3.12 Mineral Resources

This section describes the environmental setting and impact analysis for mineral resources resulting from the Proposed Project. This section includes information for existing mineral resources in the Proposed Project area, applicable regulations, environmental impacts, and mitigation measures to reduce or avoid significant effects.

3.12.1 Environmental Setting

According to the United States Geological Survey (USGS), a *mineral resource* is defined as a concentration of naturally occurring solid, liquid, or gaseous material in or on the earth's crust in such a form and quantity, and of such a grade or quality, that it has reasonable prospects for economic extraction, either currently or in the future. Mineral resources include oil, natural gas, and metallic and non-metallic deposits. Information on mineral resources was obtained through a review of literature, maps, GIS data, and online sources published by USGS, California Geologic Energy Management Division (CalGEM), California Geological Survey (CGS), and general plans for Kern County, Los Angeles County, City of Arvin and the City of Bakersfield.

Regional Setting

Mineral Resource Classification and Designation

The Surface Mining and Reclamation Act of 1975 (SMARA) requires the California Geological Survey (CGS) to conduct Mineral Land Classification (MLC) studies and identify and map Mineral Resource Zones (MRZs). The State's MRZ classification categories are defined in Table 3.12-1. MRZ-2a and MRZ-2b are considered to have the highest economic importance because the resource significance has been identified and either determined or inferred through evidence. MRZ-3a and MRZ-3b are considered to have moderate economic importance based on the likelihood of the resource significance but undetermined presence. MRZ-1 and MRZ-4 are considered to have low economic importance because significant resources are unlikely or unknown.

Mineral Resource Recovery

The USGS Mineral Resources Data System indicates two active mining sites are located within 1 mile of the Proposed Project, as shown in Figure 3.12-1. The two mining sites in proximity to the Proposed Project consist of sand and gravel mining pits (U.S. Geological Survey, 2010; California Department of Conservation, Division of Mine Reclamation, 2020). The Proposed Project alignment does not cross either mineral extraction area. No mineral resource recovery sites have been identified in proximity to the Proposed Project in a General Plan, specific plan, or any other land use plan or by the State of California (California Department of Conservation, 2023).

A review of the CalGEM's Well Star database indicates the presence of active oil, gas, and geothermal wells within 1 mile of the Proposed Project (as shown in Figure 3.12-2). The nearest

well to the Proposed Project is an oil and gas well located approximately 300 feet from the Proposed Project alignment (CalGEM, 2022).

Table 3.12-1 Mineral Resource Zone Classification Categories

Classification	Definition
MRZ-1	Areas where available geologic information indicates there is little likelihood for the presence of mineral resources.
MRZ-2a	Areas that contain significant measured or indicated reserves.
MRZ-2b	Areas where geologic information indicates that significant inferred resources or demonstrated subeconomic resources are present.
MRZ-3a	Areas likely to contain undiscovered mineral deposits similar to known deposits in the same producing district or region (hypothetical resources).
MRZ-3b	Areas judged to be favorable geologic environments for mineral resource occurrence, but where mineral discoveries have not been made in the region (speculative resources).
MRZ-4	Areas where geologic information does not rule out either the presence or absence of mineral resources.
ARA-6	Areas with aggregate resources rated as highly significant.

Source: (California Department of Conservation, 2000)

