoir. Views of the vast majority of the VNC property (including the Bypass Reservoir site) from off-site locations to the south are entirely obstructed by existing development and terrain, including the original Lower San Fernando Dam. Views from residential neighborhoods located to the west are generally obstructed by the ridgeline that runs along the western perimeter of the VNC property. Views from off-site locations to the north of the VNC are generally obstructed by terrain, vegetation, and development, including elements of the Jensen Water Filtration Plant, located along the northwestern boundary of the VNC. Because of the Bypass Reservoir's location within the interior of the VNC, views of the reservoir site itself from locations outside the VNC are essentially unavailable. Furthermore, as described above, the VNC is currently largely occupied by facilities devoted primarily to the production, storage, and/or transmission of drinking water and electricity; regional flood control functions; or other functions that impart a generally industrial character to the site. Therefore, the proposed solar installation would only minimally alter the appearance of the existing rigid-cover Bypass Reservoir and would not impact scenic vistas, scenic resources related to a designated state scenic highway, or the existing visual character or quality of the site and its surroundings, including through the creation of light or glare.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. See discussion under Section 3.1(a).

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. See discussion under Section 3.1(a).

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. See discussion under Section 3.1(a).

3.2 AGRICULTURAL AND FORESTRY RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) 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 non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

DISCUSSION

a) 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 non-agricultural use?

No Impact. The proposed project would be located in the interior of the 1,340-acre VNC, which is owned by LADWP and occupied by facilities devoted primarily to the production, storage, and/or transmission of drinking water and electricity; regional flood control functions; or other industrial functions. The VNC does not contain land that is designated as Farmland as mapped by the Farmland Mapping and Monitoring Program.[1] The proposed project would be located on land that is zoned Public Facilities (PF).[2] It has never been used for agricultural uses and therefore is not subject to a Williamson Act contract.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. See discussion under Section 3.2(a).

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The proposed project would be located in the interior of the 1,340-acre VNC, which is owned by LADWP and occupied by facilities devoted primarily to the production, storage, and/or transmission of drinking water and electricity; regional flood control functions; or other industrial functions. The project site does not support native tree cover or timber resources and is therefore not considered forest land, timberland, or a timberland production zone as defined in the California Public Resources Code or Government Code.[3, 4]

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See discussion under Section 3.2(c).

e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. There is no Farmland or forest land within the VNC. The electrical generation capacity of the proposed project is five MW and represents renewable energy capacity that would offset the use of fossil fuels for electrical generation to meet currently projected energy demand in the LADWP service area. It would not contribute to growth that may lead to the conversion of Farmland or forest land. Therefore, there would be no potential for construction or operation of the proposed project to convert Farmland to non-agricultural use or forest land to non-forest use, either directly or indirectly.

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1 State of California, Division of Land Resource Protection. *Farmland Mapping and Monitoring Program*. Website: http://www.consrv.ca.gov/DLRP/fmmp/index.htm, accessed June 2010.

2 City of Los Angeles. *Zimas – Zoning Information and Map Access System*. Website: http://zimas.lacity.org/, accessed June 2010.

3 Legislative Council of California. *California Public Resources Code.* Website: http://www.leginfo.ca.gov/.html/prc_table_of_contents.html, accessed June 2010.

4 Legislative Council of California. *California Government Code.* Website: http://www.leginfo.ca.gov/.html/gov_table_of_contents.html, accessed June 2010.

3.3 AIR QUALITY

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentration?	☐	☐	☒	☐
e) Create objectionable odors that would affect a substantial amount of people?	☐	☐	☒	☐

DISCUSSION

The primary air quality issue with respect to the proposed BRSP is due to air pollutant emissions generated during construction of the project. The solar arrays would have limited operational impacts associated with infrequent repair, maintenance, and cleaning activity. Greenhouse gas (GHG) emissions are addressed in Section 3.7 of this IS/ND.

The Federal Clean Air Act (CAA) and its subsequent amendments establish air quality regulations and National Ambient Air Quality Standards (NAAQS) and delegate the enforcement of these standards to the states. In California, the Air Resources Board (ARB) is responsible for enforcing air pollution regulations. The ARB has in turn delegated the responsibility of regulating stationary emission sources to regional air agencies. In the project area, which is located in the South Coast Air Basin (SCAB), the South Coast Air Quality Management District (SCAQMD) has this responsibility. In California, the ARB is responsible for enforcing both the federal and state air pollution standards.

Areas that do not meet the NAAQS or California Ambient Air Quality Standards (CAAQS) for a given criteria pollutant are designated as "nonattainment areas" by the U.S. Environmental Protection Agency (EPA) and/or the ARB. Further classifications are given to nonattainment areas to identify the severity and number of violations experienced, and the year in which attainment is anticipated based on implementation of attainment plans. The SCAB is designated a non-attainment area for ozone (O_3), particulate matter smaller than or equal to 10 microns in diameter (PM_{10}), and particulate matter smaller

than or equal to 2.5 microns in diameter ($PM_{2.5}$).[5] The SCAQMD maintains an extensive air quality monitoring network to measure criteria pollutant concentrations throughout the SCAB.

