Attachment A Required Findings/Rationale

<u>Required Findings</u>: The following is a list of the required findings as set forth in Chapters 3, 4, 30 and 61 of the TRPA Code of Ordinances. Following each finding, Agency staff has indicated if there is sufficient evidence contained in the record to make the applicable findings or has briefly summarized the evidence on which the finding can be made.

1. <u>Chapter 3 – Required Findings</u>:

<u>Based on the information submitted in the IEC, and other information know to TRPA, TRPA shall make</u> one of the following findings and take the identified action:

- (a) <u>The proposed project could not have a significant effect on the environment and a finding</u> of no <u>Significant effect shall be prepared in accordance with the Rules of Procedure, Section</u> <u>6.6;</u>
- (b) <u>The proposed project could have a significant effect on the environment but, due to the mitigation measures that have been added to the project, the project could have no significant effect on the environment and a finding of no significant effect shall be prepared in accordance with Rules of Procedure Section 6.7; or</u>
- (c) <u>The proposed project may have a significant effect on the environment and an</u> <u>environmental impact statement shall be pared in accordance with Chapter 3 of the TRPA</u> <u>Code of Ordinances and the Rules of Procedure, Article 6.</u>

Based on the information provided in this staff report, the project application, the Initial Environmental Checklist (IEC), and Article V(g) Findings Checklist, there is sufficient evidence demonstrating that the proposed project, with the proposed conditions in the draft permits, will not have a significant effect on the environment and a finding of no significant effect shall be prepared.

- 2. <u>Chapter 4 Required Findings</u>:
 - (a) <u>The project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Plan Area Statements and maps, the Code and other TRPA plans and programs.</u>

Based on the information provided in this staff report, the project application, the Initial Environmental Checklist (IEC), and Article V(g) Findings Checklist, there is sufficient evidence demonstrating that the proposed project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, the TRPA Code and other TRPA plans and programs.

(b) The project will not cause the environmental threshold carrying capacities to be exceeded.

TRPA staff has completed the "Article V(g) Findings" in accordance with Chapter 4, Subsection 4.3 of the TRPA Code of Ordinances. All responses contained on said checklist indicate compliance with the environmental threshold carrying capacities. The applicant also completed an IEC. No significant environmental impacts were identified, and staff has concluded that the project will not have a significant effect on the environment.

(c) <u>Wherever federal, state or local air and water quality standards applicable for the Region,</u> whichever are strictest, must be attained and maintained pursuant to Article V(g) of the TPRA <u>Compact, the project meets or exceeds such standards</u>.

TRPA is requiring that all potential environmental effects of the project be mitigated through the project design, including the installation of both temporary and permanent Best Management Practices and ongoing maintenance, and payment of water quality and excess coverage mitigation fees. The project is also required to comply with all City of South Lake Tahoe and Lahontan Regional Water Quality Control Board requirements. As a result, upon completion of construction, the project should have no impact upon air or water quality standards.

<u>Chapter 30 – Land Coverage Transfer</u> <u>30.4.2 Transferred Land Coverage Requirement for Linear Public Facilities and Public Health and Safety</u> <u>Facilities</u>

<u>The maximum land coverage for linear public facilities is limited to the minimum amount needed to</u> <u>achieve their public purpose, except as provided for non-motorized public trails in subsection 30.4.6.D.3.</u> <u>Such transfer may be permitted, provided TRPA makes the following findings:</u>

(a) <u>The project complies with required findings for additional public service facilities if required</u> pursuant to Section 50.8.

The project is not an additional public service facility.

(b) <u>There is no feasible alternative that would reduce land coverage.</u>

The solar project has been designed to reduce the minimize the physical amount of land coverage needed while maximizing the solar output. To produce the desired amount of clean energy (i.e., 1,339 kW DC Ground Mount Photovoltaic System), a solar system consisting of 2250 modules and 3.3 acres is required. STPUD has adequate base allowable land coverage available within the project area to accommodate the solar facility, but it is located within land capability district 4 to the east and south of the proposed project site. Moving the location of the proposed solar facility to the class 4 lands would eliminate the need to transfer land coverage for the public health and safety facility. However, siting the solar facility completely within land capability class 4 lands is not desirable compared to the current site that straddles the class 4/6 boundary for the following reasons:

- it would place the solar facility within more sensitive lands on slopes of up to 15 percent rather than the current site at 6 percent,
- it would be farther away from the existing WWTP facilities thereby impacting a larger area of previously undisturbed lands,
- it would require a longer access roadway and place solar panels on steeper slopes.

