I.3 PLANNING PROCESS

I.3.1 Bureau of Land Management Land Use Planning Process

I.3.1.1 Planning Criteria

In accordance with Bureau of Land Management (BLM) planning regulations (43 Code of Federal Regulations [CFR] 1610.4-2) for BLM-administered lands, the BLM developed planning criteria to help guide data collection, alternatives formulation, and impact analysis. The following criteria define the decision space or "sideboards" that define the scope of the planning effort and are based on laws, regulations, and agency guidance, serving to keep the planning process focused.

- The Environmental Impact Statement (EIS) and land use plan amendments will be completed in compliance with the Federal Land Policy and Management Act (FLPMA), Endangered Species Act (ESA), National Environmental Policy Act (NEPA), Omnibus Public Lands Management Act of 2009, National Historic Preservation Act of 1966, and all other applicable federal laws, proclamations, legislative designations, executive orders, court orders, and management policies of the BLM.
- The Desert Renewable Energy Conservation Plan (DRECP) and Land Use Plan Amendment (LUPA) are primarily driven by the need to accommodate renewable energy development and biological resource conservation. The effect of decisions on renewable energy and biological resource conservation affects other resources, uses, and values, including but not limited to physical, cultural, social, and scenic values, and uses such as land use authorizations, recreation, and mineral development within the DRECP area. In order to appropriately conserve these other resources and uses, decisions will be made on these other resources to respond to the effect on them from renewable energy development and biological resource conservation. Planning decisions will respond to changes in renewable energy and biological resource management.
- Resources, uses, and values not affected in any way by renewable energy and biological resource management are outside the scope of this LUPA. These resources, uses, and values will continue to be managed pursuant to the existing BLM land management plans, including the California Desert Conservation Area (CDCA) Plan of 1980 as amended, the Bakersfield Resource Management Plan (RMP), and Bishop RMP.
- The BLM will continue to manage resources and uses on BLM-administered lands by existing land use planning decisions unless specifically amended by the Record of Decision (ROD) for the LUPA.

- The BLM land use plan and resource management plans, as amended, will recognize valid existing rights (e.g., mining claims).
- The BLM will coordinate with local, state, tribal, and federal agencies during the EIS process to strive for consistency with existing plans and policies, to the extent consistent with federal law and the purposes of FLPMA. Pursuant to FLPMA, states are authorized to advise the Secretary of the Interior with respect to the development and revision of land use plans, guidelines, rules, and regulations for the public lands and with respect to such other land use matters as may be referred to them by the Secretary.
- The BLM decisions will be consistent and compatible with the existing Lower Colorado River Multiple Species Conservation Program and the Coachella Valley Multiple Species Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP), to the extent the HCP and NCCP are consistent with federal law and FLPMA.
- The BLM will coordinate with tribal governments and will provide strategies for the protection of recognized traditional uses in the EIS process, consistent with other planning criteria and in accordance with the purpose and need for the DRECP.
- The BLM will take into account appropriate protection and management of special-status plant and animal species on BLM-administered lands in the EIS and will engage in all required consultation under federal law, including any take permits necessary under the Bald and Golden Eagle Protection Act.
- The BLM will take into account appropriate protection and management of cultural resources on BLM-administered lands in the EIS and will engage in all required consultation.
- The BLM will recognize Legislatively and Legally Protected Lands[1] managed by the BLM, and BLM decisions will be consistent and compatible with the values for which the special designations were established.
- The BLM will recognize in the EIS the specific niche occupied by public lands in the life of the communities that surround them or that are surrounded by them and in the nation as a whole.
- The BLM will encourage public participation throughout the process.

[1] Defined as "Existing protected lands, including: Wilderness Areas, National Parks, National Preserves, National Wildlife Refuges, California State Parks and Recreation Lands, California Department of Fish and Wildlife (CDFW) Conservation Areas (Ecological Reserves and Wildlife Areas), CDFW areas, privately held conservation areas including mitigation/conservation banks approved by the Wildlife Agencies, land trust lands, Wilderness Study Areas, Wild and Scenic Rivers, and National Scenic and Historic Trails.

- Environmental protection; promotion of physical, cultural, social, and scenic values; and energy production are all desirable and necessary objectives of sound land management practices and are not to be considered mutually exclusive priorities.
- The BLM will support planning to provide renewable energy opportunities to help meet public consumptive uses that contribute to climate change.
- Under constitutional principles, federal law, and regulation, and through policy implemented over significant periods of time, BLM is responsible for managing public land resources, including species and species habitat on public land. The BLM's decision on the LUPA portion of the DRECP is not constrained or determined by any other agency's action, except as required by federal law, such as the ESA.
- As described earlier, however, the BLM is coordinating with the other agencies and is directed by statute to consider other federal, state, local, and tribal programs and policies. The BLM will secure an ESA Section 7 biological opinion for its land use plan amendments.

I.3.1.2 Types of Decisions

I.3.1.2.1 National Conservation Lands

In June 2000, the Department of the Interior and the BLM established the National Landscape Conservation System (NLCS) to provide for coordinated protection of the BLM's conservation lands. On March 30, 2009, President Barack Obama signed into law the Omnibus Public Lands Management Act of 2009 (PL 111-11) (Omnibus Act), which congressionally established the NLCS to "conserve, protect and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations." Congress directed that public land within the CDCA administered by the BLM for conservation purposes be included in the NLCS.