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. The SCAQMD and the Southern California Association of Governments (SCAG) have responsibility for preparing an Air Quality Management Plan (AQMP) that addresses federal and state Clean Air Act requirements. The AQMP is based on regional projections for housing, employment, and population. The construction and operation of the proposed project is being undertaken to meet RPS standards for renewable energy distribution and consumption. Implementation of the proposed project would not substantially affect population, housing units, or employment, and it would thus be consistent with regional growth projections on which the AQMP is based.

b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The proposed project's air quality impacts are mainly attributable to the construction activity. To address the potential for impacts associated with construction of the project, it was assumed that overall project construction and commissioning would require six months of activity. It is estimated that the area required for the minor amount of grading required for the installation of the inverters and transformers (2,000 square feet) could be graded in a single day. Emissions were calculated based on off-road emission factors from the SCAQMD's website for heavy equipment[6] and emission factors from the EMFAC2007 Model[7], assuming that the project would be constructed prior to 2012. If project construction occurs later than 2012, emissions would decrease due to increasingly stringent emission requirements and the phase-out of older equipment. Emissions of fugitive dust were calculated using the urban emissions software (URBEMIS) model emission factor of 20 lbs/acre-day.[8]

A summary of the maximum daily construction emission estimates is provided in Table 1 below. This analysis is based on the maximum construction scenario, assuming grading and daily deliveries of materials would occur on the same day. Emissions were compared with both the SCAQMD regional significance thresholds for construction and the Localized Significance Threshold (LST)[9] for the project area. Accordingly, using conservative estimates of maximum daily construction activity, the project would have a less than significant impact on air quality.

Operational emissions would include periodic inspection and maintenance activities, and would be lower than the emissions associated with construction (i.e., less than significant).

While emissions are below the SCAQMD's significance thresholds for regional and LSTs, LADWP would follow best management practices relative to South Coast Air Quality Management District dust abatement rules and plans (i.e., Rule 403) during grading and construction.

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5 SCAQMD. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.* May 6, 2005. Website http://www.aqmd.gov/prdas/aqguide/aqguide.html, accessed June 2010.

6 http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html

7 http://www.arb.ca.gov/msei/onroad/latest_version.htm

8 Rimpo and Associates. 2007. URBEMIS Model, Version 9.2.4.

9 Assuming grading area is 1 acre, nearest receptor is 100 meters (328 feet) from site, LST for East San Fernando Valley Source-Receptor Area.

TABLE 1. ESTIMATED CONSTRUCTION EMISSIONS

Emissions, lbs/day						
Emission Source	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Fugitive Dust	--	--	--	--	0.55	0.12
Heavy Equipment (onsite)	3.79	27.38	14.16	0.03	1.69	1.50
Vehicles (offsite)	1.71	14.65	21.72	0.05	13.02	2.78
TOTAL	5.50	42.02	35.88	0.07	15.27	4.40
SCAQMD Regional Thresholds	75	100	550	150	150	55
LST	N/A	148	995	N/A	77	8
Above Thresholds?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Scientific Resources Associated, 2010

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The project's minor grading and construction emissions are less than significant and are very short-term. No projects in the immediate area have been identified that would, in combination with the emissions from the proposed project, exceed air quality significance criteria.

d) Expose sensitive receptors to substantial pollutant concentration?

Less Than Significant Impact. Sensitive receptors are defined as residences, schools, daycare centers, playgrounds, and medical facilities. Residential dwellings are located on the other side of the ridgeline to the west of the proposed solar site, the closest of which is about 325 feet away. As shown in Section 3.3(b), the project would not generate substantial emissions exceeding localized significance thresholds; therefore, sensitive receptors would not be exposed to substantial pollutant concentrations.

e) Create objectionable odors that would affect a substantial amount of people?

Less Than Significant Impact. Project construction could result in the emission of minor amounts of odor compounds associated with diesel and other construction equipment exhaust. Such emissions from the proposed project, which would be minor due to the limited construction size and duration, would typically dissipate in the distance between the project site and the VNC property boundaries, and would not result in significant odor impacts,.

3.4 BIOLOGICAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a) Have a substantial adverse effect, either directly or indirectly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. The VNC is used for a variety of public works facilities, including flood control and conveyance, electric generation and transmission, water treatment, water storage and distribution, police and fire training, and a helicopter base. The complex also contains limited occurrences of sensitive wildlife habitats, including open freshwater marsh, seasonal wetlands, oak woodland, sycamore woodland, and willow scrub woodland. Coastal sage scrub habitat occurs on the hillsides on the west and south sides of the complex, and remnants of this community occur intermittently

throughout the property. The majority of the VNC consists of developed/actively disturbed, ruderal, and non-native grassland vegetation.[10]

