

5. The AC cables carry the power from the inverters to the Project substation, and will be installed at a depth of at least 48 inches to the top of the cables.

6. The DC cables connect the solar panels to the inverters. The DC cables will extend between each load break disconnect (“LBD”), which safely isolates the inverters from the DC power coming from the solar array, and each inverter, and have a standard depth of cover of 24 to 28 inches. The DC cables have a different depth of cover than AC cables for a few reasons:

a. The National Electric Code (“NEC”) requires a depth of cover of 24 inches for the DC cables.¹

b. The DC cable runs are short (an average of 282 feet, with the longest being 640 feet), the DC cables are installed either under (when crossing) or parallel to the internal access roads, and all the DC cables are within the fenced areas of the Project.

c. If the DC cables were installed to a depth of 48 inches, the system would need to be re-designed. In addition to needing more DC cables, the DC cables would need to be a larger diameter due to soil resistivity and the heat generated by the cable at the greater depth. These changes would increase Project costs by between \$500,000 and \$1,000,000.

7. Given the factors outlined in paragraph 6 of this Affidavit, Harmony Solar is requesting an amendment to the Order and Certificate that authorizes a different depth of cover for underground AC cables and underground DC cables. Specifically, Harmony Solar is requesting a minimum depth requirement of 24 inches to the top of DC cables, while AC cables would continue to have a minimum depth requirement of 48 inches.

¹ See National Fire Protection Association, National Electrical Code (NFPA 70), Table 300.5 (2023).

