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**GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY
DEPARTMENT OF COMMERCE
(DIRECTORATE GENERAL OF ANTI-DUMPING & ALLIED DUTIES)**

NOTIFICATION

New Delhi 22nd May, 2014

Final Findings

Subject: - Anti-Dumping Investigation concerning imports of Solar Cells whether or not assembled partially or fully in Modules or Panels or on glass or some other suitable substrates, originating in or exported from Malaysia, China PR, Chinese Taipei and USA.

14/5/2012-DGAD:- Having regard to the Customs Tariff Act 1975 as amended from time to time (hereinafter also referred to as the Act) and the Customs Tariff (Identification, Assessment and Collection of Anti-Dumping Duty on Dumped Articles and for Determination of Injury) Rules,1995 thereof, as amended from time to time (hereinafter also referred to as the Rules);

2. Whereas the Solar Manufacturer's Association (hereinafter also referred to as the applicant) filed an application before the Designated Authority (hereinafter also referred to as the Authority), alleging dumping of Solar Cells, whether or not assembled partially or fully in modules or panels or on glass or some other suitable substrates (hereinafter also referred to as the subject goods), originating in or exported from China PR, Malaysia, Chinese Taipei and USA (hereinafter also referred to as the subject countries) for and on behalf of some domestic producers of the subject goods, namely M/s Indosolar Ltd, a 100% Export Oriented (EOU) Unit, M/s Websol Energy Systems Ltd, a unit in a Special Economic Zone (SEZ) and M/s Jupiter Solar Power Limited, a unit in the Domestic Tariff Area (DTA), (hereinafter also referred to as the domestic industry).
3. The application is supported by the following other domestic producers of the subject goods:

- i. Moser Baer Photovoltaic Ltd.
- ii. Moser Baer Solar Systems Pvt Ltd.
- iii. PV Power Technologies Pvt Ltd.
- iv. Alpex Exports Pvt Ltd.
- v. Waaree Energies Pvt Ltd.
- vi. Lanco Solar Pvt Ltd.
- vii. HHV Solar Technologies Pvt Ltd.
- viii. Greenbrilliance Energy Pvt Ltd.
- ix. Euro Multivision Ltd.
- x. Tata BP Solar India Ltd
- xi. Goldi Green Technologies Pvt Ltd
- xii. Ajit Solar Pvt Ltd
- xiii. Premier Solar Systems Pvt Ltd
- xiv. Maharishi Solar Technology Pvt Ltd
- xv. Birla Surya Ltd.

4. And whereas, the Authority on the basis of sufficient evidence submitted by the applicant, issued a public notice dated 23rd November, 2012, published in the Gazette of India, Extraordinary, initiating anti-dumping investigations concerning imports of the subject goods, originating in or exported from the subject countries, in accordance with sub-Rule 6(1) of the Rules, to determine the existence, degree and effect of the alleged dumping and to recommend the amount of anti-dumping duty, which, if levied, would be adequate to remove the injury to the domestic industry.

A. PROCEDURE

5. The procedure described below has been followed by the Authority with regard to the present investigation:

- i. The Authority notified the Embassies/Representatives of the subject countries in India about the receipt of the anti-dumping application before proceeding to initiate the investigation in accordance with sub-rule (5) of Rule 5 supra.
- ii. The Authority sent a copy of the initiation notification dated 23rd November, 2012 to the Embassies/Representatives of the subject countries in India, to all the known exporters from the subject countries, to all the known importers and the other Indian producers of the subject goods as per the addresses made available by the applicant and

requested them to make their views known in writing within 40 days of the date of the initiation notification.

- iii. Since a large number of producers/exporters from the subject countries expressed interest to participate in the subject investigation, the Authority took resort to sampling in terms of Rule 17(3) of the Anti-dumping Rules.
- iv. Along with the initiation Notification, a sampling questionnaire was sent to the producers/exporters of the subject goods in the subject countries, with copy to the concerned Embassies/Representatives in India, with the advice to fill in the same and provide to the Authority within 15 (fifteen) days of the date of the letter. The Authority also informed the producers/exporters of the subject goods in the subject countries that they will be intimated thereafter, to file the exporters' questionnaire response in the prescribed format (also MET Response in case of China PR), not later than forty days from the date of intimation of the sampling for detailed investigation by the Authority.
- v. The copy of the initiation notification along with non-confidential version of the application filed by the domestic industry, sampling questionnaire, Exporter's Questionnaire and MET Questionnaire (for China PR) formats were sent to the following known producers/exporters of the subject goods in the subject countries:
 1. JA Solar, China PR
 2. Gold Poly, China PR
 3. Hanwha Solar One, China PR
 4. Wuxi Suntech Power Co., Lt., China PR
 5. Changzhou Trina Solar Energy Co., Ltd, China PR.
 6. Suntech, China PR
 7. Dongfang Electric (Yixi) Magi Solar Power Technology Co., Ltd, China PR
 8. Ningbo Jonshi Solar Electrical Science and Technology Co Ltd, China PR
 9. Nantong Qiabgsgebg Ogitiviktauc Technology Co Ltd, China PR
 10. Shenzhen Topray Solar Co Ltd, China PR
 11. Eoply New Energy Technology Co Ltd, China PR
 12. Shanghai BYD Company Ltd, China PR
 13. Hanwha (Qidong) Co Ltd, Korea
 14. Jinko Solar Co Ltd, China PR