The BRSP and associated facilities would be located in an area of the VNC that is highly disturbed by existing facilities and operations.[11] The existing Bypass Reservoir is ringed by a 25-foot-wide asphalt roadway, and the adjacent areas where inverters and transformers would be located are also disturbed by previous grading or existing public works facilities. Most of the project construction activity would be limited to the reservoir roof and perimeter roadway. Areas used for ancillary facilities and temporary equipment laydown on the north side of the Bypass Reservoir consist primarily of invasive, non-native grassland and ruderal species that are managed (mowed) to facilitate active site operational and public facilities needs. The areas to be disturbed by construction do not include any of the sensitive habitats identified above, nor do they otherwise contain designated or critical habitat for any candidate, sensitive, or special-status species of wildlife. As none of the areas in the VNC that contain sensitive habitats or communities potentially hosting sensitive wildlife or plant species would be directly or indirectly affected by project construction or operations, no impacts would occur.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. See response to 3.4(a). The existing covered Bypass Reservoir, upon which solar modules would be placed, is not located in a riparian habitat or other sensitive natural community. Similarly, ancillary equipment would be sited on previously disturbed upland areas.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. See responses to 3.4(a) and (b). All construction for the proposed BRSP would occur in upland areas. No Federal protected wetlands exist within or adjacent to construction areas that would be directly or indirectly subject to removal, filling, hydrologic interruption, or other disturbance.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The concrete and metal Van Norman Bypass Reservoir is not presently used as a wildlife corridor and does not otherwise support resident or migratory wildlife movement in and around VNC. While some other areas of the VNC do support such activity[12], the installation of solar modules on the roof of the Bypass Reservoir and the use of the very limited amount of adjacent land for ancillary facilities would not interfere with wildlife activity at VNC.

[10] Michael Brandman Associates, October 2009, *Biological Resources Impact Assessment, Van Norman Complex Property*. Prepared for Los Angeles Department of Water and Power (draft report)
[11] Based on site survey, May 6, 2010.
[12] Op. cit. Michael Brandman Associates.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The proposed project would not conflict with the City of Los Angeles Tree Protection Ordinance, as no trees would be removed during the placement of solar modules on the reservoir roof. Minor construction on the ground would occur in previously disturbed areas devoid of trees.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed BRSP would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because the VNC is not located in a conservation plan area.[13, 14]

3.5 CULTURAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?

No Impact. The proposed project would not cause an adverse change in the significance of a historical resource, as no facilities of historic significance would be affected. Based on a recent site visit, it was determined that the only facilities to be modified or used as a result of project implementation are the Bypass Reservoir itself and, adjacent to the reservoir, the perimeter road, and electrical equipment (all associated with reservoir operation). These reservoir and appurtenant facilities date to 1972 when the reservoir was constructed.

[13] City of Los Angeles. *Granada Hills-Knollwood Community Plan*. July 10, 1996.
[14] City of Los Angeles. *Zimas – Zoning Information and Map Access System*. website http://zimas.lacity.org/, accessed June 2010.

b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?

Less Than Significant Impact. Based on previous surveys and discoveries, portions of the VNC complex are known to have contained significant archaeological resources.[15, 16] Construction monitoring at VNC for Chloramination Station 1, northerly of the BRSP, resulted in discovery of isolated archaeological resources and a possible hearth structure. The soils at the BRSP project site have been disturbed by past construction activities including the Bypass Reservoir itself; therefore, surface manifestation of archaeological resources is not likely.

Although the presence of archaeological resource discoveries during construction is always a possibility, the likelihood in this case is low due to the previous substantial soil disturbance at the site and the minimal amount of additional surface disturbance that is necessary for project construction. LADWP employs best management practices to instruct grading and excavation workers in the proper procedures to follow in the unlikely event archaeological resources are discovered during excavation. In such case, excavation would be redirected to another location until a qualified professional could examine the find, determine significance and, if necessary, take further mitigating actions.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less Than Significant Impact. A paleontological resources assessment was recently conducted by LADWP for water treatment facilities at the VNC.[17] The study concluded that the likelihood of uncovering paleontological resources during construction was low. This finding is generally applicable to the greater VNC, as surface deposits consist of younger Quaternary Alluvium derived primarily as fluvial deposits from the drainages leading into the VNC area. These deposits typically do not contain significant vertebrate fossil remains, at least in the uppermost layers. However, significant paleontological resources occur nearby and may occur at depth (one nearby discovery was at a depth of 75 feet).[18] Project activities, which would occur on the roof of the existing Bypass Reservoir or require shallow excavations not exceeding about two feet, are unlikely to uncover significant vertebrate fossils. LADWP employs best management practices to instruct grading and excavation workers in the proper procedures to follow in the unlikely event fossil resources are discovered during excavation. In such case, excavation would be redirected to another location until a qualified professional could examine the find, determine significance and, if necessary, take further mitigating actions.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. No human remains are expected to be disturbed within the project site during construction. In the event that remains are unearthed during construction, State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 provide guidance with regard to the accidental discovery of human remains. Should remains be unearthed during construction, LADWP would be subject to these requirements by law, reducing any potential impact to less than significant.

[15] EDAW 2009, *Los Angeles Aqueduct Filtration Plant Disinfection Contact Tank Project Mitigated Negative Declaration.* Appendix C Phase 1 Cultural Resources Assessment, Los Angeles Department of Water and Power.
[16] Gates, 1972, *Archaeological Site Record CA-LAN-644,* South Central Coastal Information Center
[17] Op. cit. EDAW 2009.
[18] Ibid.

3.6 GEOLOGY AND SOILS

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

DISCUSSION

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. As with all areas in of Southern California, the project site is located in a seismically active region, which is laced with numerous known earthquake faults. In the project vicinity, these include the Santa Susana Fault Zone, located to the north of the VNC, and the San

Fernando Fault Zone, which extends across the southern and eastern portions of the VNC, but not under the Bypass Reservoir site itself. Both of these fault zones are designated Alquist-Priolo Special Study Zone Areas.[19] The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy, which would not apply to the proposed solar panel installation. Most of the VNC, including areas surrounding the Bypass Reservoir, have been identified as susceptible to liquefaction.[20] However, the solar modules would be installed on the roof of the existing Bypass Reservoir, which was constructed to withstand potential seismic events, including strong ground shaking and seismically-related ground failure. In addition, to minimize potential damage to the solar facilities from seismic events, all project structures would be designed and constructed in accordance with the latest version of the California Building Code, the Uniform Building Code, and the City of Los Angeles Building Code relative to seismic criteria, and neither people nor structures would be exposed to potential substantial adverse effects.

ii. Strong seismic ground shaking?