Secretarial Order 3309, Management of the National Landscape Conservation System, provides additional instruction to the BLM on the management of the NLCS. It instructs the BLM to ensure that components of the NLCS are managed to protect the values for which they were designated. Appropriate multiple uses may be allowed, but the BLM should prohibit uses that are in conflict with the values for which the units were designated. The Secretarial Order also directs the BLM to manage NLCS components as an integral part of the larger landscape, in collaboration with the neighboring land owners and surrounding communities, to maintain biodiversity and promote ecological connectivity and resilience in the face of climate change. The BLM is instructed to integrate science and interdisciplinary perspective into the management of these areas, and to offer visitors the adventure of experiencing natural, cultural, and historic landscapes through self-directed discovery; build and sustain communities of partners and volunteers; draw upon the

expertise of specialists throughout the BLM, in coordination with tribes, other federal, state, and local government agencies, interested local landowners, adjacent communities, and other public and private interests; and endeavor to inspire the next generation of natural resource and public land stewards by engaging youth through education, interpretation, partnerships, and job opportunities.

The BLM recognizes that the public has a heightened interest in the management and protection of the National Conservation Lands, including those in the California desert. The BLM has a unique and timely opportunity to reassess the conservation potential of CDCA lands through the DRECP process, which includes a FLPMA land use planning component. The BLM is using the public participation structure of the FLPMA land use planning component to assess and identify lands managed for conservation purposes to be included in the NLCS.

In order to identify lands proposed for conservation management as part of the NLCS, the BLM first applied the criteria from the Omnibus Act to determine what lands qualified for inclusion in the NLCS. It then identified lands meeting those criteria, and finally developed management for National Conservation Lands within the CDCA. These steps are described in detail below.

I.3.1.2.1.1 Definition of National Conservation Lands

The Omnibus Act established the NLCS in order to conserve, protect, and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations. The National Conservation Lands were identified based on having nationally significant ecological, cultural, and scientific values as called for under Public Law 111-11 and using the criteria listed below. The BLM identified the footprint for National Conservation Lands in the range of alternatives by use of the following criteria. The BLM identified lands with nationally significant ecologic, cultural, and scientific values using the primary criteria below. Alternative configurations of these lands are analyzed for their conservation value and importance, using the additional criteria listed below.

Primary criteria:

- **Ecological**
  - Species habitat – High-quality habitat for multiple native species; or critical habitat for a federally listed species
  - High level of ecological diversity
  - Illustrates a significant natural value or phenomenon that is exemplary in the physiographic region

- **Cultural**
  - Contains a nationally significant prehistoric or historic cultural site that is eligible for the National Register of Historic Places
  - Contains a nationally significant cultural landscape that provides context and setting for historic properties or is of religious or cultural importance to Indian tribes
- **Scientific**
  - Area that has been the focus for significant scientific study or has a natural or cultural value, natural process, or other occurrence of high scientific value for potential future study

Additional criteria used to develop alternatives:

- **Development pressure** – Area has natural or cultural values representative of other areas under development pressure, or adjoins Development Focus Areas (DFAs).
- **Landscape intactness** – Relatively undisturbed features, unmodified natural environment of fairly large size, and not impacted by numerous developments (e.g., absence of extensive road network, multiple physical facilities such as communication sites, power lines)
- **Scenic quality** – Higher levels of scenic quality as determined by the BLM Visual Resources Inventory process
- **BLM jurisdiction** – Primarily large blocks of BLM lands (may include interspersed lands managed by other agencies for conservation purposes)
- **Landscape Linkages –** Habitat and landscape-scale linkages to existing National Conservation Lands and other conservation units such as Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, National Trails, etc.

In some cases, these values overlapped with the values for which Areas of Critical Environmental Concern (ACECs), Desert Wildlife Management Areas (DWMAs), and other Habitat Management Areas (HMAs) were designated. However, the BLM determined that those areas must contain nationally significant ecological, cultural, or scientific values, as determined using the criteria above, to be included as National Conservation Lands.

I.3.1.2.1.2 Identification of National Conservation Lands

To identify lands for inclusion in NLCS, the BLM evaluated lands that, under the No Action Alternative, are managed to protect specific resources, as well as areas proposed in the alternatives to be managed for these purposes. These areas included existing and proposed ACECs, Desert Wildlife Management Areas (DWMAs), and Habitat Management Areas (HMAs). The BLM also considered lands outside of existing and proposed ACECs, DWMAs,

and HMAs that linked important resources and designations, such as habitat linkages, or linkages between proposed National Conservation Lands, Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, National Trails, and National Parks and Preserves.

Once the BLM had identified areas containing nationally significant landscapes using the primary criteria above, the interdisciplinary team developed a range of alternatives by providing different weights to the additional criteria.

The Preferred Alternative focused on habitat connectivity and cultural and botanical values. For ecological values, it focused on important wildlife linkages; threatened and endangered critical habitat and BLM Special-Status Species habitat; and smaller, highly significant botanical sites. For cultural values, this alternative considered large cultural landscapes important to Native Americans, local communities, and that assist in understanding human habitation in the CDCA; historic trails and roads; and smaller, highly significant cultural sites. The scientific values focused on larger landscapes that offer opportunities for large-scale resource on ecological response to climate change, cultural resources, biological resources, hydrology, paleontology, and geology; and smaller site with opportunities for focused research. Under this alternative, approximately 3,856,000 million acres met these criteria.

Alternative 1 focused on intact landscapes with a high scenic value. For ecological values, this included only the most scenic, intact desert landscapes and habitat. It included some wildlife linkages, but at a smaller scale, and only where lands met the scenic criteria and were not in a transmission corridor. This alternative reflects the cultural importance of a highly scenic, intact landscape, and includes large cultural landscapes and smaller sites that meet the scenic and intactness criteria. Highly scenic portions of historic trails and roads were included. The scientific values included intact landscapes, which offer opportunities for research in areas largely undisturbed by modern human activity. Under this alternative, approximately 1,626,000 acres met these criteria.

Alternative 2 was the maximum DFA and maximum conservation alternative. Under this alternative, additional threatened and endangered critical habitat and BLM Special-Status species habitat was included, as well as additional wildlife linkages. For cultural resources, the BLM included additional lands that may contain undiscovered sites and larger cultural landscapes. Scientifically, the values are similar to the Preferred Alternative, but with the addition of more disturbed lands and the opportunity for habitat restoration research. Larger intact landscapes provide opportunities for landscape level studies of prehistoric and historic lifeways. This alternative identified approximately 5,538,000 acres of National Conservation Lands.