15. Motech (Suzhou) Renewal Energy Co Ltd, China PR
16. CNPV Dongying Solar Power Co Ltd, China PR
17. Yingli Energy (China) Co Ltd, China PR
18. Delsolar (Wujiang) Ltd, China PR
19. Baoding Tianwei Solar Films Co Ltd, China PR
20. Sungen International Ltd, Hong Kong
21. China Sunenergy (Nanjing) Co Ltd, China PR
22. Chint Solar Zhejian Co Ltd, China PR
23. Jiangyin Hareon Power Co Ltd, China PR
24. Jingao Solar Power Co Ltd, China PR
25. Michael Yuhuan Sino Solar S&T Co Ltd, China PR
26. Scott Xiong, China PR
27. Hanwha Solar One (Qidong) Co Ltd, China PR
28. Jetion Solar (China) Co Ltd, China PR
29. Ningbo OSDA Solar Co Ltd, China PR
30. LDK Solar Hi-Tech (Nanching) Co Ltd, China PR
31. LDK Solar Hi-Tech (Xinyu) Co Ltd, China PR
32. LDK Solar Hi-Tech (Hefei) Co Ltd, China PR
33. LDK Solar Hi-Tech (Suzhou) Co Ltd, China PR
34. Hengdian Group DMEGC Magnetics Co Ltd, China PR
35. Perlight Solar Co Ltd, China PR
36. AnjiDasol Solar Energy Science and Technology Co Ltd, China PR
37. Jiangsu Jiasheng Photovoltaic Technology Co Ltd, China PR
38. Ningbo Qixin Solar Electrical Appliance Co Ltd, China PR
39. Dupont Appollo (Shenzhen) Ltd, China PR
40. China Chamber of Commerce for Imports and Exports of Machinery and Electronics Product, China PR
41. Suntech North & South America, USA
42. Prince Solar Company Ltd, USA
43. Sunrisco IndustriesInc (USA), USA
44. First Solar Inc, USA
45. Canadian Solar, Canada
46. Real Magic Technology SDN.BHD, Malaysia
47. Fidelio International SDN BHD, Malaysia
48. Epic Engineering, Malaysia
49. Q-cells Malaysia SDN BHD, Malaysia
50. Gintech, Chinese Taipei
51. Tsec Corporation, Chinese Taipei
52. Delsolar, Chinese Taipei
53. Delsolar Co Ltd, Chinese Taipei

54. Neo Solar Corporation, Chinese Taipei
55. Sunengine Corporation Ltd, Chinese Taipei
56. Topcell Solar International Co Ltd, Chinese Taipei
57. Motech Industries Inc Solar Division, Chinese Taipei
58. Sun Well Solar, Chinese Taipei

vi. The following producers/exporters from the subject countries submitted the sampling questionnaire response:

1. M/s LDK Solar Hi-tech(Hefei) Co Ltd, China PR.
2. M/s LDK Solar Hitech (Nanchang) Co Ltd, China PR.
3. M/s Wuxi Suntech Power Co Ltd, China PR.
4. M/s Canadian Solar Manufacturing (Changhsu) Inc, China PR.
5. M/s Canadian Solar Manufacturing (Luoyang) INC (LYSP), China PR.
6. Canadian Solar International Ltd, Honk Kong.
7. M/s JA Solar Technology, Yangzhou Co Ltd, China PR.
8. M/s Hanwha Solar One (Qidong) Co Ltd, China PR.
9. M/s CEEG Nanjing Renewable Energy Co Ltd, China PR
10. M/s Chint Solar (Zhejiang), Co Ltd, China PR.
11. M/s Jinko Solar Co Ltd, China PR.
12. M/s Jinko Solar Import & Export Co Ltd, China PR.
13. M/s Motech (Suzhou) Renweable Energy Co Ltd, China PR.
14. M/s Del Solar (Wujiang) Ltd, Chin PR.
15. M/s CEEG (Shanghai) Solar Sceince Technology Co ltd, China PR.
16. M/s LDK Solar Hitech (Suzhou) Co Ltd, China PR.
17. M/s Baoding Tianwei Solar Films Co Ltd, China PR.
18. M/s Changzhou Trina Solar Energy Co Ltd, China PR.
19. M/s Shangluo BYD Industrial Co Ltd, China PR.
20. M/s Dongfang Electric (Yixing) Magi Solar Power Techology Co Ltd, China PR.
21. M/s Jiangyin Hareon Power Co Ltd, China PR.
22. M/s Hengdian Group DMEGC Magnetics Co ltd, China PR.
23. M/s Hanzhou Dahe Thermo Magnetics Co Ltd, China PR.
24. M/s China Sunergy (Nanjing) Co Ltd, China PR.
25. M/s JiangAo Solar Co Ltd, China PR.
26. M/s Shanghai JA Solar Technology Co Ltd, China PR.
27. M/s Zhejiang Jinko Solar Trading Co Ltd, 58 Yuanxi Road, Yuanhua Town, Haining City, Zhejiang Province, China PR.

28. M/s AnjiDaSol Solar Energy Science & Technology Co Ltd, China PR.
29. M/s Yuhuan Sinosula Science & Technology Co Ltd, China PR.
30. M/s Perlight Solar Co Ltd, China PR.
31. M/s CNPV Dongying Solar Power Co Ltd, China PR.
32. M/s Zhejiang Jinko Solar Co Ltd, China PR.
33. M/s Ningbo Qixin Solar Electricals Appliance Co Ltd, China PR.
34. M/s Yingli Energy (China) Co Ltd, China PR.
35. M/s Shanghai BYD Co Ltd, China PR.
36. M/s Renesola Jingsu Ltd, China PR.
37. M/s Shenzhen Topray Solar Co Ltd, China PR.
38. M/s LDK Solar International Co Ltd, Hong Kong.
39. MEMC PTE Ltd, Singapore.
40. Ningbo OSDA Solar Co Ltd.
41. Jiang Su Runda PV Co Ltd.
42. Win Win Precision Technology Co Ltd, Chinese Taipei.
43. Motech Industries INC, Chinese Taipei.
44. Sunwell Solar Corporation, Chinese Taipei.
45. Nex Power Technology Corporation, Chinese Taipei
46. Solartech Energy Corporation, Chinese Taipei.
47. Del Solar Co Ltd, Chinese Taipei.
48. Neo Solar Power Corporation, Chinese Taipei.
49. TSEC Corporation, Chinese Taipei.
50. Topcell Solar International Co Ltd, Chinese Taipei.
51. AU Optronics Corporation, Chinese Taipei.
52. M/s First Solar, Inc, USA.
53. First Solar Malaysia SDN BHD, Malaysia.
54. First Solar GMBH, Rheinstr, Germany.
55. Q-Cells Malaysia SDN BHD, Malaysia.