Less Than Significant Impact. See discussion under Section 3.6(a)(i).

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. See discussion under Section 3.6(a)(i).

iv. Landslides?

Less Than Significant Impact. The project site itself is located on flat ground and is not subject to landslides. No areas within the VNC have been identified as susceptible to landslides in the Safety Element of the City of Los Angeles General Plan.[21] A few small and isolated areas near the Bypass Reservoir have been identified on California Geologic Survey and City of Los Angeles Bureau of Engineering small-scale maps as susceptible to earthquake-induced landslides, based primarily on slope rather than geotechnical site investigations.[22, 23] However, none of these areas are directly or indirectly involved in the project construction, nor would the Bypass Reservoir be substantially affected by potential landslides in these areas.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The proposed solar modules would be attached to the aluminum cover of the existing Bypass Reservoir. The installation of the modules themselves would involve no clearing, grading, or other ground-disturbing activities that would result in soil erosion or loss of topsoil. A relatively small area (approximately 2,000 square feet) adjacent to the reservoir perimeter road would be required for the skid-mounted inverters and transformers. This equipment would require concrete pads, the construction of which would not result in substantial erosion. Materials and supplies laydown, equipment storage, and worker vehicle parking would be confined to existing paved areas or other previously disturbed areas near the Bypass Reservoir. Based on the relatively small numbers of

[19] City of Los Angeles. *Safety Element Exhibit A: Alquist-Priolo Special Study Zones & Fault Rupture Study Areas in the City of Los Angeles*. November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.

[20] City of Los Angeles. *Safety Element Exhibit B: Areas Susceptible to Liquefaction in the City of Los Angeles*. November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.

[21] City of Los Angeles. *Safety Element Exhibit C: Landslide Inventory & Hillside Areas in the City of Los Angeles*. November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.

[22] California Geologic Survey. *Seismic Hazard Zones: San Fernando Quadrangle.* Website: http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_sfer.pdf, accessed June 2010.

[23] City of Los Angeles Bureau of Engineering, Department of Public Works. *Navigate LA.* Website: http://navigatela.lacity.org/index01.cfm, accessed June 2010.

equipment and workers required for construction and the staged manner in which materials would be delivered to the site, minimal disturbance that might contribute to erosion would occur.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. See discussion under Sections 3.6(a)(i) and 3.6(a)(iv).

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. The proposed project is not located on expansive soils.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The VNC is connected to a City sanitary sewer system. Because no new personnel would be required at the VNC in association with operations of the proposed project, no changes to the existing sanitary waste system operations would occur such that septic tanks or an alternative wastewater system would be required. During project construction, sanitary waste would be handled by temporary portable chemical toilets or in the existing sanitary facilities at the VNC. The waste from temporary facilities would be removed by a private contractor and disposed at an approved offsite location.

3.7 GREENHOUSE GAS EMISSIONS

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Greenhouse gas emissions would be generated from construction activities associated with the project. Greenhouse gas emissions were estimated using the same methodologies as criteria pollutants, and were compared with the SCAQMD's screening threshold of 900 metric tons of CO_2-equivalent (CO_2e) emissions, below which no cumulatively considerable impact would occur, and no further analysis is required. CO_2e emissions associated with BRSP construction are estimated to be 321 metric tons (assumed to be emitted in a one-year period).[24] The project emissions associated with construction would be below the 900 metric ton threshold, and would not result in a cumulatively

[24] Scientific Resources Associated. 2010. Technical Memorandum of BRSP Air Quality and Global Climate Change.

considerable impact on global climate. Operational emissions would include periodic inspection and maintenance activities, and would be lower than the emissions associated with construction. Furthermore, due to the nature of the project in providing approximately five MW of generation capacity to help the City of Los Angeles meet its renewable energy goals, the project is consistent with the goals of AB 32 in reducing greenhouse gas emissions overall in the region by providing non-fossil fuel energy sources.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. See discussion under Section 3.7(a).

3.8 HAZARDS AND HAZARDOUS MATERIALS

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒
f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. See discussion under Section 3.8(b).

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. Construction of the proposed project would include activities involving some hazardous materials, including on-site fueling and minor servicing of construction equipment. However, construction activities would be short-term in nature, and the types of materials that would be involved are not considered acutely hazardous. Furthermore, the handling of these materials is subject to federal, state, and local health and safety requirements. Therefore, project construction would not create a significant hazard to the public or environment from the routine transport, use, or disposal of hazardous materials or through a reasonably foreseeable upset or accident.