Alternative 3 reflected the value of habitat connectivity and scientific uncertainty. Ecologically, this alternative focused on larger landscapes and included most of the wildlife linkages and Threatened and Endangered critical habitat, and BLM Special-Status Species

habitat included in the Preferred Alternative. Smaller, more isolated units, including some unique and rare plant habitats, were not included. Cultural values included large cultural landscapes important to Native Americas, local communities, and that assist in understanding human habitation of the CDCA, as well as historic trails and roads. Smaller sites isolated from larger landscapes were not included. Scientifically, large landscapes offered opportunities for large-scale research on ecological response to climate change, cultural resources, biological resources, hydrology, paleontology, and geology. Smaller sites were not included. This alternative identified approximately 3,551,000 acres of National Conservation Lands.

Finally, Alternative 4 focused on integrating DFAs and Variance Process Lands. Biologically, it was similar to, but smaller than the Preferred Alternative where there was overlap with DFAs, transmission corridors, and Variance Process Lands. Threatened and endangered critical habitat, and BLM Special-Status species habitat and important wildlife linkages were included; however, some connectivity and habitat was interrupted by scattered Variance Process Lands and transmission corridors. Cultural values were also similar to those in the Preferred Alternative, except where landscapes were interrupted by Variance Process Lands or transmission corridors. Finally scientific values were similar to the Preferred Alternative, but opportunities for landscape research was reduced due to a more fragmented landscape. This alternative identified 2,804,000 acres of National Conservation Lands.

I.3.1.2.1.3 Identification and Management of National Conservation Lands

Public Law 111-11, enacted on March 30, 2009, established in the BLM the National Landscape Conservation System (NLCS or National Conservation Lands). Congress provided for the establishment of the system in order to conserve, protect, and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations. Congress specified that the components of the National Conservation Lands include: national monuments; national conservation areas; Wilderness Study Areas; National Scenic and Historic Trails that are components of the National Trails System; components of the National Wild and Scenic River System; and components of the National Wilderness System. Congress also included within the National Conservation Landscape System "[a]ny area designated by Congress to be administered for conservation purposes, including . . . public land within the California Desert Conservation System administered by the Bureau of Land Management for conservation purposes."

In connection with the LUPA, the ROD will identify the lands within the CDCA that Congress included as part of the system in Section 2002(b)(2)(D) of Public Law 111-11. The BLM has, pending the ROD, identified such lands and their outstanding cultural, ecological, and scientific values in Volume II, Chapter II.3. In order to determine which lands Congress intended to include within the NLCS, the BLM inventoried and evaluated CDCA lands to

determine whether they exhibit characteristics of "nationally significant landscapes that have outstanding cultural, ecological, and scientific values," the characteristics Congress identified as describing the National Conservation Lands. Those lands within the CDCA that exhibit such characteristics, pursuant to Congress's direction, are part of the NLCS and will be managed for conservation purposes in accordance with the provisions of FLPMA, the CDCA, and Public Law 111-11. BLM received public review of and comment on the areas identified as National Conservation Lands. The BLM interprets the Omnibus Act to provide for permanent inclusion of these lands in the NLCS, meaning that they will remain part of that system unless legislation provides otherwise.

Public Law 111-11 provides Congress's basic direction to the BLM on how to manage the lands in the NLCS. This is through applicable law relating to any component listed and in a manner that protects the values for which the components of the system were designated. Once included in the NLCS, the identified lands in the CDCA will be managed to conserve, protect, and restore the identified lands in order to protect their identified outstanding cultural, ecological, and scientific values.

The BLM is also using the LUPA as an opportunity to define goals and objectives and allowable uses within the National Conservation Lands. These land use planning decisions are described in Section I.3.1.2.2. These decisions can be changed through a future land use plan decision. In accordance with the Omnibus Act, Secretarial Order 3308, and BLM policy, future land use plans for these areas will ensure that management decisions and allowable uses protect the values for which the areas were designated. Land use plans addressing National Conservation Lands will emphasize the conservation, protection, and restoration of these values (BLM 2012).

I.3.1.2.2 Land Use Plan Decisions

Land use plan decisions for public lands fall into two categories: (1) desired outcomes (goals and objectives) and (2) allowable uses (including restricted or prohibited uses) and actions anticipated to achieve desired outcomes (management actions). Goals are broad statements of desired outcomes (e.g., maintain ecosystem health and productivity, promote community stability, ensure sustainable development) that usually are not quantifiable. Objectives identify specific desired outcomes for resources. Objectives are usually quantifiable and measurable. Desired future conditions can be identified in goals or objectives.

After establishing desired outcomes, the BLM identifies allowable uses for land use allocations and management actions that are anticipated to achieve these goals and objectives. "Allowable uses" is an umbrella term that defines which uses are allowable, restricted, or prohibited on certain land use allocations or areas, including subsurface mineral estate managed by the BLM. Management actions are proactive measures that will

enhance resource values and can include but are not limited to resource restoration projects, daily activities, and administrative designations such as ACECs.

The CDCA Plan (1980, as amended), as well as the Bishop and Bakersfield RMPs, establish goals and objectives, allowable uses, and management actions that will remain valid unless they are amended in the ROD.

I.3.1.3 Site-Specific Implementation Decisions and Requirements for Further Environmental Analysis

The BLM's land use plan decisions will guide and inform future renewable energy development and resource conservation on public (federal) lands in the LUPA Decision Area. Proposed land use plan decisions are subject to protest to the Director under the planning regulations at 43 CFR 1610.5-2. The decisions would not authorize any specific projects or imply such approval. Any future projects would still require additional site-specific environmental analysis and a separate land use authorization such as a right-of-way grant or lease.

