STATEMENT OF SUPPORT FOR ZONING AMENDMENT

A Conditional District Rezoning permit (R-80-CD) is requested for a portion of a current R-30 zoned property with a condition limiting the use to a solar farm. In support of this request, Petitioner provides the following information:

Introduction:

RB Solar LLC proposes to construct a solar farm on approximately 54 acres of the 127 acres of the parcel at 3682 N Oxford Street. The engineering, procurement and construction for the solar farm development will be conducted by Melink Corporation. The proposed property on N Oxford Street near Rock Barn Road is currently zoned R-30. Adjacent properties are also zoned R-30 and are mostly serving residential purposes.

The solar farm will consist of ground mounted solar panels at an approximate 25° tilt from the horizontal surface. All solar panels will be mounted on a safe and secure steel racking system at a variable height between two and seven feet from the ground to the lowest part of the solar module. The proposed solar farm is comprised of 20,292 REC315PE 315 watt solar modules adding up to a DC capacity of 6,392 kW DC. There will be 178 Solectria PVI28TL 28kW AC string inverters to yield a total capacity of 4,984 kW AC. All components specified in this design are certified by the required standards for solar constructions and electrical safety.

During installation, this project will stimulate the local economy by creating full time jobs for the regional labor force. Once commissioned, the proposed system will produce electricity year-round during sunlight hours with minimal maintenance and man hours. The solar farm will provide renewable and clean energy to the Duke utility grid to satisfy a portion of the power consumption in Catawba County. The proposed solar farm is estimated to produce 8,914,200 kWh of power a year, enough to power approximately 695 homes in the community. Solar energy mitigates cost fluctuations, pollution and other disadvantages associated with the traditional means of power generation by providing sustainable energy from a constant fuel source.

Environmental Concerns:

The proposed location of the installation contains a floodplain region designated both AE and AEFW. According to the floodplain overlay standards, in an AEFW floodway zone the estimated flood level cannot rise by more than an additional hundredth of a foot from due to new construction. The proposed solar farm design is currently undergoing a hydraulic analysis study to determine if the installation in the AEFW region adheres to floodplain development requirements by estimating the change in the base flood water elevation due to the proposed structures. If the hydraulic analysis yields an unfavorable result, the portion of the proposed

solar farm in the floodway will be relocated where possible and otherwise removed. Additionally the designed solar array will abide by standards for the AE floodplain region; the lowest portion of the solar module will be at minimum two feet above the base flood elevation (BFE). At the proposed location the BFE is 827 feet therefore excluding support posts, the lowest structure will be at 829 feet throughout the entire AE floodplain.

To avoid top soil erosion caused by construction a reinforced silt fence will be installed north of the solar array. The fence will have a minimum of 26 inches of fabric above ground and eight inches of fabric below the grading level. The silt screen will lie within the proposed conditional zoned boundary between the solar array and Lyle Creek. Furthermore grading will be kept to a minimum and upon construction local vegetation will be installed to stabilize the soil and promote biodiversity in the area.

- All solar farm requirements for the Conditional District Rezoning were followed in the design process of this photovoltaic system.
- The design is in accordance with the floodplain overlay standards.

Rezoning Support Statement:

The proposed solar farm will not affect the character or functionality of the surrounding properties or infrastructure. The proposed structures will be largely hidden from public view and will not reflect significant glare onto adjacent properties or roadways on account of buffering mechanisms. The solar array is setback from the parcel boundary with mature, dense vegetation on the perimeter of the property, creating a natural screen to reduce visibility of the system. Additionally natural topography including a creek and large hills will also create a shield between the new construction and the public. Where existing buffers are deficient, new vegetation will be installed according to Catawba County standards.

The proposed region for rezoning is adjacent to a horse farm, a creek, a road, forested area and residential with the eastern edge of the parcel is bordered by Rock Barn Road. Accordingly to mitigate safety hazards for drivers, the proposed system is set back one hundred feet from the roadway. Solar panels are designed to absorb sunlight as opposed to reflect it, thus concerns of glare bothering neighbors and citizens are small. Additionally, the solar farm will not affect any county adopted plans for road construction or other infrastructure modification. The proposed conditional zoned region contains a buried sewer easement which will be free of structures and remain easily accessible. During operation the solar power system does not generate considerable noise or any other pollution to the surrounding environment.

This project would not require any resources from the Catawba County but will provide electricity to the community by utilizing otherwise vacant land. There will not be any additional structures installed aside from those used to mount and connect the solar panels and inverters.

There is no requirement for proper parking space in the long term since the only physical upkeep needed is periodic ground and equipment maintenance. During construction temporary parking and equipment staging will be located on the same parcel, specifically across N Oxford St in a currently vacant field. Upon commissioning, employees will not typically be working on site and the system will not create additional traffic or disturbances.

The system will be producing clean energy that will be sold to the local utility company, Duke Energy Carolinas, per a Power Purchase Agreement. The energy sales in this agreement will produce revenue for the land owner and system owner over a course of fifteen to thirty years. State income tax and Catawba County personal property taxes will be paid over this long-term agreement, generating additional community funds without demanding waste management, infrastructure upgrades, sewage, public lighting or other government services.