Environmental Setting by Segment

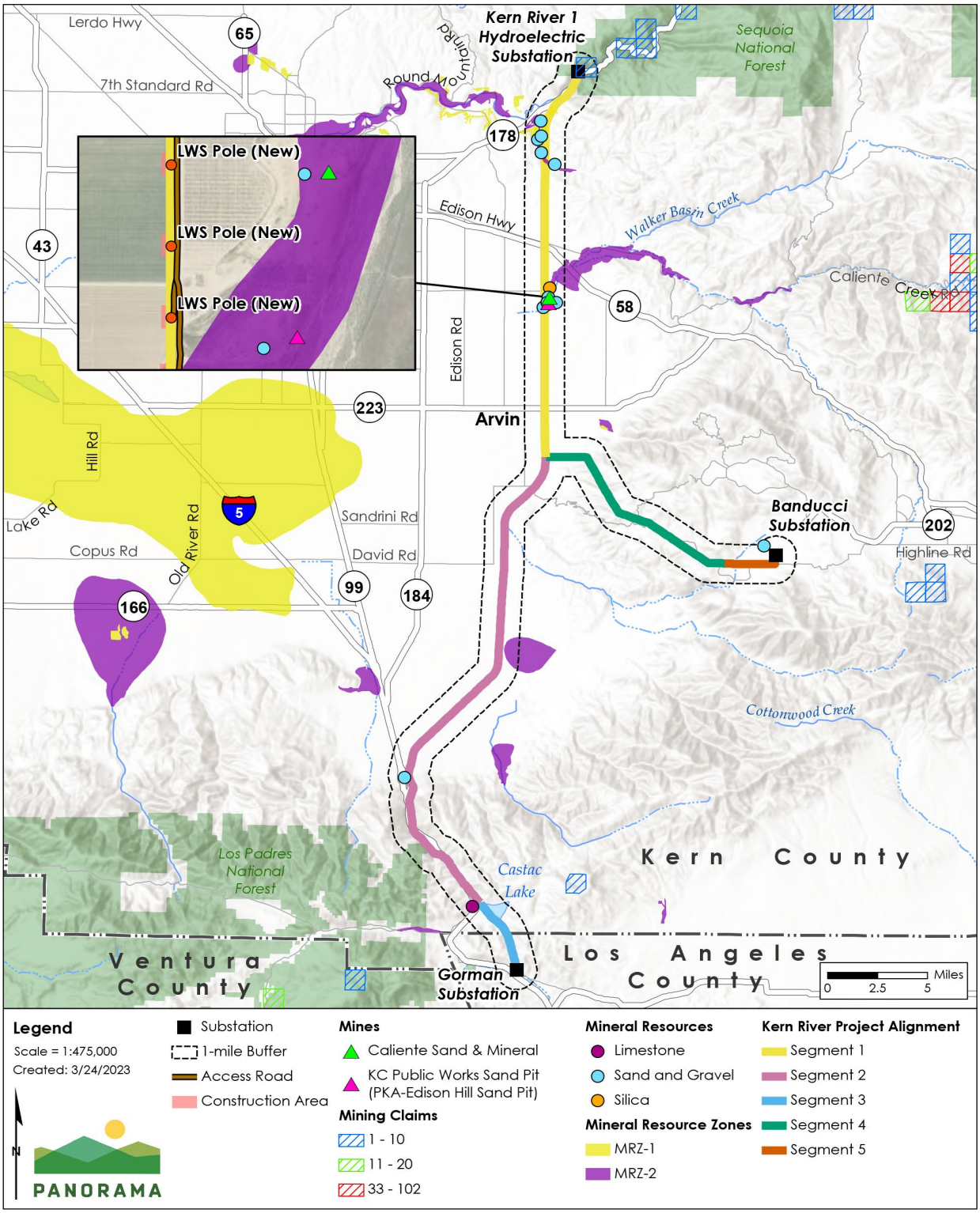
Table 3.12-2 provides a summary of State-classified mineral resource areas within 1 mile of the Proposed Project. Table 3.12-3 provides a summary of active mineral resource recovery sites within 1 mile of the Proposed Project; the locations are shown on Figure 3.12-1.

Segment 1

Non-State classified MRZs are present within Segment 1. Segment 1 is located within and adjacent areas that contain known mineral resources, including State-classified MRZ-2a (California Department of Conservation, 2009). A placer mining claim (Claim Name K ABLE #56789101112, Serial Number CAMC279457) is located in the same Public Land Survey System Section as the existing Kern River 1 Hydroelectric Substation at the northern terminus of Segment 1 (SCE 2022).