Implementation decisions generally relate to on-the-ground actions that BLM approves and that require site-specific analysis. There are no proposed implementation decisions in this Final EIS. When the BLM considers any future application, the BLM decision maker must determine if it would conform to the applicable land use plan (43 CFR 1610.5-3; Department of the Interior 2008) and what level or type of environmental documentation or analysis is required in accordance with NEPA. The BLM would retain the discretion to deny renewable energy right-of-way applications, along with geothermal leases and post-lease development, based on site-specific issues and concerns, even in areas identified as DFAs and Solar Energy Zones. The public would have opportunities to participate and comment during the project-specific NEPA process.

I.3.1.4 Integration with the Biological Conservation Planning Process

The proposed LUPA in this Final EIS has been developed within the context of the larger DRECP, specifically, the biological conservation framework, refer to Appendix D.

I.3.1.5 Consistency of DRECP with the West Mojave Route Network Planning Effort

The West Mojave Route Network Project (WMRNP) planning area is a subgeographic unit located totally within the DRECP LUPA Decision Area. Both the WMRNP and DRECP propose land-use planning changes to the CDCA Plan. The Draft Supplemental EIS for the WMRNP was released in February 2015.

The WMRNP Draft Plan Amendment is narrower in scope than the DRECP LUPA. WMRNP planning decisions center around travel management and to a lesser extent address grazing and recreation management strategies. Neither plan proposes changes to travel management area designations of closed, open, or limited. The WMRNP Draft Plan Amendment proposes changes to the process for evaluating and designating the transportation network and further limitations to off-route stopping, parking, and camping that do not affect the landscape-level proposals in the DRECP LUPA, and do not dictate particular outcomes in a specific area.

Both the WMRNP and DRECP LUPA propose changes to grazing and recreation. WMRNP replaces the general guidance on running competitive special recreation permit events on designated routes in multiple-use class "L," with the designation of a subset of specific routes that may be used for competitive special recreation permits, further limiting the potential for conflicts in areas where DRECP LUPA is identifying one or more special designations. Reallocation of forage in specific grazing allotments is also proposed in both plans. These overlapping proposals have been reviewed and are also consistent.

The WMRNP would also make route designation decisions, which are implementation decisions and not plan decisions. The implementation decisions in the WMRNP, such as route designations, will be considered in the context of the DRECP proposals, especially disturbance caps, and are being designed to avoid conflicts with the DRECP. Because the WMRNP is anticipated to be completed after the DRECP LUPA ROD is signed, implementation decisions in the WMRNP will be subject to the plan decisions in the DRECP.

I.3.2 DRECP Biological Conservation Planning Process

This section describes the DRECP biological conservation planning process used to develop the DRECP biological conservation strategy, which forms the biological foundation for the BLM LUPA. The California Desert Biological Conservation Framework is the approach for conserving Focus Species and vegetation types, and the landscape and ecological processes that support them, within the DRECP Plan Area. It includes the biological elements of the BLM LUPA and addresses the impacts of renewable energy development and the associated activities through prescribing Conservation and Management Actions (CMAs) for the renewable energy and transmission development elements of the DRECP.

The process described below focuses primarily on the biological conservation components of the planning process, but this conservation planning process was fully integrated with the BLM land use planning process described in Section I.3.1 and the renewable energy planning process described in Section I.3.3. This integrated planning process, which considered all biological resources on federal and nonfederal lands and non-biological resources and uses on BLM-administered lands within the Plan Area, produced the DRECP

alternatives described in Volume II of the Draft DRECP and EIR/EIS, and the LUPA alternatives described in Volume II of this document. The integration process for the Draft DRECP and EIR/EIS included combining the biological and non-biological elements of the BLM LUPA with the biological conservation elements for the General Conservation Plan (GCP) and Natural Community Conservation Plan (NCCP) with the renewable energy planning elements to produce a single integrated planning document. This integration was carried forward into the LUPA and Final EIS.

As part of the DRECP integrated planning process, scientific input and recommendations were incorporated at all stages. Early in the planning process, the DRECP Independent Science Advisors (ISA) provided written recommendations that were used to inform the DRECP biological conservation planning process (DRECP ISA 2010). During development of the profiles for the Focus Species, individual species experts provided review of the baseline information being used for the DRECP Focus Species. In 2012, a second group of scientists was convened, the DRECP Independent Science Panel (ISP), which provided additional written recommendations for incorporating the latest science into the DRECP (DRECP ISP 2012). In late 2012 and early 2013, independent species modeling experts reviewed, revised, and refined the species distribution models being used for DRECP Focus Species. Appendix E in the Draft DRECP, incorporated by reference to the Final EIS, provides a summary of responses to the DRECP ISA and ISP recommendations.

The biological conservation planning process included the following steps, which at times were roughly sequential, but mostly iterative:

1. Establish the conservation focus (e.g., Focus Species and vegetation types)
2. Gather baseline biological information
3. Identify Biological Goals and Objectives (BGOs)
4. Develop reserve design
5. Develop Conservation and Management Actions (CMAs)
6. Develop Monitoring and Adaptive Management Program (MAMP)

These biological conservation planning steps are described in detail in Sections I.3.4.1–I.3.4.6 of the Draft DRECP and EIR/EIS and are not repeated here. The conservation planning process considered conservation on public and private land. The BLM used this information to develop the alternatives for the LUPA as part of the integrated process in the Draft DRECP, and for the Proposed LUPA for the Final EIS.