vii. The sampling questionnaire responses filed by MEMC PTE Ltd, Singapore and LDK Solar International Co Ltd, Hong Kong are not considered since Singapore and Hong Kong are not subject countries. Similarly, the sampling questionnaire response filed by Ningbo OSDA Solar Co Ltd and Jiang Su Runda PV Co Ltd are also not considered since the name of the country to which they belong were not provided. Further, the sampling questionnaire responses submitted by M/s LDK Solar Hi-tech(Hefei) Co Ltd, China PR, M/s LDK Solar Hitech (Nanchang) Co Ltd, China PR, M/s LDK Solar International Co Ltd, Hong Kong and M/s Win Win Precision

Technology Co Ltd, Chinese Taipei are also not considered as complete information as required in the sampling questionnaire were not furnished.

viii. The following producers/exporters from the subject countries were sampled by the Authority:

1. M/s Wuxi Suntech Power Co Ltd, Wuxi, China PR.
2. M/s Canadian Solar Manufacturing (Changhsu) Inc, Changshu City, Jiangsu Province, China PR.
3. M/s Canadian Solar Manufacturing (Luoyang) INC, Luoyang City, Henan Province, Chin PR.
4. Canadian Solar International Ltd, Hong Kong.
5. M/s China Sunergy (Nanjing) Co Ltd, Nanjing, China PR.
6. M/s CEEG (Shanghai) Solar Science Technology Co Ltd, Shanghai, China PR.
7. M/s CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR.
8. M/s JA Solar Technology, Yangzhou, China PR.
9. M/s Shanghai JA Solar Technology Co Ltd, Shanghai, China PR.
10. M/s JiangAo Solar Co Ltd, Ningjin, Hebei, China PR.
11. M/s Baoding Tianwei Solar Films Co Ltd, Baoding City, Hebei Province, China PR.
12. Motech Industries INC, Tainan City, Chinese Taipei.
13. M/s Sunwell Solar Corporation, Tauyuan, Chinese Taipei.
14. M/s Del Solar Co Ltd, Zhunan Township, Mioli County, Chinse Taipei.
15. M/s First Solar Malaysia SDN BHD, Kulim, Malaysia
16. M/s First Solar, Inc , Tempe, Arizona, USA
17. M/s First Solar GMBH, Rheinstr, MAINZ, Germany.
18. M/s Q-Cells Malaysia SDN BHD, Selangor Darul Ehsan, Malaysia.

ix. The following sampled producers/exporters from the subject countries along with their related/connected parties filed the exporters questionnaire and MET (as applicable) responses:

1. M/s Wuxi Suntech Power Co Ltd, Wuxi, China PR.
2. M/s Canadian Solar Manufacturing (Changhsu) Inc, Changshu City, Jiangsu Province, China PR.
3. M/s Canadian Solar Manufacturing (Luoyang) INC, Luoyang City, Henan Province, Chin PR.
4. M/s Canadian Solar International Ltd, Hong Kong.

5. M/s China Sunergy (Nanjing) Co Ltd, Nanjing, China PR.
6. M/s CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR.
7. M/s CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR.
8. M/s JA Solar Technology, Yangzhou, China PR.
9. M/s Shanghai JA Solar Technology Co Ltd, Shanghai, China PR.
10. M/s Shanghai JA Solar PV Technology Co., Ltd, China PR.
11. M/s JiangAo Solar Co Ltd, Nangjin, Hebei, China PR.
12. M/s Baoding Tianwei Solar Films Co Ltd, Baoding City, Hebei Province, China PR.
13. M/s Motech Industries INC, Tainan City, Chinese Taipei.
14. M/s First Solar, Inc, Tempe, Arizona, USA.
15. M/s First Solar GMBH, Rheinstr, MAINZ, Germany.
16. M/s First Solar Malaysia SDN BHD, Kulim, Malaysia
17. M/s Q-Cells Malaysia SDN BHD, Selangor Darul Ehsan, Malaysia.

x. Importers Questionnaire was sent to the following known importers/users of subject goods in India calling for necessary information in accordance with Rule 6(4) of the Rules:

1. Access Solar Ltd.
2. Ammini Group.
3. Jain Irrigation Systems Ltd.
4. KL Solar Company Pvt. Ltd.
5. Kotak Urja Pvt. Ltd.
6. PHOTONIX Solar Private Limited.
7. PLG Power Limited.
8. JJ PV Solar Pvt Ltd.
9. Ever Green Solar System India Pvt. Ltd.

xi. In response, the following importers/users in India have filed importers questionnaire response:

1. Kiran Energy Solar Pvt. Ltd.
2. Louroux Bio Energies Ltd.
3. ACME Solar Energy Pvt Ltd.

xii. Apart from the respondent exporters and importers, the following other interested parties have also made submissions during the course of the investigation:

1. Solar Power Developers Association.
2. Solar Independent Power Producers Association.
3. Embassy of United States of America.
4. China Chamber of Commerce For Import & Export of Machinery & Electronic Products (CCCME).
5. Punj Lloyd Infrastructure Ltd.
6. Embassy of China.
7. Jain Irrigation Systems Ltd.
8. High Commission of Malaysia.
9. Vikram Solar.
10. M and B Switchgears Limited.
11. ACME Solar Energy Pvt Ltd.
12. Gujarat Borosil Ltd.
13. Louroux Bio Energies Ltd
14. Welspun Solar AP Pvt Ltd.
15. US India Business Council
16. Solar Power India
17. MOFCOM, China
18. National Solar Energy Federation of India
19. Renesola Jiangsu Ltd- China PR
20. Perlight Solar Co. Ltd.- China PR
21. Jinko Solar Co. Ltd- China PR
22. Hengdian Group DMEGC Magnetics Co. Ltd.- China PR
23. Changzhou Trina Solar Energy Co. Ltd- China PR
24. Hanwha Solar One (Qidong) Co. Ltd
25. ASSOCHAM
26. National Manufacturing Competitive Council (NMCC)
27. Centre for Science & Environment

xiii. Certain other importers/users also expressed their interest in the investigation, but did not make any relevant submission.