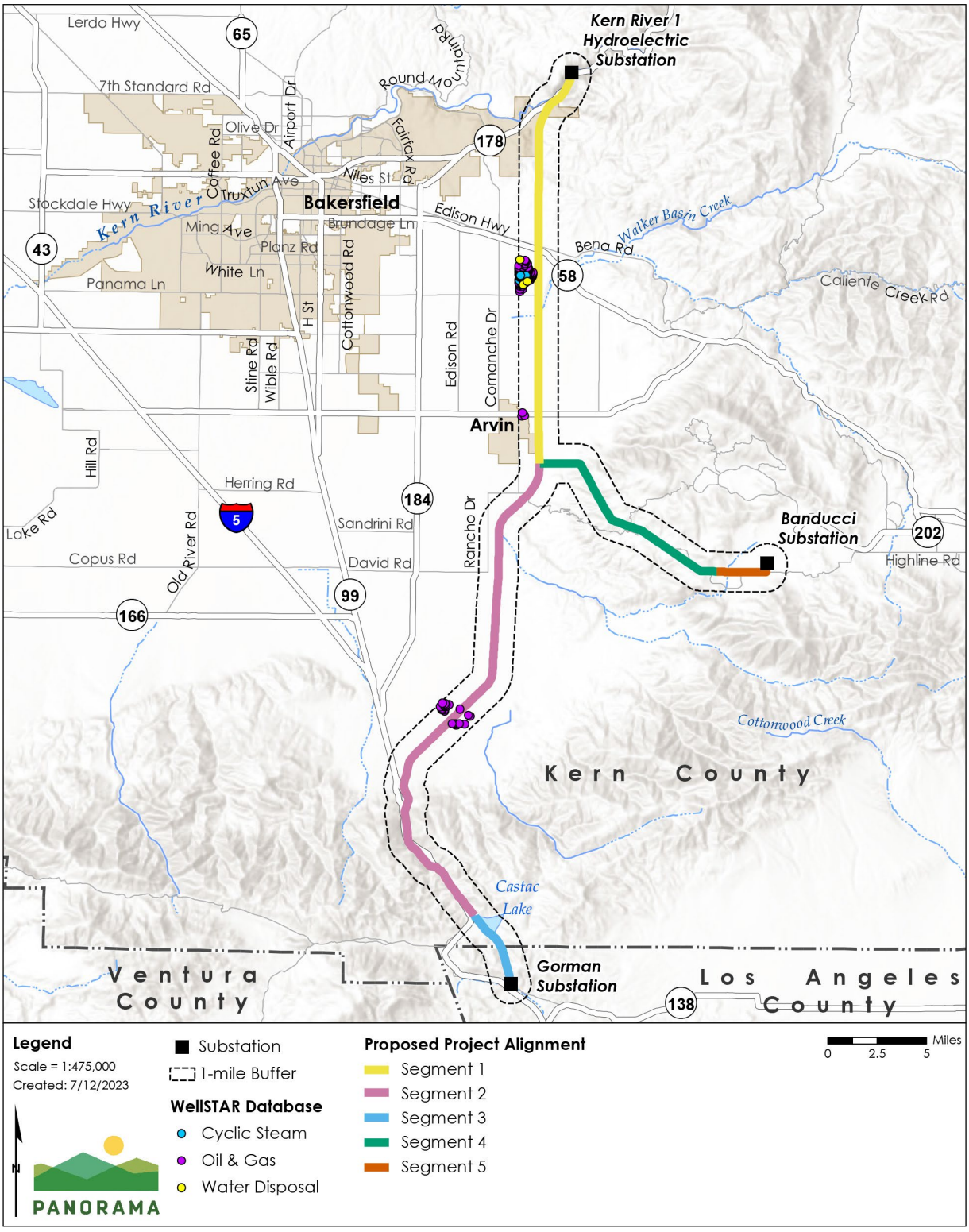
Mineral resources within the vicinity of the Proposed Project alignment include 10 sand and gravel resources and one silica resource, as shown in Figure 3.12-1 (U.S. Geological Survey, 2010). Two aggregate sites (i.e., mines and pits), the Caliente Sand and Mineral Quarry and KC Public Works Sand Pit (Table 3.12-3 and Figure 3.12-1), are located within 1 mile of Segment 1 but over 1,000 feet from the Proposed Project alignment. As shown in Table 3.12-3, 173 active oil and gas, cyclic steam, and water disposal wells are present within 1 mile of Segment 1 (as shown in Figure 3.12-2).