I.3.3 Renewable Energy Goals and Planning Process

I.3.3.1 Federal/BLM Renewable Energy Goals

As detailed in the discussion of the interagency and BLM purpose and need (Sections I.1.1 and I.1.2), a number of executive and secretarial orders and congressional mandates are designed to promote the development of domestic renewable energy resources. The BLM, as the largest federal land management agency in the desert, is charged with the development of renewable energy that is consistent with the BLM's multiple use and sustained yield mandate, as well as FLPMA's requirement to "preserve the unique and irreplaceable resources, including archaeological values, and conserve the use of the economic resources" of the CDCA (43 United States Code [U.S.C.] 1781[a][6]). The BLM is seeking to facilitate renewable energy development under Secretarial Order 3285A1 (Department of the Interior 2010) and meet the president's Climate Action Plan goals to facilitate additional renewable energy projects on the public lands to support 6 million homes by 2020; and at the same time, the BLM must strive to facilitate renewable energy that is consistent with protection of other important resources and values, including units of the National Park System, National Wildlife Refuges, other specially designated areas, and wildlife, cultural, historic, and paleontological values.

I.3.3.2 California's Renewable Energy Requirements and Energy Goals

The DRECP is an important part of California's strategy for significantly increasing the use of renewable energy and reducing the combustion of fossil fuels. The state's drive to develop more renewable energy resources rests on two mandates. The first is a statutory requirement that at least 33% of retail electricity sales in California must come from renewable resources by December 31, 2020 (California Public Utilities Code, Sections 399.15[b][2][B] and 399.30[c][2]; California Public Resources Code, Section 25740). This standard, known as the Renewables Portfolio Standard (RPS), is one of the most ambitious renewable energy requirements in the country. The Global Warming Solutions Act of 2006 (AB 32) is the other mandate propelling the state's renewable energy effort to reduce greenhouse gases (GHG) emissions to address the threats posed by climate change. A number of regulatory programs are being established to achieve the statutorily mandated GHG reduction to 1990 levels by the year 2020. In addition, executive orders by the governor have established a long-range goal of reducing the 1990 level of GHG emissions by 80% by 2050 (California Executive Order S-3-05). To achieve the 2050 GHG reduction goal, California will need to develop new zero- or low-carbon energy sources such as renewable electricity generating plants above and beyond those required to meet the current RPS mandate and 2020 GHG reduction goals.

Although the state's requirements and goals are not binding on the BLM, they were considered by the Renewable Energy Action Team (REAT) when developing the Draft

DRECP and EIR/EIS, and the BLM has used them to help determine the potential demand for utility-scale renewable energy in the California desert. These requirements and goals are described in detail in Sections I.3.5.2.1 and I.3.5.2.2 of the Draft EIR/EIS and are not repeated here.

I.3.3.3 Overview of the Renewable Energy Planning Process and Development Focus Area Design Process

To support the respective state and federal renewable energy goals, the Draft DRECP and EIR/EIS identified desert locations that are most compatible with renewable energy development and areas where the DRECP's mitigation and conservation efforts would be focused. The configuration of DFAs (areas where renewable energy development would be directed under the DRECP) was a collaborative process that considered and integrated state and federal renewable energy goals, natural resources conservation needs, culturally important areas, recreation, and visual resources in the Plan Area, and information from renewable energy, conservation, utility, military, tribes, recreationists, and affected local stakeholders. The LUPA carries forward the DFAs that occur on BLM-managed public lands, but it would not make any decisions on DFAs on lands outside of BLM jurisdiction.

The following sections describe some of the underlying principles, processes, and projections used to estimate the potential need for renewable energy in the California desert and to identify DFAs and other energy development components of the different Plan alternatives. The processes used in developing the biological conservation elements of the DRECP are described separately in Section I.3.2.

I.3.3.3.1 Guiding Principles

The REAT agencies, stakeholders, and the public identified the following principles to guide the identification of areas compatible with renewable development:

1. Generation should be developed either on already-disturbed land or in areas of lower biological value, and conflict with both biological and non-biological resources should be minimized.
2. Areas identified for generation should have high-quality solar, wind, and/or geothermal renewable energy resources.
3. Generation should be sited close to existing transmission and in areas where transmission could be expected as a reasonable extension of the existing transmission system and planned system upgrades, as identified by the Renewable Energy Transmission Initiative, or other transmission plans.

4. Generation should, to the maximum extent possible, be aggregated to avoid transmission sprawl, reduce cost, and reduce disturbance across the Plan Area. Again, this principle aims to minimize disturbance to biologically, culturally, recreationally, and visually valuable areas.
5. The Plan should provide sufficient areas for development flexibility to ensure the Plan does not constrain competition within the market or unnecessarily result in distorted or environmentally incompatible incentives when implemented (i.e., where feasible, the Plan should remain market neutral between different technologies or different project configurations).

I.3.3.3.2 Steps in the Planning Process

To plan for future energy development consistent with federal and state policies and mandates, the following steps to identifying the best locations for renewable energy were identified:

1. Identify the need for desert renewable energy generation: Estimate the desert-located renewable generation needed to meet California's renewable energy goals and the federal goals. This estimate, which is subject to a number of variables and uncertainties, is based on policies and programs affecting the supply of electricity and climate change, projected mix of renewable and other zero- and low-carbon technologies, economic forecasts, and many other factors. Taking these variables into consideration, the California Energy Commission developed a number of plausible scenarios to ascertain the potential need for renewable energy in the desert region in the coming decades. Scenarios and input variables were honed over the course of more than a year based on public comments received from stakeholders and the public. As explained in Section I.3.3.4, the scenario planning effort ultimately focused on the potential need for renewable energy through 2040. The potential need identified in the scenarios was then adjusted to account for the uncertainty of long-range planning estimates, the desire to ensure flexibility and competitiveness in the renewable energy development industry, and the possibility that limited transmission capacity could constrain renewable energy development in one or more of the DFAs.
2. Estimate the acreage that may be needed: Estimate the acreage that may be needed to achieve the renewable energy goals identified above, accounting for differences in technology and local constraints on development, including land ownership issues and site-specific constraints to development such as very steep slope and environmental resource constraints (e.g., natural or cultural resources that need to be avoided). This step is described in Section I.3.3.5.
3. Identify suitable locations for DFAs and allocate megawatts among them: Use resource distribution data, in combination with agency and stakeholder input, to

identify and characterize areas suitable for renewable energy development based on the principles described above and accounting for the conservation goals identified during the reserve design process. Once DFA locations are identified, estimate renewable energy profiles that allocate generation capacity (megawatts) to each technology and between DFAs for the purpose of transmission planning, resource impacts analysis, and mitigation development. The method for this was described in Appendix F of the Draft DRECP.