The proposed project would not involve hazardous materials or generate hazardous wastes during operation. The PV modules would not include any moving parts, and maintenance requirements, such as PV module washing, if necessary, would be minimal. Therefore, project operations would not create a significant hazard to the public or environment from the routine transport, use, or disposal of hazardous materials or through a reasonably foreseeable upset or accident.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The nearest existing school to the proposed project site is located approximately 0.4 miles to the southwest (Knollwood Elementary School). No new schools are proposed within the vicinity of the project.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. Government Code Section 65962.5 applies to facilities that may be subject to the Resource Conservation and Recovery Act Corrective Action program involving the cleanup of improperly managed hazardous wastes. The proposed project site is not contained on any lists compiled pursuant to Section 65962.5 or on the California Department of Toxic Substances Control database (EnviroStor) for contaminated sites.[25, 26, 27, 28] LADWP has entered into a voluntary cleanup agreement under the oversight of the California Department of Toxic Substances Control for potential soil contamination at the Sylmar Converter Station West related to a transformer release during the 1994 Northridge earthquake.[29] However, the proposed project site, which is located approximately one mile to the south, is not affected by this action.

[25] Department of Toxic Substances Control. *DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List)*. Website: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.
[26] EPA. *CERCLIS Hazardous Waste Sites*. Website: http://www.epa.gov/superfund/sites/cursites/index.htm.
[27] EPA. *National Priorities List*. Website: http://www.epa.gov/superfund/sites/npl/index.htm.
[28] Department of Toxic Substances Control. *EnviroStor*. Website: http://www.envirostor.dtsc.ca.gov/public/default.asp.
[29] Ibid

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?

No Impact. The proposed project site is not located within an airport land use plan area or within two miles of a public airport or public use airport. The project would include no occupied facilities that result in a safety hazard for people or any facilities that would be of a height that would represent an obstruction to air navigation.

f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

No Impact. The project site is not located within the vicinity of a private airstrip. However, the VNC is the base for the LADWP helicopter fleet, and helicopters regularly take off and land from the heliport facility, located approximately 0.6 miles east of the Bypass Reservoir. However, the project would include no occupied facilities that result in a safety hazard for people or any facilities that would be of a height that would represent an obstruction to helicopter navigation.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project would be located entirely within the existing 1,340-acre VNC. No permanent or temporary street closures are planned during either project construction or operations. Emergency access to or egress from the station or surrounding areas would not be adversely affected.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. According to the City of Los Angeles General Plan Safety Element, no Fire Hazard Districts or Fire Buffer Zones occur within the VNC.[30] No construction or operational activity related to the project would create a significant fire risk.

[30] City of Los Angeles. *General Plan Safety Element, Exhibit D Selected Wildfire Hazard Areas in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.

3.9 HYDROLOGY AND WATER QUALITY

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. The proposed solar modules would be attached to the existing aluminum cover of the Bypass Reservoir. The installation of the modules themselves would

involve no clearing, grading, or other ground-disturbing activities that would result in a potential violation of a water quality standard. A relatively small area (approximately 2,000 square feet) adjacent to the reservoir perimeter road would be required for the inverters and transformers. This equipment would require concrete pads, the construction of which would not result in substantial ground disturbance that could contribute to a water quality or waste discharge violation through a substantial increase in erosion, runoff, or sedimentation. Materials and supplies laydown, equipment storage, and worker vehicle parking would be confined to existing paved areas or other previously disturbed areas near the Bypass Reservoir. Based on the relatively small numbers of equipment and workers required for construction and the staged manner in which materials would be delivered to the site, minimal disturbance that might contribute to a water quality or waste discharge violation would occur. The post-construction operation of the proposed solar modules would not involve activities that would contribute to a violation of a water quality standard or waste discharge requirement.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. During project construction, minor amounts of water would be required for various uses, such as the concrete mix required for the transformer and inverter foundations. However, because of the relatively small quantity of water required in the context of the available supply, no depletion of groundwater supplies would occur from project construction. During project operations, the solar modules may occasionally require washing to maintain energy generation efficiency. To wash the modules one to two times a year, a maximum of approximately 0.15 acre-feet of water would be required annually, which represents significantly less than the one acre-foot of water per year used by a typical Los Angeles household; no depletion of groundwater supplies would occur related to project operations.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. As discussed above, the proposed solar modules would be attached to the aluminum cover of the existing Bypass Reservoir. The installation of the modules themselves would involve no clearing, grading, or other ground-disturbing activities that would alter the existing drainage pattern of the site or area such that substantial erosion, siltation, or runoff would result. The amount of precipitation that currently runs off the rigid roof of the Bypass Reservoir would remain the same after installation of the solar arrays on the roof. A relatively small area (approximately 2,000 square feet) adjacent to the reservoir perimeter road would be required for the inverters and transformers. This equipment would require concrete pads, the construction of which would not substantially alter the existing drainage pattern in a manner that would result in substantial erosion or siltation or a substantial increase in runoff that would result in flooding, exceed the capacity of existing or planned storm water drainage systems, or provide additional sources of polluted runoff.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. See discussion under Section 3.9(c).

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. See discussion under Section 3.9(c).

f) Otherwise substantially degrade water quality?