Figure 3.12-1 Mining and Mineral Resources in the Proposed Project Vicinity



Source: (U.S. Geological Survey, 2010), (California Department of Conservation, Division of Mine Reclamation, 2020), (California Department of Conservation, California Geological Survey, 2009)

Figure 3.12-2 Active Wells in the Project Vicinity



Source: (CalGEM, 2022)

Table 3.12-2 Mineral Resource Areas within 1 mile of the Proposed Project

Category	Description	Acres per segment					Total acres
		1	2	3	4	5	
MRZ-1	Areas where available geologic information indicates there is little likelihood for the presence of mineral resources	440	0	0	0	0	440
MRZ-2a	Areas that contain significant measured or indicated reserves	901	592	0	0	0	1,493

Source: (California Department of Conservation, 2009)

Table 3.12-3 Active Mineral Resource Recovery Sites within 1 mile of the Proposed Project

Category	Description	Active sites per segment					Total sites
		1	2	3	4	5	
Active mining operations	Aggregate pits: areas with minor to moderate mining activities, such as small to medium open borrow pits used for various sources of aggregate	2	0	0	0	0	2
Active wells	Gas, oil, or geothermal wells identified in DOC's Well Star database	173	23	0	0	0	196

Source: (California Department of Conservation, Division of Mine Reclamation, 2020)

Segment 2

Non-State classified MRZs are present within Segment 2. Segment 2 is located within and adjacent areas that contain known mineral resources, including State-classified MRZ-2a (California Department of Conservation, 2009). One sand and gravel resource and one limestone resource are within 1 mile of Segment 2. There are no other active mining claims and no active mineral recover sites within 1 mile of Segment 2. Approximately 23 oil and gas wells are within 1 mile of Segment 2.

Segments 3, 4, and 5

Segments 3, 4, and 5 are not located within and adjacent areas that contain known mineral resources (California Department of Conservation, 2009). One known limestone mineral resource site is adjacent the Proposed Project alignment in Segment 3, and one sand and gravel resource site is present within 1 mile of Segment 5. There are no active mining claims and no active mineral recovery sites identified within 1 mile of Segments 3, 4, or 5. No active oil and gas, steam, or water disposal wells are present within 1 mile of Segments 3, 4, or 5.

3.12.2 Applicable Regulations, Policies, and Standards

Federal Regulations, Policies and Standards

There are no federal regulations pertaining to mineral resources that are applicable to the Proposed Project.

State Regulations, Policies, and Standards

California Surface Mining and Reclamation Act of 1975 (Public Resources Code Sections)

The Surface Mining and Reclamation Act of 1975 (SMARA) established statewide policies for surface mining and reclamation. It provides regulations for mining operations that assure that environmental impacts are minimized and mined lands are used in a stable condition (State of California, 2018). The law specifically mandates a two-phased process, commonly referred to as *classification and designation*, for mineral resources. The California Geological Survey is responsible under SMARA for carrying out the classification phase of the process. SMARA requires the State Geologist (who is the chief administrator of the California Geological Survey) to classify lands into MRZs based on the known or inferred mineral resource potential of that land. The classification process is based solely on geology, without regard to land use or ownership. The primary goal of mineral land classification is to help ensure that the mineral resource potential of land is recognized and considered in the land use planning process. The California Mining and Geology Board is responsible for the second phase, which allows the Board to identify areas within a production-consumption region that contain significant deposits of certain mineral resources that may be needed to meet the region's future demand (State of California, 2018).

Local Regulations, Policies and Standards

The CPUC has sole and exclusive State jurisdiction over the siting and design of the Proposed Project because it authorizes the construction, operation, and maintenance of investor-owned public utility facilities. Pursuant to GO 131-D section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties' and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local land use laws, regulations, and policies is provided for informational purposes only.