4. Develop a conceptual transmission plan: Develop a conceptual transmission plan to accommodate the new renewable energy generation planned for each DFA, with assistance from transmission planners from the municipal and investor-owned utilities that will purchase renewable power generated in the Plan Area, U.S. Department of Defense, California Public Utilities Commission (CPUC), and California Independent System Operator. This plan is described in Appendix K.

These steps are described in detail in Sections I.3.5.3.3, I.3.5.3.4, I.3.5.3.5, and I.3.5.3.6 of the Draft EIR/EIS and in Appendix F of the Final EIS, and they are not repeated here.

I.3.3.4 Renewable Energy Generation Estimates in the Plan Area

The amount of generating capacity (megawatts) that California will need to meet its RPS and GHG mandates and goals cannot be forecast with great precision. Nevertheless, the uncertainty inherent in these kinds of projections does not obviate the need for programmatic planning as the best way to conserve natural resources while accommodating renewable energy development. The development components of the DRECP are based on a reasonable estimate of the amount of renewable resources that may be needed in California's desert region over the next 25 years.

The estimating process is described in detail in Sections I.3.5.4.1, I.3.5.4.2, I.3.5.4.3, I.3.5.4.4, I.3.5.4.5, and I.3.5.4.6 of the Draft EIR/EIS and summarized in Appendix F of the Final EIS, and they are not repeated here. Based on the analysis described in the aforementioned sections, the REAT agencies agreed upon an estimate of 20,000 megawatts (MW) of renewable energy development that could be reasonably expected to occur within the DRECP Plan Area through 2040.

The BLM used these estimates as a planning tool to predict demand for renewable energy development in the California desert. These estimates do not represent a target that the BLM is trying to achieve through the LUPA. The DFAs were evaluated based on their suitability for renewable energy development and the presence or absence of resources and uses that may be affected by renewable energy. The 20,000 MW planning estimate assumes that renewable energy development could occur on both public and private lands within the DRECP Plan Area. The Proposed LUPA does not contemplate meeting the full 20,000 MW of

electricity on BLM managed lands. Siting of all renewable energy within the DRECP planning area on BLM land alone would not provide for balance or flexibility in locating renewable energy development on lands with less biological value; in some instances those locations would also not align with existing transmission corridors.

Furthermore, past, present, and anticipated future renewable energy development patterns do not indicate that public lands will support all or even a majority of future renewable energy development in the Plan Area. Appendix F provides more details regarding the portion of renewable energy that has been built or is under development on public and private land.

I.3.3.5 Renewable Energy Resource Distribution and Development Potential

Section I.3.3.4 describes the expected generation targets for the Plan Area, but does not provide an assessment of the spatial distributions, extent, or quality of the resource available within the Plan Area. This section summarizes the information provided from state, federal, and stakeholder sources describing the distribution of potential generation resources used by planners in designating areas best suited for renewable energy development.

Most of the Plan Area is recognized as a world-class renewable energy resource. There are potentially 10 million acres of solar resources, 11.5 million acres of wind resources, and 350,000 acres of geothermal resources within the DRECP boundary. This section describes the information used to move beyond general acreage estimates to characterize renewable energy potential and describes the development assumptions used to refine that potential using more detailed geographic attributes within the Plan Area.

I.3.3.5.1 Estimated Renewable Energy Resource Potential

The following is an assessment of the potential area available for renewable energy development within the Plan Area:

- **Solar**: Approximately 10 million acres have the potential for the development of solar resources (areas with insolation greater than 6.5 kilowatt-hours per square meter per day). Geographically, the highest insolation values and greatest concentration of solar resources based on these data are located in the west and central Mojave regions.
- **Wind:** Approximately 11.5 million acres have the potential for development of wind resources. The greatest concentration of wind resources is located in the Tehachapi region and various mountain ranges in the central and eastern Mojave regions.
- **Geothermal:** Approximately 350,000 acres within the Plan Area have been identified as known geothermal resource areas. The geothermal resource areas are

concentrated in the Salton Sea and Imperial Valley areas, south of Owens Valley in Inyo County, and the north-central Mojave area.

The methods for reaching these assessments are described in detail in Sections I.3.5.5.1.1, I.3.5.5.1.2, and I.3.5.5.1.3 of the Draft EIR/EIS and are not repeated here.

I.3.3.5.2 Stakeholder-Defined Development Potential

The Center for Energy Efficiency and Renewable Technologies (CEERT) and the Large-Scale Solar Association (LSA) submitted a joint proposal for the development of solar energy in the Plan Area. The CEERT and LSA proposal identified the chief characteristics of desirable solar resource lands, including above-average insolation, level topography (under 5 degrees of slope), and proximity to transmission (existing or planned high-voltage lines and substations) (CEERT 2012). CEERT and LSA sought to identify up to two million acres within the DRECP boundary that they recommend should be analyzed for conflict with the conservation goals.

In November 2010, the California Wind Energy Association (CalWEA) presented "Wind Resource Considerations for the DRECP Process" to the Resource Mapping Working Group. The presentation included mapping and acreage calculations for areas of potentially viable wind resource development areas within the Plan Area. Subsequently, CalWEA updated its plan and identified wind-development focus areas that "include the highest quality wind resources that are within 10 miles of an existing transmission corridors and do not overlap with lands that have been classified by BLM as having special environmental concerns (Areas of Critical Environmental Concern (ACECs) and Desert Wildlife Management Areas (DWMAs))" (CalWEA 2012).