xiv. Views received from Ministry of Environment and Forests (MOEF) and Ministry of New and Renewable Energy (MNRE), concerning the present investigation, have also been discussed in this final finding.

xv. Before initiating the investigation, the Authority had requested the concerned Administrative Ministry to provide details of the producers of the subject goods in India. On the basis of details obtained from the concerned Administrative Ministry, the following other domestic producers

of subject goods were requested to provide costing/injury information along with details about their import position and support/opposition to the application filed by the domestic industry:

1. Moser Baer Solar Ltd.
2. Moser Baer Photo Voltaic Ltd.,
3. Euro Multivision Ltd
4. Tata BP Solar India Ltd
5. Emmvee Solar Systems Pvt Ltd
6. HHV Solar Technologies Pvt Ltd
7. Green Brilliance Energy Pvt Ltd,
8. Alpex Solar Pvt Ltd
9. Vikram Solar Pvt Ltd,
10. Ajit Solar Pvt Ltd,
11. PV Power Technologies Pvt Ltd,
12. Solar Semiconductor Pvt Ltd,
13. Lanco Infratech Ltd,
14. Waaree Instruments Ltd,
15. Evergreen Solar Systems India Pvt Ltd,
16. Photonix Solar Pvt Ltd,
17. Goldi Green Technologies Pvt Ltd,
18. Borosil Glass Works Ltd,
19. Modern Solar Pvt Ltd,
20. Topsun Energy Ltd,
21. XL Energy Ltd,
22. Bharat Heavy Electricals Limited (BHEL),
23. CEL,
24. Maharishi Solar Technology,
25. KL Solar,
26. Kotak Urja Pvt. Ltd.
27. Microsol,
28. Photon Energy Systems
29. Photonix,
30. PLG Power,
31. Premier Solar Systems (P) Ltd,
32. Rajasthan Electronics & Instruments Ltd,
33. Reliance Industries Ltd,
34. Shurjo,
35. Surana Ventures,
36. Titan Energy,

37. UPV Solar - Udhaya Energy Photovoltaics Pvt Ltd,
38. USL Photovoltaics PVT Ltd,
39. Yash Birla,

xvi. However, except Moser Baer Solar Ltd, Moser Baer Photo Voltaic Ltd. and Tata BP Solar India Ltd, none of the supporting parties furnished any costing/injury information.

xvii. Request for extension of time to file the questionnaires' response was received from some interested parties. The Authority granted the time extension, keeping in view the time bound nature of the anti-dumping investigations.

xviii. The Authority provided a copy of the non-confidential version of the application to the known exporters and to the Embassies/Representatives of the subject countries in India in accordance with Rule 6(3) supra;

xix. The Authority also made available non-confidential version of the evidences presented by various interested parties in the form of a public file kept open for inspection by the interested parties;

xx. The applicant provided import information based on secondary source i.e. Impex Statistic Services for the injury period including the POI at the time of application. Post-initiation, the domestic industry submitted data from the Directorate General of Commercial Intelligence and Statistics (DGCI&S) also. A request was also made by the Authority to the Directorate General of Commercial Intelligence and Statistics (DGCI&S) to arrange details of imports of subject goods for the relevant periods. Information received from the DGCI&S has been relied upon by the Authority in the present investigation.

xxi. The Non-injurious Price based on the cost of production and cost to make and sell the subject goods in India based on the information furnished by the domestic industry on the basis of Generally Accepted Accounting Principles (GAAP) and Annexure III to the Anti-dumping Rules has been worked out so as to ascertain whether Anti-Dumping duty lower than the dumping margin would be sufficient to remove injury to the Domestic Industry.

- xxii. Information provided by the interested parties on confidential basis was examined with regard to sufficiency of the confidentiality claim. On being satisfied, the Authority has accepted the confidentiality claims, wherever warranted and such information has been considered confidential and not disclosed to other interested parties. Wherever possible, parties providing information on confidential basis was directed to provide sufficient non confidential version of the information filed on confidential basis
- xxiii. Investigation was carried out for the period starting from 1st January 2011 to 30th June, 2012 (POI). The examination of trends, in the context of injury analysis, covered the periods April 2008-March 2009, April 2009-March 2010, April 2010-March 2011 and the POI.
- xxiv. The Authority held Oral Hearing on 18th July, 2013 to hear the interested parties orally. The interested parties present at the time of hearing were advised to file written submissions of the views expressed orally and were also given an opportunity to file rejoinders to the views expressed by other interested parties. The written submissions and rejoinders received from interested parties have been considered by the Authority to the extent considered relevant.
- xxv. Information provided by the domestic industry and the cooperating producers/exporters in the subject countries were verified by the Authority to the extent considered necessary.
- xxvi. In accordance with Rule 16 of Rules Supra, the essential facts of the investigation were disclosed to the known interested parties vide disclosure statement dated 13th May, 2014 and comments received thereon, considered relevant by the Authority, have been addressed in this final finding.
- xxvii. *** in this final finding notification represents information furnished by an interested party on confidential basis, and so considered by the Authority under the Rules.
- xxviii. The exchange rate adopted for the POI is 1 US\$=Rs.48.67.

6. Post initiation, the name of the applicant has been amended as Indian Solar Manufacturers Association (hereinafter also referred to as the applicant).

B. PRODUCT UNDER CONSIDERATION AND DOMESTIC LIKE ARTICLE

7. The product under consideration (PUC) in the present investigation is "Solar Cells whether or not assembled partially or fully in Modules or Panels or on glass or some other suitable substrates" originating in exported from China PR, Malaysia, Chinese Taipei and USA. As stated by the applicant, Solar Cells are manufactured through two technologies in India i.e. crystalline silicon technology and thin film technology. Solar cells produced through both the technologies are covered under the product under consideration
8. Solar cells are also known as Photovoltaic Cells in the market parlance. Photovoltaic is the direct conversion of sun light into electricity at the atomic level. Some materials exhibit a property known as the photoelectric effect that causes them to absorb photons of light and release electrons. When these free electrons are captured, electric current results, which can be used as electricity. Semiconductor materials such as silicon used in microelectronics industry possess such photoelectric effect. When light energy strikes the semiconductor material, electrons are knocked loose from the atoms in the semiconductor material. If electrical conductors are attached to the positive and negative sides, forming an electrical circuit, the electrons can be captured in the form of an electric current i.e. electricity. The subject goods are classified under Customs Classification chapter heading 85414011. However, the customs classification is indicative only and in no way binding on the scope of the present investigation.

