

SPACE POWER SYMPOSIUM (C3)

Space-based Solar Power Architectures – New Governmental and Commercial Concepts and Ventures (1)

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CONCEPT STUDY ON SPACE SOLAR POWER SYSTEM

Abstract

In the last years, a significant change in global energy and environmental security situation, combined with an exponentially accelerating pace of technological change, leads to revisit the SPS concept: Many SSPS concepts were proposed before. Almost all these concepts have the target of launch cost-down 1/50 1/100 compared with H-IIA, and also the target of its on-orbit system weight 10g/W. In this paper, MHI proposes a new SSPS concept. This new concept has the target of launch cost-down 1/2, and the target of its on-orbit system weight 1g/W. This concept has the merit of the reality on the launch cost target, but also has the demerit of difficulties on its on-orbit system weight target. So, MHI also proposes the approach for achieving its on-orbit system weight target in this paper.