

IAF SPACE POWER SYMPOSIUM (C3)
Solar Power Satellite (1)

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AN INDEPENDENT INTERNATIONAL ASSESSMENT OF SPACE SOLAR POWER

Abstract

The National Space Society (NSS), the Power Committee of the International Astronautical Federation (IAF), and the International Academy of Astronautics (IAA) Permanent Committee (PC) on Space Solar Power (SSP) have undertaken an independent, peer-reviewed system and technology assessment of SSP. This assessment includes consideration of SSP concepts (space, ground, infrastructures, etc.), including (1) systems analysis and modeling, (2) definition and evaluation of relevant concepts of operations (CONOPS), and (3) technology readiness and risk assessment (TRRA).

This paper will provide an overview of the results of this assessment. It will summarize the 2024 version of the IAA taxonomy for SSP and the various systems concepts and technologies that are now under consideration. It will conclude by indicating the plan forward and inviting participation by the international community in this activity.

Keywords: NSS, National Space Society, IAA, International Academy of Astronautics, IAF Power Committee, Space Solar Power, SSP