Submissions made by the Opposing Interested Parties

9. The submissions made by the opposing interested parties with regard to the product under consideration and like article during the course of the investigation and considered relevant by the Authority are as follows:
 - i. Designated Authority has made only a "prima facie" determination of the product under consideration at the stage of initiation of the investigation and therefore it is impermissible to proceed with the investigation on the basis of prima facie determination.
 - ii. The present petition and investigation combined for Thin Film and c-Si PV products is inappropriate. Subject goods produced through Thin Film Technology must be excluded from the scope of the investigation as they

are not like article. Solar cells of crystalline and thin film technologies differ in terms of basic raw materials, production process, physical properties, efficiencies, etc. Both have limited interchangeability/substitutability along with different uses. A module to module interchangeability between crystalline and thin film technology is not possible.

- iii. Domestic industry is not manufacturing thin film and therefore the same should be excluded from the purview of the product under consideration.
- iv. As regards similarity in functions & usages between Thin Film and c-Si PV products, neither of the two products can generate useable electricity without the Balance of System (BoS). Thus, Thin Film and c-Si PV are only intermediate products whose only function is to get integrated with the BoS and then generate useable electricity. Since these are only intermediates of complete solar power plant, these per se do not perform any function (unless integrated into system) and are therefore not interchangeable. Only after integration with the Balance of System that the two products can generate useable electricity. That makes them two alternatives and not like article.
- v. Petitioners have sought to include cells, modules and thin film within the scope of product under consideration on the grounds that cells are like articles to modules and modules is like articles to thin films. It would be illegal to include two products in the product scope, merely because the two are like articles. Product scope includes both cells and modules and module is a value added product and hence should be treated as separate product. Also, all the domestic producers are not manufacturing modules. Moreover, there are a number of other types of solar power systems such as CSPV Systems (Concentrated Solar Photovoltaic) and CSP Systems (Concentrated Solar Thermal Power), which perform function similar to the function performed by PV systems but not included in the purview of the present investigation.
- vi. Thin film and crystalline products are not substitutable either from producers' point of view or from consumers' point of view. The thin film producers cannot produce crystalline products and similarly crystalline product producers cannot produce thin film products. The two do not share the same product characteristics. The consumers cannot use the two interchangeably.

- vii. Thin film and crystalline products are not homogenous product. US ITC has held in its findings that crystalline and thin film products are unlike articles. The European Commission also observed in its findings that thin film PV products have different physical, chemical and technical characteristics compared to the product concerned and are clearly excluded from the product definition. The Indian Designated Authority should also act accordingly.
- viii. Petitioners contend that crystalline and thin films have been interchangeably used in India. This statement is factually incorrect. It is not possible for the consumers to interchangeably use thin film and crystalline modules. At the stage of conceiving the project, a developer has option of choosing between the two technologies. However, once the developer has chosen one of the two technologies and ordered the products including balance of systems, it is not feasible for the developer thereafter to switch to other technology.
- ix. It is not possible to substitute thin film with a crystalline module at the stage of replacement. As far as expansions are concerned, if these are separate additions, then a developer can alternatively use any of the two products. However, if these expansions are linked to the existing project and share some of the balance of system from the existing projects, the consumer cannot replace a thin film with crystalline and vice-a-versa.
- x. The petitioners have contended that crystalline cells/modules and thin film products are comparable in price at project level. Whether or not there is significant difference between crystalline cells/modules and thin films at projects level is entirely immaterial in deciding whether or not there is significant difference in the two at product level. However, the fact that the two are comparable in price at project level does not mean that the two are comparable in terms of price at product level.
- xi. Crystalline and thin films are at best alternate products and not same product. An alternate article is “another article”, which is different in character from the article, but which performs the same functions or uses. Alternate article satisfies the same requirement. As alternate products they may serve the same use. They are, however, not the same product having same use.

- xii. Thin film prices are lower than crystalline prices. Despite so, majority imports in to India are of crystalline cells. Huge imports of thin film only show that this is an alternate product available to the project developers. If these were indeed perfectly substitutable, given lower price of thin film, entirety or at least majority of the imports would have been of Thin Film products.
- xiii. There is no dispute that thin film and crystalline products are competing products. However, all competing products are not like articles. Indeed, all competing products may not be the same product, whereas all like products must be competing products.
- xiv. The modules namely New Edge modules, Quartech module with innovative 4 bus bar solar cell technology, BIPV modules and Andes Solar Home System, which are not manufactured by the domestic industry, should be excluded from the scope of the PUC. New Edge modules combine high quality and performance, Quartech module with innovative 4 bus bar solar cell technology shortens current transmission path between the bus bars, thus reducing cell resistance loss and increasing module output by 3%, BIPV modules, which uses double low iron tempered glass with solar cells laminated in between are ideal for roofs, skylights and/or facades and Andes Solar Home Systems are off-grid solar power systems, providing electricity to homes and communities with no access to electricity or in an emergency. Product lines above 280W or those having efficiency above 16.5% should also be excluded from the scope of PUC since the domestic industry does not manufacture the same. Specialized products viz; QSAR II (mono crystalline) and WARATAH (poly crystalline) should also be excluded from the scope of PUC.
- xv. Indian products are inferior in quality and product warranties given by the exporters are for a longer period as high as 25 years.
- xvi. ADD should only be imposed on modules and not on cells. Indian solar cell manufacturing is about 700 MW however the module manufacturing is around 1250 MW. Capacity of solar manufacturer being low coupled with poor utilization will lead to low module manufacturing capacity utilization.