No Impact. Based on the type and magnitude of activities anticipated during project construction and operations, the proposed project would not otherwise substantially degrade water quality.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project is located within the existing VNC and does not include the construction of any housing. Furthermore, according to the most recent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the area, as well as the City of Los Angeles General Plan Safety Element, the project site is not located within an area subject to a 100-year flood hazard.[31, 32]

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. According to the most recent FEMA Flood Insurance Rate Map for the area and the City of Los Angeles General Plan Safety Element, the project site is not located within an area subject to a 100-year flood hazard.[33, 34]

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. The proposed project involves the installation of solar modules on the roof of the existing rigid-cover Bypass Reservoir. As discussed above, the Bypass Reservoir is not located within an area subject to significant flooding. The reservoir lies adjacent to the inundation area that would result from the failure of the Los Angeles Dam, the earthen impoundment structure for the Los Angeles Reservoir.[35] The risk of failure of the Los Angeles Dam is considered very low. Furthermore, because the proposed project consists of solar modules, it would not expose people or habitable structures to significant risk in the event of a flood related to such a failure.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The proposed project site is not located within a tsunami hazard zone, nor is it subject to mudflows.[36] The Van Norman Bypass Reservoir, on which the solar modules would be

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31 FEMA Map Service Center. *Flood Insurance Rate Map (FIRM) 06037C1075F*. 2008 Website: http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1, accessed June 2010.

32 City of Los Angeles. *General Plan Safety Element, Exhibit F 100-Year & 500-Year Flood Plains in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.

33 Op. cit. FEMA

34 Op. cit. City of Los Angeles.

35 City of Los Angeles. *General Plan Safety Element, Exhibit G Inundation and Tsunami Hazard Areas in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.

36 Ibid.

installed, could be subject to seiche caused by a seismic event. However, seiche events were considered in the design of the reservoir to minimize the occurrence of and damage from standing waves. In addition, because the proposed project consists of solar modules, it would not expose people or habitable structures to significant risk in the event of a seismically related seiche in the Bypass Reservoir.

3.10 LAND USE AND PLANNING

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a) Physically divide an established community?

No Impact. The project would be located in the interior of the existing 1,340-acre VNC, which is owned by LADWP and occupied by facilities devoted primarily to the production, storage, and/or transmission of drinking water and electricity; regional flood control functions; or other industrial functions. Therefore, construction and operation of the proposed project would not result in physical division of any established communities.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project would be located in the interior of the existing 1,340-acre VNC, which is owned by LADWP and occupied by facilities devoted primarily to the production, storage, and/or transmission of drinking water and electricity; regional flood control functions; or other industrial functions. The Bypass Reservoir, on which the solar modules would be installed, is located in an area of the VNC designated in the City of Los Angeles General Plan as Public Facilities and zoned PF, consistent with approved uses related to drinking water and electrical power production and distribution.[37]

[37] City of Los Angeles. *Zimas – Zoning Information and Map Access System*. Website: http://zimas.lacity.org/, accessed June 2010.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project would not conflict with any habitat conservation plan. The site is not within a habitat conservation plan or a natural community conservation area.[38]

3.11 MINERAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. See discussion in Section 3.11(b).

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The proposed project site, which includes the existing Bypass Reservoir and a small area for ancillary equipment, is not identified as a locally important mineral resource site delineated on a local general plan, specific plan, or other land use plan.

[38] City of Los Angeles. *Granada Hills-Knollwood Community Plan*. July 10, 1996. Website: http://cityplanning.lacity.org/complan/pdf/ghlcptxt.pdf, accessed June 2010.

3.12 NOISE

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☒	☐
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

DISCUSSION

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. The City of Los Angeles regulates noise through several sections of its municipal code. These include Section 41.40, which establishes time prohibitions on noise due to construction activity, and Section 112.05, which establishes maximum noise levels for powered equipment and powered hand tools. According to Section 41.40, no construction activity that might create loud noises in or near residential areas or buildings shall be conducted between the hours of 9:00 p.m. and 7:00 a.m. on weekdays, before 8:00 a.m. or after 6:00 p.m. on Saturday and national holidays, or at any time on Sunday. As discussed above, the proposed project construction activities would generally occur only on weekdays and, on those days, would be limited to between the hours of 7:00 a.m. and 6:00 p.m. Although not anticipated, if occasional Saturday work were required, it would not commence before 8 a.m., and it would cease by 6:00 p.m. No construction work would occur on Sundays or national holidays. According to Section 112.05, noise from construction activity shall not exceed the noise limits established by the federal government for various powered tools and pieces of operating equipment. As discussed above, the construction of the proposed project would involve a relatively small number of equipment, which would operate for only brief periods of time. Some power tools would also be used for the actual installation of the solar modules on the reservoir roof. All equipment and tools would comply with the established federal noise limits and, consistent with these limits, would generally not exceed 85 decibels for single pieces of

larger equipment, such as the backhoe used to excavate for the inverter and transformer foundations. Therefore, the construction of the project would not generate noise levels in excess of local standards. Furthermore, the noise generated from construction would be temporary and short-term, and it would diminish substantially when transmitted over the soft surfaces between the Bypass Reservoir and western boundary of the VNC, which lies approximately 325 feet west of the reservoir at its closest point. Noise from construction would be further reduced at the residential properties west of the VNC by the intervening ridgeline. None of the equipment used during construction would generate excessive groundborne vibration or groundborne noise. Based on the nature of the project facilities, the operation of the project after construction is complete would generate only negligible noise related to periodic maintenance activities, including the use of vehicles and equipment, and no significant impact related to noise generation from post-construction operations would occur.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. See discussion in Section 3.12(a).

c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

No Impact. See discussion in Section 3.12(a).

d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Less Than Significant Impact. See discussion in Section 3.12(a).