This information was considered by the REAT agencies as they developed the DRECP alternatives and DFA configurations.

I.3.3.6 Development Focus Areas

Using the principles laid out in Section I.3.3.3.1 to utilize disturbed lands where feasible, and to encourage compact development close to existing transmission, the REAT agencies focused DFAs on already disturbed and degraded lands.

In developing the DFAs, the aim was to avoid areas that were viewed as making significant contribution to the biological and non-biological conservation goals. The location, size, and distribution of DFAs were ultimately the spatial tradeoffs and restrictions placed on the renewable energy resources identified in Section I.3.3.5 by conservation designations.

Various subsets of DFAs were identified to assist evaluation of the different potential tradeoffs between renewable energy goals and biological and non-biological conservation

goals. Each subset of DFAs represented a different set of tradeoffs and resulted in potentially different mixes of energy generation types. This is described in detail in Sections I.3.5.6.1 and I.3.5.6.2 of the Draft EIR/EIS and is not repeated here.

I.3.3.7 Transmission Planning Goals and Assumptions

The transmission planning undertaken for the DRECP is conceptual and programmatic in nature, intended to provide a reasonable estimate of the amount of new transmission that may be needed to support anticipated renewable energy development in the desert region, as well as its approximate location and size. DRECP planners did not attempt to identify and analyze specific new or expanded transmission lines—just as the DRECP does not plan and analyze specific renewable generation projects. Planning for transmission within the DRECP and between the DRECP and load centers requires building upon previous transmission planning efforts.

As part of the DRECP planning process, the Transmission Technical Group (TTG) was formed. The TTG included transmission planners from the major California electric utilities with a direct interest in the DRECP, including Southern California Edison, Los Angeles Department of Water and Power, San Diego Gas and Electric, Imperial Irrigation District, and Pacific Gas and Electric. It also included representatives from the U.S. Department of Defense (DOD), the California Independent System Operator, CPUC, and CEC. The details of the TTG's analysis are set forth in Appendix K of the Draft DRECP and include conceptual electric transmission lines within and outside of DRECP area. The work of the TTG was coordinated by three co-chairs who represented the California Independent System Operator, CPUC, and CEC.

The Garamendi Principles (SB 2431), which are supported in California to minimize the costs and environmental impacts of new transmission projects, were used when preparing the DRECP transmission planning maps; thus map lines that indicate new transmission needs were drawn to follow existing transmission rights-of-way wherever possible (CEC 2007). But otherwise, the line segments represent only the electrical connections (i.e., the end-points of each line segment) and do not reflect specific siting plans or routes for new transmission lines. The new transmission lines identified through this exercise have not been evaluated for the specific locations, constructability, desirability, cost, or likelihood of their successful permitting. They also have not been studied by transmission planning groups to identify reliability concerns or effects on other transmission systems.

Transmission planning for the DRECP was neutral regarding potential transmission owner or developer. The transmission conceptual plan for the DRECP was assumed to serve Plan Area generation growth only, and it was dependent upon the location and extent of the new generation as well as the location of the load center receiving the electricity.

The transmission plan was based on the CEC's estimates of need for renewable energy generating capacity to meet RPS and GHG emissions targets, as described in Section I.3.3.2. The planning process identified, at a gross scale, the necessary transmission system facility additions that would likely be needed to accommodate 20,000 MW of renewable generation that could be developed within the 2040 time frame.

The transmission system upgrades assume that a combination of available and new transmission capacity would be utilized to accommodate generation within the DFAs through 2040. The availability of existing transmission is based on the 2020 cases prepared by the California Transmission Planning Group (http://www.ctpg.us). For DRECP planning purposes, the available capacity identified by the California Transmission Planning Group's 2020 cases was also used as the available existing transmission capacity for 2040, since transmission upgrades for load growth and other grid-related expansion requirements were not considered likely between 2020 and 2040.

The TTG did not address any transmission that might be built on DOD lands. Instead, the DOD provided the TTG with exit point locations at the military base boundaries for 1,500 MW of new transmission from the bases, and the TTG planned for collector lines to the nearest collector substations. For purposes of this analysis, and at the DOD's request, this 1,500 MW was considered in addition to the renewable generation included in each of the DRECP alternatives.

The TTG identified transmission system facility additions that would accommodate a specified number of megawatts of renewable generation that could be developed in the DFAs by 2040. Each new identified element of the transmission system (e.g., substation, transmission line) was assigned a capacity (in megawatts) to accommodate the estimated new generation; the TTG also estimated the amount of land that would be affected by the transmission facility's construction and operation. Standard transmission grid components were assembled to derive a conceptual transmission plan for each alternative. For substations, the estimated acres of permanent impact were based on the transmission voltages that the substations are designed to serve. Transmission line length and width were based on the distance (length) to substation locations and the width of the right-of-way required. Access road length and width were based on the size of the substation, the length of the transmission line, and standard construction methods. Each 230 kilovolt (kV) and 500 kV line was assumed to require a permanent access road. The use of helicopters to install transmission lines could reduce the need for access roads, but such a site-specific analysis was beyond the scope of the TTG effort.

The basic assumptions used to estimate impacts of transmission components included consideration of all transmission lines that are likely to be required to interconnect desert renewable energy projects. This included lines ranging from 34.5 kV to 500 kV, as well as

substations and access roads. The amount and location of generation is different for each alternative and is described in Appendix K of the Draft DRECP.