Submissions made by the domestic industry

10. The submissions made by the domestic industry, regarding product under consideration and like article, during the course of the investigation and considered relevant by the Authority are as follows:

- i. Product scope is defined appropriately. There is no legal basis to say PUC should have been frozen at the time of initiation. Initiation notification defines PUC appropriately and without any ambiguity. Use of the term *prima facie* did not leave the PUC undefined and vague.
- ii. The product under consideration (PUC) is Solar Cells whether or not assembled partially or fully in Modules or Panels or on glass or some other suitable substrates.
- iii. There is no basis in the argument that solar cells and modules are different products. Solar cell is a solid state electrical device that converts sunlight directly into electricity by the photovoltaic effect. To make practical use, solar cells are placed on devices like panels/module etc. A module is nothing but an array of solar cells. EU has considered cells and modules as one product in their ongoing investigation against China PR.
- iv. Solar Cells are manufactured through two technologies in India i.e. crystalline silicon technology and thin film technology. Solar cells produced through both the technologies are covered under product under consideration. PUC includes solar cells of crystalline and thin film technology. Solar cells through both the technologies have same end use and are like articles since both technologies use semiconductor material as the basic raw material. Under c-Si Technology or crystalline technology, Crystalline Silicon wafer based solar cells are made separately. A mosaic of multiple cells is created on a substrate and the cells are interconnected by Copper (Cu) ribbon and encapsulated using EVA and back sheet. Under thin film technology, the semiconductor material is deposited on a substrate and then scribed into a mosaic of cells and the cells are interconnected by metallic connection and encapsulated with EVA and back sheet to form modules. Both products look similar in appearance. Solar cells manufactured under both the technologies

operate on the same principle using photoelectric effects to produce electricity. Solar cells of both the technologies are used to build photovoltaic power systems that generate electricity. Solar cells manufactured under both the technologies use p-n-junction diodes to transmit electricity in the required direction. Under both the technologies, the photovoltaic power system is built by interconnecting the respective modules i.e., c-Si modules or a-Si modules. For interconnecting the modules, cables, inverters, switches, combiner boxes, etc are used under both the technologies. Such items are known as 'Balance of System' (BOS) to complete the PV power system. Modules manufactured using both the technologies are either fitted on roof-top or ground mounted. They have common installation and commissioning teams and BOS suppliers in the value chain.

- v. The Indian market predominantly consists of Solar Power projects set up under Jawaharlal Nehru National Solar Mission (JNNSM) of the Central Government or other schemes of the State Governments concerned. In such projects, the solar cells are ground-mounted. The power generated from these power plants are connected to the national or regional grid. They are also called 'on-grid' market. There is also a market for roof-top systems that are not connected to the grid which are called 'off-grid' systems. The current size of the ground mounted 'on-grid' solar power systems in India during the period of 2011-2012 is around 445.55 MW. The market for roof-top mounted 'off-grid' system is minuscule and is approximately 11 MW. In the on-grid market, there is no discernible preference for the technology. End-users have no restriction in the usage of either technology. In fact, a power project may be built using solar cells of either technology. All projects under JNNSM or under the various States neither differentiate the technology nor award separate auction price for projects developed using different technologies. Solar cells of both the technologies are interchangeably and simultaneously used in such power projects.
- vi. Even for off-grid market, there is no preference for technology. Capital subsidy provided by the government is based on size & application and is independent of technology used. The National Solar Mission policy document goes on to specify both the

crystalline & Thin Film technologies can be used and mentions the certifications required for each. Thus, project developers do not have any particular preference for either technology and they use both the technologies interchangeably and simultaneously within the same project.

- vii. Solar cells of both the technologies are sold through same distribution channel and even have same set of customers who are predominantly large scale solar power project developers.
- viii. Solar cells of Crystalline and Thin Film technologies can be simultaneously used in a power project and is a perfect substitute to each other. In the event of exclusion of Thin Films from the scope of anti-dumping duties the buyer's choice would be for Thin Films only. Thus, subject goods of crystalline and thin film technology should be treated as like product.
- ix. The final finding of USITC as quoted below shows cells and modules are not two different products:

“Based on the record in the preliminary investigations, the Commission defined a single domestic like product, CSPV cells and modules (collectively “CSPV products”), that is coextensive with the scope of the investigations. In so doing, the Commission considered whether to treat CSPV cells and CSPV modules as separate domestic like products, and it considered whether to define “off-grid” CSPV modules as a separate domestic like product. No party had advocated in favor of finding any of these items to be separate domestic like products, and the Commission found no basis on that record to do so. In these final investigations, no party disagrees with, and the record continues to support, the Commission’s findings on these two issues from its preliminary determinations. Consequently, we do not treat CSPV cells and CSPV modules as separate domestic like products, nor do we define “off-grid” CSPV modules as a separate domestic like product.”(Italics supplied)

- x. As per MNRE information, usage of Thin Film modules in the Batch II (2012-2013) of JNNSM Phase I project is about 78% which was

around 51% in JNNSM Batch I (2011-12), as against the global installation of Thin films which is around 15%. Hence, any claim of limited substitutability/interchangeability and user preference for crystalline technology due to space constraints/design/physical specifications etc is baseless.

- xi. The subject goods of crystalline and thin film technology imported into India are like article to the domestically manufactured subject goods. Thus, the issue of non-production of thin film by the domestic industry is irrelevant.
- xii. Difference in technology and allied process does not render products different. "Solar cells whether or not assembled in modules or panels" as per ITC (HS) classification clearly covers crystalline and thin film in cell and module/panel form.
- xiii. Facts of the USA and EU cases with regard to inclusion of thin films are different from Indian case. The applicants in both the countries never asked for the inclusion of thin films in the scope of the PUC. Decision of EU and USA authority with regard to inclusion/exclusion of thin film in the product scope is out of place in the Indian context as the PUC involved in the current investigation is different from that of US and EU investigations.
- xiv. Substitutability in the present case denotes availability of subject goods of two technologies with the project developers which are interchangeable also. The developer can choose any technology or any combination at the design phase. Availability of two technologies itself shows direct competition between the two technologies. Developer's choice at the design stage is primarily governed by cost of modules. BOS, land etc are required under both the technologies. Thus, the choice of developer would always be to source the dumped material. Thus, CSPV and thin films are substitutes.
- xv. Cost of crystalline and thin films are comparable at the product or project level, although cost of thin film is a little less. Since the cost of both the technologies is comparable at the project level, the developer would always look for a low priced dumped product irrespective of the technology. Thus, leaving thin films without anti-

dumping duties would lead to complete shift of imports into thin films.