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. The proposed project site is not located within an airport land use plan area or within two miles of a public airport or public use airport. Furthermore, the project would include no occupied facilities that would expose people to excessive noise levels related to aircraft use.

f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. The project site is not located within the vicinity of a private airstrip. However, the VNC is the base for the LADWP helicopter fleet, and helicopters regularly take off and land from the heliport facility, located approximately 0.6 miles east of the Bypass Reservoir. However, the project would include no occupied facilities that would expose people to excessive noise levels related to helicopter use.

3.13 POPULATION AND HOUSING

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The project does not include construction of new homes or businesses or the extension of roads or other infrastructure that would induce population growth. The proposed solar project would provide energy to help meet existing and projected demand in the LADWP service area and, based on City of Los Angeles RPS goals, would replace existing fossil fuel generated power. The project thus would not indirectly induce population growth through the provision of additional energy supply.

Due to the relatively low number of personnel required for project construction and the expected relatively short duration of construction (approximately six months), workers would be drawn from local communities, and no population growth in the area would occur.

The operation of the proposed solar power generation facility would not require any new employees on site and thus would not induce population growth or the need for new housing in the area.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project would be located completely within the existing 1,340-acre VNC. There is no existing housing within the project property, nor does the project require removal of any housing outside the property.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. See discussion in Section 3.13(b).

3.14 PUBLIC SERVICES

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Fire protection?

No Impact. Fire protection for the VNC is provided by the LAFD. Within the context of the VNC, the proposed project would not generate a requirement for additional fire protection.

Police protection?

No Impact. Police protection for the VNC is provided by the LAPD. The complex is also guarded and patrolled by LADWP security personnel. Within the context of the VNC, the proposed project would not generate a requirement for additional police protection.

Schools?

No Impact. The proposed project is a solar power generation facility within the existing VNC. No feature of the project would directly generate a demand for school services, nor would the project lead directly or indirectly to substantial population growth such that new or physically altered school facilities would be required.

Parks?

No Impact. The proposed project is a solar power generation facility within the existing VNC. No feature of the project would directly generate a demand for parks, nor would the project lead directly or indirectly to substantial population growth such that new or physically altered park facilities would be required.

Other public facilities?

No Impact. The proposed project is a solar power generation facility within the existing VNC. No new housing or businesses would be constructed as part of the project, nor would the project directly or indirectly induce population growth in the area such that new or physically altered governmental facilities would be required to adequately provide services.

3.15 RECREATION

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. Neither the construction nor operation of the proposed project would generate any additional population that would increase the use of existing neighborhood or regional parks or other recreational facilities.

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project is a solar power generation facility within the existing VNC. It does not include recreational facilities or require construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

3.16 TRANSPORTATION AND TRAFFIC

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☐	☒

DISCUSSION

a) Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. Construction of the proposed project could result in temporarily increased traffic volumes associated with construction activities. It is anticipated that project construction activity would last up to six months. Access to the VNC for construction of the BRSP would occur at the secondary gate off of Sepulveda Boulevard near Roxford Street. Off-site construction phase vehicle trips would be generated by worker commute trips, truck deliveries of solar equipment, concrete deliveries, and a few haul trucks for miscellaneous waste disposal. This analysis assumed simultaneous arrival and departure of all workers in the mornings and evenings.

According to County of Los Angeles Transportation Impact Report guidelines, a detailed traffic report must be prepared for projects that generate over 500 trips per day or where other possible adverse

impacts are identified.[39] To determine the peak-hour traffic generation from construction worker commute trips, it was assumed that workers would travel to and from the project site with average vehicle occupancy of 1.2 passengers. This assumption, derived from a factor of one of every six workers carpooling, is reasonable based on the location of the project site in relation to the regional workforce supply. Based on this vehicle occupancy factor and assuming all workers would arrive at the project site at essentially the same time in the morning and depart at essentially the same time in the afternoon/evening, the 35 project workers required during one month of the project construction would generate 29 one-way commuter vehicle trips during the a.m. and p.m. peak traffic periods (58 trips per day total from commuters).

The level of truck traffic during construction of the BRSP is considered minimal overall, with an average of three and maximum of five trips a day. This amount of truck traffic is equivalent to about 13 round-trips per day (using a passenger car equivalent value of 2.5 car trips per truck), or 26 one-way trips per day. Because these trips would be generally distributed throughout the day, only a few would occur during the morning and evening peak periods.

Overall, a total of 84 daily trips, distributed throughout the day, would occur during peak construction activity. No traffic impact report is required for this project, and the estimated increase in traffic would be minor and temporary (approximate six months duration). The proposed project would not cause an increase in traffic that is substantial in relation to the context of the region, vicinity, and local roadways that provide access to the site. Therefore, the impact would be less than significant.