- it would place the solar panels closer to sensitive land uses (e.g., Al Tahoe bike trail and residential homes) and sensitive resources (e.g., Heavenly Valley creek) thereby reducing the amount of forested buffer between the solar facilities and offsite uses.
- the number of panels may need to be increased to equal the same amount of power.
- the design of the footings/foundation may need to be re-evaluated based on the slope of the hillside to orient the panels properly.

Because it is not a reasonable or feasible alternative to site the solar facility in the land capability class 4 lands and because the base allowable land coverage for land capability district 4 may not be used within the less-sensitive land capability 6 district lands within the project area, STPUD proposes to transfer land coverage into the project area. Under the proposed transfer, STPUD would send the land coverage required for Class 6 (42,913 square feet) to a state or local agency partner from STPUD's pool of base allowable Class 4 land coverage. At the same time, STPUD would receive from that partner 42,913 square feet of allowable Class 4, 5, or 6 land coverage for use in the Class 6 portion of the project area.

This land coverage transfer is preferable to the use of TRPA Code Section 30.4.1.C.3.c(ii) (e.g., Option 2) to calculate base allowable land coverage for the project area. Use of Option 2 would calculate base allowable land coverage using 20 percent (the amount allowable within land capability district 4) for all high capability lands (including class 6 which allows 30 percent cover) within the project area. This method would allow the solar facilities to be constructed in the current location and within base allowable land coverage limits as calculated under Option 2. However, use of Option 2 would result in the forfeiture of approximately 210,000 square feet of base allowable land coverage otherwise available in land capability district 4 under Code Option 1.

The District is mandated by the Federal Clean Water Act and the Porter-Cologne Act of 1969 to maintain and operate water and wastewater systems, including a wastewater treatment and export system at the Project Area, in perpetuity for the benefit of the south shore community. Given the unknown requirements for facility improvements or expansions that may be necessary in the future to fulfill STPUD's regulatory obligations both within and/or outside of the WWTP project area, it would not be feasible for STPUD to utilize Option 2 to determine base allowable land coverage. Using Option 2 may provide sufficient base allowable land coverage for the solar array project area, but it would lead to greater expense for STPUD and environmental risk for the community if and when that base allowable land coverage is needed in the future for mandated Public Health and Safety facilities.

In summary, given the unknown specifications for regulatory compliance for wastewater and associated facility improvements that will be needed in the future, STPUD is unable to predict with any certainty that the base allowable class 4 land coverage within the District's WWTP project area will not be needed for District facilities at some time in the future.

(c) <u>The project, because of its unusual configuration or service requirement, requires special</u> <u>consideration; and</u>

The solar power system is proposed at the STPUD WWTP project area so that it may efficiently offset existing use of grid power with clean energy for operation of the WWTP. Annually, the WWTP's power consumption is approximately 6M kWh. The solar array is contractually

obligated to produce 1,925,050 kWh in Year 1 of the agreement with the solar power partner (e.g., approximately 32 percent of the WWTP annual consumption). STPUD cannot consider an alternate offsite location for the solar array, because of restrictions from the power utility; the Project Area is the only location that can be considered for this project. STPUD considered a rooftop project alternative at the WWTP, but cost and physical constraints made it infeasible. The most suitable site is located on class 6 land. Special consideration is warranted for the associated coverage transfer because this is a public facility with important water quality obligations under federal law and recalculating allowable coverage under the Option 2 method would adversely impact STPUD's ability to construct water and wastewater improvements in the future.