Information on the size and mix of generation technologies and how they were assumed to be distributed in the DFAs enables the calculation of the expected length of generation interconnection tie lines; number, size, and location of new collector substations; and likely length of delivery lines to the main transmission grid. For transmission, the technology mix is important when assessing the maximum simultaneous delivery capacity for collector lines from all generators since this would indicate the maximum size (in megawatts) of a new line. The maximum simultaneous delivery capacity is defined as the point during the annual load cycle when delivery to load is likely to peak. This is primarily driven by the mix of wind and solar generation. Because solar and wind provide energy at different times of the day, delivery lines were sized to accommodate the expected simultaneous output of the different renewable technologies within each DFA for the time period (month and hour) used to conduct the transmission analysis. To do this, TTG members used their professional judgment to define the percentage of output that would result from the solar, wind, and geothermal generation within each DFA to estimate the maximum simultaneous output.[2] In contrast, collector lines that connect the generators within each DFA to the collector substations are sized to accommodate the maximum possible combined output of all generators within the DFA.

I.3.4 Plan Integration

As described above, the DRECP planning process integrates three types of mapping elements: (1) BLM land use planning designations, (2) biological conservation areas, and (3) renewable energy planning areas. As described further below, BLM land use planning designations are developed using the process described in Section I.3.1 and include conservation designations (NLCS, ACEC, Wildlife Allocation), as well as other designations, such as Special Recreation Management Areas and Extensive Recreation Management Areas. The biological conservation areas were developed in the context of the DRECP biological conservation planning process, described in Section I.3.2. The renewable energy planning areas were developed using the process described in Section I.3.3 and are based on renewable energy resource considerations reflected in state and federal renewable energy policies, an evaluation of potential future demand for renewable energy represented in the CEC calculator, and renewable energy resource and technology information.

I.3.4.1 BLM Land Use Planning Designations

The BLM land use planning designations include areas suitable for renewable energy development; areas suitable for biological, cultural, and scientific conservation; and areas

[2] The TTG assumed output at 90% for geothermal facilities, 80% for solar facilities, and between 28% and 52% for wind facilities (based on location).

suitable for an emphasis on recreation, mineral extraction, grazing and other multiple uses. The requirements of Public Law 111-11 for conservation of nationally significant ecological, cultural, and scientific resources lead to the mapped areas identified as National Conservation Lands. The multiple use and sustained yield requirements of FLPMA lead to modifications in the management of recreation (including the establishment of Special Recreation Management Areas and Extensive Recreation Management Areas), allowing for continued exploration of mineral resources, establishment of Visual Resource Management Classes, and grazing. BLM also developed mitigation measures for impacts to the various multiple uses and resources it considers in managing its lands, and developed mitigation measures to maintain multiple use and sustained yield. Tribal input was considered in developing both the DFAs and areas for conservation, to remove important areas from DFAs and ensure adequate protection through inclusion in conservation areas.

I.3.4.2 Biological Conservation Areas

Each alternative described in the Draft EIR/EIS included a LUPA-wide conservation strategy that includes areas for biological conservation, as well as other biological conservation strategy elements, such as CMAs and monitoring and adaptive management. The areas for biological conservation included the existing conservation areas and BLM LUPA conservation designations on BLM-administered lands. The initial steps in identifying and mapping areas important for biological conservation included establishing the conservation focus and defining a proposed Focus Species list, assembling baseline information, and identifying BGOs. The biological conservation planning process follows from these initial steps, as described in Section I.3.4. The Proposed LUPA and Final EIS carries forward this strategy on BLM lands, through biological conservation areas, such as certain National Conservation Lands, ACECs, and Wildlife Allocations.

I.3.4.3 Renewable Energy Planning Areas

The renewable energy planning areas (DFAs) were developed based on a consideration of mapped renewable energy resources and modeled renewable energy technology profiles on the one hand, and areas with important or sensitive natural resources, as identified in the biological conservation planning process and BLM's land use planning process, on the other. As described in Section I.3.3, the renewable energy planning process is guided by the need to reduce the environmental impacts of anticipated renewable energy development and the need to help achieve state and federal renewable energy goals. The Draft DRECP and EIR/EIS assumed that renewable energy development would occur in DFAs and examined alternative configurations for DFAs and renewable energy technology profiles that could accommodate the development of renewable energy projects capable of generating up to 20,000 MWs of electricity throughout the plan area, including federal, state and private lands. For planning purposes, the DRECP assumes that there could be a demand for up to 20,000 MWs of renewable energy generation within

the term of the DRECP to 2040, as described in Section I.3.3. The Proposed LUPA carries forward this strategy on BLM lands through the designation of DFAs and adoption of CMAs and policies that would streamline renewable energy development in the DFAs. The proposed LUPA does not contemplate that all 20,000 MW of electricity would be produced on BLM-managed lands.

I.3.5 Duration of the DRECP BLM LUPA

BLM regulations under 43 CFR 1610.5-5 do not specify a duration for LUPAs; therefore, the LUPAs approved as part of the DRECP would not expire and would remain in place until amended through future land use planning efforts as described in BLM regulations (43 CFR 1610). The BLM periodically evaluates land use plans to determine if new decisions are required through the plan amendment process (see BLM 2005, pp. 33–38). The plan amendment process is subject to NEPA and includes opportunities for participation by the public and other federal, state, and local agencies. The LUPAs approved as part of the DRECP could be amended in the future pursuant to changing conditions or law and policy as required by federal law and regulation, including FLPMA.

The public lands within the CDCA that comprise nationally significant landscapes with outstanding cultural, ecological, and scientific values that are administered by the BLM for conservation purpose as part of the NLCS, and will be managed to protect the values for which these lands were designated. The BLM interprets the Omnibus Act to provide for permanent inclusion of these lands in the NLCS, and therefore, cannot remove lands from the NLCS through a land use plan amendment. While the lands themselves are permanently included in the NLCS, the CMAs remain subject to land use planning decisions, and may be changed through the land use plan amendment process, so long as those changes are consistent with the Omnibus Act.

BLM-authorized activities on public land must conform to the applicable land use plan. If the BLM receives an application for a project that does not conform to the land use plan, it may reject the application without additional analysis. If the BLM determines the proposal warrants further analysis, it must undertake a plan amendment, which includes a public process, as described in the land use planning regulations at 43 CFR 1610.2.