15th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE (D4) Innovative Concepts and Technologies (1)

Author: Mr. Pulak Srivastava University of Petroleum and Energy Studies, India, pulak.srivastava14@gmail.com

> Dr. Ugur Guven UN CSSTEAP, United States, drguven@live.com Mr. Shashank Pathak

University of Petroleum and Energy Studies, India, shashank.hades21@gmail.com Mr. Mridul Jain

University of Petroleum and Energy Studies, India, mridulj116@gmail.com Mr. Aditya Mishra

University of Petroleum and Energy Studies, India, oddmradityamishra@gmail.com Ms. Shivangi Chauhan

University of Petroleum and Energy Studies, India, shivangichauhan48@gmail.com Ms. Vishwani Aggarwal

University of Petroleum and Energy Studies, India, vishwaniaggarwal@gmail.com

DYSON SPHERE USED FOR WIRELESS TRANSMISSION OF ENERGY

Abstract

The most important thing any life form needs to sustain and grow is Energy. Ever since the dawn of civilisation, mankind has been searching for sources of energy far and wide. Man learning to light a fire was the most elementary step in this process. Eventually, in due course of time, man started to learn about new ways to harness energy in an efficient manner. Archimedes came along, and hence civilizations learnt how to convert one form of energy to the other. During the Industrial revolution, Steam engines became the next big thing. Lifestyle of the people also increased, and hence their energy requirements. The sun, in this regard, seems to be the obvious choice. Solar energy, so far seems to be the best option as far as both abundance and effectiveness are taken into account. When it comes to renewable energy, only the Sun is capable of fulfilling our appetite for energy. It is high time we start thinking of next level alternatives. Harvesting the energy of the sun is the next major breakthrough for humankind. The most interesting answer to this question, perhaps the most creative, and one with infinite possibilities is the Dyson Sphere. The mother star (in our case, the sun) holds enormous energy reservoirs to meet future demand and supply gaps. A Dyson sphere aims to position itself in such a manner around the sun that all the radiations are contained around it. The radiation hence collected is converted to electricity and passed on to smaller satellites to create a systematic distribution network. An important point to note here is that, due to the sheer amount of energy available, the array of applications possible is infinite. Right from feeding the existing channels of energy, Dyson spheres will open up a plethora of opportunities for fields that have huge amounts of energy requirement. An energy substitute for all energy sources, and can be used for everything right from space defence systems to wireless charging of devices, the Dyson Sphere system can be used like a telecommunication network transmitting off radiations to meet energy requirements. This paper will be discussing about the ways how we can eventually be able to transmit the absorbed energy from sun to Earth for the betterment of human future.