Operation of the proposed project would not cause any increase in traffic in relation to the existing traffic load and capacity of the street system, because no operating personnel are required at the site on a daily basis. A small number of personnel may be required during brief periods when certain maintenance operations must be performed. These activities would generate minimal traffic to and from the project site, and project operations would not conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the local circulation system. Operational traffic impacts would be less than significant.

b) Conflict with an applicable congestion management program including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. According to the Los Angeles County traffic impact analysis guidelines, a congestion management plan (CMP) impact analysis must be provided for any project that would add 50 or more trips to a CMP roadway segment during either the a.m. or p.m. peak hours, including freeway on-ramps. As noted above, construction of the BRSP would add about 29 worker commute trips and a small number of truck trips during both a.m. and p.m. peak periods. None of the surrounding surface streets are designated CMP segments; however, the ramps at Roxford and I-5 are CMP segments. The proposed project's traffic generation would not meet CMP criteria, and a CMP impact analysis is not required. No conflict with congestion management or transportation management measures would occur.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

No Impact. The proposed project would not result in a change in air traffic patterns. The construction and operation of the proposed project would not generate air traffic. Further, the proposed project would not include any structures of a height that could act as a hazard to aircraft navigation.

[39] Los Angeles County Department of Public Works, 1997, Traffic Impact Analysis Report Guidelines

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project would not include the construction of any new off-site roads or the modification of any existing off-site roads, either for the purposes of long-term project operations or to temporarily support project construction. Construction of the project would include truck deliveries of materials, components, and supplies to the site. A very limited number of oversize loads may be required to deliver large equipment to the site at the outset of construction and remove the equipment after construction is completed. If oversize loads are needed, permits specifying route and time limits, as well as any necessary traffic control measures, would be required from state, county, and/or city agencies. General truck traffic is compatible with Sepulveda Boulevard and Roxford Street from both an access and weight standpoint, and does not represent an incompatible use.

e) Result in inadequate emergency access?

No Impact. The proposed project would not hinder emergency access in the area. No permanent or temporary road closures or modifications are proposed as part of the project. All construction activities and staging would take place within the existing VNC. No incompatible uses on public roads would occur from either construction or operation of the BRSP.

f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

No Impact. The proposed project would not conflict with adopted policies supporting alternative transportation. Construction activities would take place entirely within the VNC property and would not require the removal or relocation of alternative transportation facilities (e.g., bus stops and bike lanes). Once construction activities are complete, no additional employees would travel to the project site, and no new vehicle trips would be generated.

3.17 UTILITIES AND SERVICE SYSTEMS

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Projects projected demand in addition to the providers existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the Projects solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

DISCUSSION

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The proposed BRSP would not generate wastewater and thus would not require any changes to facilities or operations at existing wastewater treatment facilities. No impact to wastewater treatment requirements of the applicable Regional Water Quality Control Board would occur. The project would not require modifications or expansion of wastewater facilities.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. See response to Section 3.17(a) regarding the generation of wastewater or expansion of wastewater facilities. Water for solar panel washing would be supplied by the LADWP from existing sources and represents a relatively small maintenance requirement. To wash solar modules one to two times a year, up to 0.15 acre-feet of water would be required annually. The upper end of this range represents significantly less than the one acre-foot annual water use of a typical Los Angeles

household. This quantity of water use is not significant and would not require new water production facilities or entitlements.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed BRSP would not require construction of new storm drainage facilities. The existing drainage system for the reservoir site would not require modification for the solar modules, as the area of impervious surface on the reservoir roof would be the same with or without the solar modules. The proposed project would add an approximately 2,000 square foot concrete pad to accommodate the inverters and transformers, resulting in relatively insignificant amounts of impervious surface that would incrementally increase storm water runoff. This small addition of impervious surface is inconsequential with respect to the overall site drainage and runoff pattern, and could be accommodated with no environmental impact.

d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. See discussion in Section 3.17(b).

e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Projects projected demand in addition to the providers existing commitments?

No Impact. See discussion in Section 3.17(a).

f) Be served by a landfill with sufficient permitted capacity to accommodate the Projects solid waste disposal needs?

Less Than Significant Impact. As no demolition and minimal grading are required to accommodate the proposed project, and as most components are prefabricated, minimal solid waste would be generated during project construction. Construction debris would be recycled or transported to a landfill site and disposed of appropriately. In accordance with AB 939 and best management practices, LADWP would work to ensure that source reduction techniques and recycling measures are incorporated into project construction and operation. Operation would not result in any increase in personnel at the project site, and would not generate solid waste.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. In accordance with best management practices and as required by regulation and law, LADWP would comply with federal, state, and local solid waste diversion, reduction, and recycling mandates.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have Impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

No Impact. As described in various subsections of Section 3.0 (in particular, Sections 3.2 Air Quality, Section 3.4 Biological Resources, and Section 3.5 Cultural Resources) the proposed BRSP does not have the potential to degrade the environment or cause significant environmental impacts. As construction activities would affect primarily the roof of the existing Bypass Reservoir as well as small areas adjacent to the reservoir that are already highly disturbed, no significant impacts to biological resources or archaeological/historic resources would occur.

b) Does the project have Impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

No Impact. As discussed in Section 3.3, the proposed project is located within the Los Angeles County portion of the SCAB, which is designated a non-attainment area for O_3 and particulate matter (PM_{10} and $PM_{2.5}$). However, the proposed project would not contribute to cumulative impacts, as it would be consistent with the SCAG growth projections, construction impacts would be minor, and project-related operational emissions would be negligible. Relative to air quality and the production of greenhouse gases, the proposed project would be cumulatively beneficial because it would replace fossil-fuel generated power with solar-generated power, which would produce no air pollutants or greenhouse gas emissions.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. The analysis presented in this document does not identify significant adverse impacts on human beings. The impacts were characterized as either absent or less than significant, and no mitigation measures would be required. Therefore, the proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

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