- xvi. The subject goods, which are being dumped into India, are identical to the goods produced by the domestic industry. There are no known differences either in the technical specifications, functions or end-uses of the dumped imports and the domestically produced subject goods. Hence, the goods produced by the domestic industry are 'Like Article' to dumped goods from subject countries. There is no difference in the dumped goods and the product under consideration manufactured by the petitioners. The two are technically and commercially substitutable and interchangeable hence should be treated as 'like article' under the Anti-Dumping Rules.
- xvii. Contentions of exporters especially from China with regard to inclusion of thin film in the PUC are contrary to their views before USA in the anti-dumping investigation concerning solar cells. Chinese exporters vide their association (CCCME) filed their response before the US authority. CCCME made a reasoned argument for inclusion of thin film in the PUC before the US authority. However, before the Indian Authority, Chinese exporters have argued that thin film is not like article.
- xviii. With regard to domestic industry not manufacturing thin film products, injury information with regard to one of the domestic producers of thin films products i.e. Moser Baer is provided to the Authority. Moser Baer should be considered within the scope of domestic industry within the meaning of Rule 2(b) of AD Rules. Without prejudice, even if the domestic industry is not manufacturing thin film products, they cannot be excluded from the scope of PUC as long as they are 'like article' to subject product being manufactured by the Indian Industry under rule 2 (d) of AD Rules. Past cases by DGAD and also foreign agency like EC upholds the view that production of a particular type by the domestic industry is immaterial once the 'like article' is determined.
- xix. With regard to the contention that not all the domestic producers are manufacturing modules, it should be noted that cells and modules are not two different products. Cells are manufactured to

be used in modules. Module is nothing but a frame to put multiple cells together. Dumping/injury analysis of cells to cell and module to module basis is illogical as imports of modules would have impacted the cell producers also and vice versa.

EXAMINATION BY THE AUTHORITY

11. The Authority notes that the product under consideration (PUC) in the present investigation is "Solar Cells whether or not assembled partially or fully in Modules or Panels or on glass or some other suitable substrates", originating in exported from China PR, Malaysia, Chinese Taipei and USA. As stated by the applicant, Solar Cells are manufactured through two technologies in India i.e. crystalline silicon technology and thin film technology. Solar cells produced through both the technologies are covered under the product under consideration
12. Solar cells are also known as Photovoltaic Cells in the market parlance. Photovoltaic is the direct conversion of sun light into electricity at the atomic level. Some materials exhibit a property known as the photoelectric effect that causes them to absorb photons of light and release electrons. When these free electrons are captured electric current results, which can be used as electricity. Semiconductor materials such as silicon used in microelectronics industry possess such photoelectric effect. When light energy strikes the semiconductor material, electrons are knocked loose from the atoms in the semiconductor material. If electrical conductors are attached to the positive and negative sides, forming an electrical circuit, the electrons can be captured in the form of an electric current i.e. electricity. The subject goods are classified under Customs Classification chapter heading 8541 40 11. However, the customs classification is indicative only and in no way binding on the scope of this investigation.
13. With regard to like article, Rule 2(d) of the Anti-dumping Rules provides as under: -

"like article" means an article which is identical or alike in all respects to the article under investigation for being dumped in India or in the absence of such article, another article which although not alike in all respects, has characteristics closely resembling those of the articles under investigation;

14. The Authority notes that there is no known difference in product under consideration produced by the Indian industry and exported from subject countries. Product under consideration produced by the Indian industry and imported from subject countries are comparable in terms of characteristics such as physical & chemical characteristics, manufacturing process & technology, functions & uses, product specifications, pricing, distribution & marketing and tariff classification of the goods. The two are technically and commercially substitutable. The consumers are using the two interchangeably.

15. The Authority notes that the domestic producers namely M/s Indosolar Ltd, M/s Websol Energy Systems Ltd, and M/s Jupiter Solar Power Limited, constituting domestic industry in the present investigation are producers of Crystalline Cells/Modules and does not manufacture thin films. As stated by the domestic industry, the only domestic producer which holds the capacity to manufacture thin film and manufactured thin film of a very small quantum during the POI is Moser Baer units. However, Moser Baer being a major importer of the subject goods, originating in or exported from the subject countries, cannot be considered as constituting domestic industry under the Rules. Therefore, the submission of the domestic industry that M/s Moser Baer is holding the capacity to manufacture or has manufactured thin films during the POI is not relevant to the present investigation.

16. The various submissions made by the interested parties with regard to the scope of PUC and domestic like article and considered relevant by the Authority are examined and addressed as follows;

- i. As regards the submission that PUC should have been frozen while initiating the investigation, the Authority notes that the PUC has been defined unambiguously by providing a detailed product description in the initiation notification itself. As regards the submission that the PUC has been defined by the Authority only *prima facie* and not conclusively at the time of initiation of the investigation, the Authority notes that the product under consideration and the scope of the product under consideration have been defined clearly and elaborately in the initiation notification itself and therefore does not leave any scope for any ambiguity as such.
- ii. As regards the submission that product scope includes both cells and modules and module is a value added product and hence should be

treated as separate product, the Authority notes that to make practical use, solar cells are placed on devices like panels/module etc and are not separate product per se. Solar cells are manufactured to be used in Modules. A solar module/panel is nothing but a packaged, connected assembly of solar cells which would render generation of electricity through photovoltaic technique. It is also noted that there is no major value addition or major manufacturing process involved in placing cells on a module/panel. Submissions on record of the Authority show that a lot of module manufactures are importing cells from subject countries and are assembling them into modules. Authority holds that Cells and Modules are not different products as modules or panels are nothing but an array of cells to make the practical use of cells.