Kern County General Plan: Land Use, Open Space, and Conservation Element

The policies, goals, and implementation measures in the Kern County General Plan for mineral resources are contained in the Land Use, Open Space, and Conservation Element. The following goal and policies are relevant to the analysis of mineral resources for the Proposed Project.

Goal:

- Protect areas of important mineral, petroleum, and agricultural resource potential for future use.

Policies:

- Lands classified as MRZ-2, as designated by the State of California, should be protected from encroachment of incompatible land uses.
- Discourage incompatible land use adjacent to Map Code 8.4 (Mineral and Petroleum) areas.

Los Angeles County General Plan
The Conservation and Natural Resources Element of the County of Los Angeles General Plan establishes goals and policies aimed to protect mineral resources (Los Angles County, 2015). The following policy is relevant to the analysis of mineral resources for the Proposed Project:

Policy:

- Protect MRZ-2s and access to MRZ-2s from development and discourage incompatible adjacent land uses.

City of Arvin General Plan
The City of Arvin General Plan does not contain any goals, policies, or implementation measures relevant to the analysis of mineral resources for the Proposed Project.

City of Bakersfield General Plan
The Conservation Element of the City of Bakersfield Metropolitan General Plan establishes regulations aimed to protect mineral resources (City of Bakersfield County of Kern, 2002). The following goal and policies are relevant to the analysis of mineral resources for the Proposed Project.

Goal:

- Protect areas of significant resources potential for future use.

Policies:

- Protect significant mineral and petroleum resource areas, including potential sand and gravel extraction areas.
- Promote development of compatible uses adjacent to mineral extraction areas.

3.12.3 Applicant Proposed Measures

SCE has proposed measures to reduce environmental impacts. The significance of the impact is first considered prior to application of applicant proposed measures (APMs), and a significance determination is made. The implementation of the APMs is then considered as part of the Proposed Project when determining whether impacts would be significant and thus would require mitigation. These APMs would be incorporated as part of any CPUC project approval, and SCE would be required to adhere to the APMs as well as any identified mitigation measures. The APMs are included in the MMRP for the Proposed Project, and the

implementation of the measures would be monitored and documented in the same manner as mitigation measures. There are no applicant proposed measures (APMs) that would apply to potential mineral resource impacts.

3.12.4 Environmental Analysis

Summary of Impacts

Table 3.12-4 presents a summary of the CEQA significance criteria and impacts on mineral resources that would occur during construction, operation, and maintenance of the Proposed Project.

Table 3.12-4 Summary of Proposed Project Impacts to Mineral Resources

Would the proposed project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a 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?	☐	☐	☐	☒

Impact Discussion

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

The Proposed Project crosses lands identified as containing known mineral resources that are of value to the region and residents of the state. MRZ-2a is present along Segments 1 and 2 of the Proposed Project alignment. Two active mining sites are also located within 1,000 feet of the Proposed Project but are not within the Proposed Project area. The Proposed Project involves replacing and rebuilding existing subtransmission lines and substations within or immediately adjacent the existing alignment. Construction activity would involve use of SCE's existing access roads. The nearest access road to an active mining site is approximately 933 feet. The access road improvements and use would not cause loss of availability of a known mineral resource. SCE constructed the existing subtransmission lines and substations in the early 1900s. Since the replacement subtransmission lines and structures would be located proximate to the existing infrastructure, there would be no new loss of availability of known mineral resources. Additionally, mineral resources within or in close proximity to the existing ROW and easements that are available for extraction or are actively mined would continue to be available during construction of the Proposed Project. The impact from loss of availability of a known mineral resource would be less than significant.

Required APMs and MMs: None required.

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 mineral resource recovery sites are delineated in any general plan, specific plan, or other land use plan in the vicinity of the Proposed Project. Because the Proposed Project would not affect any mineral resource recovery site delineated in a local general plan, specific plan or other land use plan, no impact would occur.

Required APMs and MMs: None required.

3.12.5 References

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