Providing clean energy for public services facilities such as the WWTP is a goal of local and regional agencies including the City of South Lake Tahoe and District, evidenced by both agencies participation in the Solar Energy and Economic Development Fund (SEED Fund), the City Council's 100 percent clean energy resolution, and TRPA's upcoming code amendments to address climate goals. In 2018, the City was approached by the SEED Fund team to participate in the newest round of the program's regional, collaborative solar procurement project. Headed by Optony USA and Strategic Energy Innovations, the SEED Fund gives public agencies in the same region the opportunity to work together on procuring solar for their facilities. The City recognized this unique opportunity, and on May 7, 2019, City Council voted unanimously to sign on as the Lead Agency for the SEED Fund Sierra Nevada project. STPUD's solar project stemmed from working with the SEED Fund to develop a list of potential solar projects in the Lake Tahoe region during the summer of 2020. It is the first of these projects to go to construction and will be the largest solar array in the Tahoe Basin

(d) <u>The facility primarily serves the needs of persons other than those who are or will be residents</u> of the lands in question, or the owners of the land in question.

STPUD's WWTP serves the entire south shore community on the California side, from Emerald Bay to Stateline and south to Christmas Valley.

- 4. <u>Chapter 30 Land Coverage Relocation</u>
 - (a) <u>The relocation is to an equal or superior portion of the parcel or project area</u>

6,964 square feet of banked Class 6 land coverage is proposed to be used on Class 6 land. The slope, vegetation, and soil type in the area of relocation is the same. The site is classified as Land Capability Class 6 and is therefore suitable for development.

(b) <u>The area from which the land coverage was removed for relocation is restored in accordance with</u> <u>subsection 30.5.3.</u>

The area from where the land coverage was removed and banked has already been revegetated.

(c) <u>The relocation shall not be to Land Capability Districts 1a, 1b, 1c, 2, or 3, from any higher</u> <u>numbered land capability district.</u>

The relocation is entirely within a Land Capability Class 6 area.

5. Chapter 61: Vegetation and Forest Health

(a) <u>Tree Removal: Before tree-related projects and activities are approved by TRPA, TRPA shall find,</u> <u>based on a report from a qualified forester, that the project or activity is consistent with this</u> <u>chapter and the Code. TRPA may delegate permit issuance to a federal, state, or other qualified</u> <u>agency through a memorandum of understanding.</u>

The State-approved timber harvest plan was prepared by a registered forester and approved by the California Department of Forestry. With conditions, the project is consistent with the TRPA Code of Ordinances including Chapter 61 standards for tree removal, vegetation protection, and revegetation. See additional information in the Tree Removal section of the staff report.

- (b) <u>Tree Removal for Solar Access: Removal of healthy trees to maximize efficiency of solar energy</u> systems may be permitted according to the standards below.
 - a. <u>TRPA may approve the removal of healthy trees provided TRPA finds that the trees</u> <u>unreasonably impede the operation of a solar energy system and that the solar energy</u> <u>system is properly located so as to minimize the need for tree removal.</u>
 - b. <u>The number of healthy trees that may be removed for the system's operation shall be the minimum necessary.</u>
 - c. The only trees that shall be considered for removal for an active or passive solar energy system are those that lie generally south of the proposed solar collector and are in the sun's path between an 18∞ vertical angle measured from the base of the solar collector and a 70∞ vertical angle from the same base measurement. Trees on adjacent properties may be removed provided a contractual agreement to allow for such removal is signed by the affected parties. Tree removal may be conditioned upon replacement elsewhere on the property.

As described in the Tree Removal section of the staff report, the site selected is the most suitable for a larger-scale solar power project and minimizes the need for tree removal.

Trees within the solar array fenced area are incompatible with power generation and will be entirely removed.

For tree removal in the additional 100-foot area to the west, south and east, the applicant provided comparative PV system analyses with and without the additional tree removal. Without tree removal in the 100-foot area, near shading would increase from 1.89 percent to 8.41 percent and performance of the solar array would be reduced by 5.4 percent. This would significantly impede operation of the solar energy system.

Tree removal in the additional 100-foot area will be limited by conditions of approval to ensure all trees removed would unreasonably impede operations, that tree removal is the minimum necessary, and that the trees to be cut meet the dimensional and solar angle criteria in subsection 3.