- iii. The Authority also notes that similar contentions have been raised before the EU and US authorities in respect of their anti-dumping investigations concerning imports of similar products from China. The conclusion drawn by the authorities in EU and US in their findings are *inter alia* extracted below:

USITC Investigation Nos. 701-TA-481 and 731-TA-1190
November, 2012

Based on the record in the preliminary investigations, the Commission defined a single domestic like product, CSPV cells and modules (collectively “CSPV products”), that is coextensive with the scope of the investigations. In so doing, the Commission considered whether to treat CSPV cells and CSPV modules as separate domestic like products, and it considered whether to define “off-grid” CSPV modules as a separate domestic like product. No party had advocated in favor of finding any of these items to be separate domestic like products, and the Commission found no basis on that record to do so. In these final investigations, no party disagrees with, and the record continues to support, the Commission’s findings on these two issues from its preliminary determinations. Consequently, we do not treat CSPV cells and CSPV modules as separate domestic like products, nor do we define “off-grid” CSPV modules as a separate domestic like product.

EC Council Implementing Regulation (EU) No 1238/2013 Dated
2nd December, 2013

(33) Interested parties reiterated that cells and modules are not a single product, and should therefore be assessed separately, mainly repeating arguments already addressed in recitals (27) to (39) to the provisional Regulation. Unlike wafers, however, cells and modules do share the same basic property, i.e. the ability to generate electricity from sunlight. These arguments were therefore rejected.

- iv. As regards the submission that subject goods produced through Thin Film Technology must be excluded from the scope of the investigation as they are not like article the Authority examines the contentions as follows;
 - a) The subject goods are produced through two technologies i.e crystalline photovoltaic technology and thin film technology. Photovoltaic systems use cells to convert solar radiation into electricity. The cell consists of layers of a semi-conducting material. When light shines on the cell, it creates an electric field across the layers, causing electricity to flow. Crystalline silicon cells are made from thin slices cut from a single crystal of silicon or from a block of silicon crystals. A thin-film solar cell, also called a thin-film photovoltaic cell (TFPV), is a solar cell that is made by depositing one or more thin layers (thin film) of photovoltaic material on a substrate preferably made of glass.
 - b) The Authority notes that the product under consideration as defined for the purpose of present investigation includes subject goods of both crystalline and thin film technology. Subject goods of both the technologies are classified under the same ITC (HS) subheading i.e. 85414011. The Authority also notes that the Information Technology Agreement between India and other WTO members vide Ministerial Declaration on Trade in Information Technology Products No. WT/MIN (96)/16 dated 13th December, 1996, lists subject goods of both the technologies under unique heading i.e. *photovoltaic cells whether or not assembled in modules or made up into panels*'. Thus, by virtue of the same the product is imported into India without any Customs duties.
 - c) The Authority further notes that although there are differences in production technology, basic raw materials and production process,

subject goods of both these technologies have a number of common characteristics such as semiconductor materials possessing photoelectric effect are used in both the technologies rendering basic nature of raw materials the same. Production process involved is different but principles are the same which is photoelectric effects to produce electricity. Also, finished products through both the technologies have similar basic properties and functional use.

- d) The Authority also notes that such similarities can be seen in transmission methodology also i.e. subject goods manufactured through both the technologies use p-n-junction diodes to transmit electricity in the required direction, under both the technologies, photovoltaic power system is built by interconnecting the respective modules i.e., crystalline modules or thin film modules. For interconnecting the modules, cables, inverters, switches, combiner boxes, etc are used under both the technologies. Such items are known as 'balance of system' or BoS to complete the PV power system. Modules manufactured using both the technologies are either fitted on roof-top or ground mounted.
- e) It is also noted that the efficiency level of crystalline modules and thin film modules is not similar and crystalline modules are stated to be having higher efficiency level as compared to thin films. It is also given to understand that the difference in efficiency levels may vary between 5% to 7% under these technologies and the difference in efficiency might lead to a higher requirement of modules under thin film technology to get the same output on account of difference in efficiency. However, the difference in efficiency level do not render crystalline module and thin film modules two different products. It is a well-settled jurisprudence that quality and the so-called efficiency are not relevant for defining the scope of the Product under Consideration in an anti-dumping investigation. Since the products of both the technologies are ultimately used for generating electricity out of sun light, the consumers perceive crystalline and thin film products as one single product. Therefore, it is a common man's knowledge that Crystalline and Thin Film products are directly competing with each other in the market and are therefore functionally substitutable.

- f) It is further noted that subject goods of both the technologies are substitutes and a solar power plant can be set up using either of the technologies or a combination of both in separate lines at the design phase as technology per se do not render any restraints on the end user.
- g) As regards the contention that the consumers who have got space constraints can't use thin film and therefore both the technologies have limited substitutability, the Authority notes that first of all space is not a major constraint in India when it comes to larger solar projects. Moreover, solar cells of both the technologies are used both in ground mounted as well as roof-top fitments. Therefore, the argument that requirement of bigger space for using thin films makes it different from the crystalline solar cells does not hold good.
- h) Also, the landed price of imports shows that the consumers were getting the material at comparable prices indicating direct competition between crystalline and thin film products. Commercial substitutability is also visible between subject goods produced through two technologies as the price difference between crystalline solar cell modules and thin films is not significant.
- i) Authority also makes note of the fact that thin film products were introduced in the market as a cheaper solution against the then high priced crystalline technology. However, the gap in the cost and price of crystalline and thin film products reduced over the years with reduction in prices of silicon wafers. The import information shows that during the POI crystalline modules were imported at a price of about Rs. 53/Watt from subject countries while thin film imports from subject countries were at about Rs. 51/watt showing proximity and closeness between the products of both the technologies. About 25% of total imports of subject goods into India from subject countries during the POI were constituted by thin films.
- j) With regard to the contention that there is a limited interchangeability on a module to module basis and between the technologies, the Authority notes that there is a limited interchangeability between the technologies as the user would have to change the Balance of System also while changing the modules. However, the limited interchangeability cannot be construed as a

significant factor to break the likeness of crystalline and thin film technology as the nature of product suggests that the chances of a developer converting from an existing crystalline project to a thin film project is almost illusive as there is no rational behind it. Authority holds that any limited interchangeability between the technologies when there exists substitutability between the technologies do not render crystalline and thin film solar cells two different products. The Authority also notes that it has not been substantiated by the opposing parties that imposition of duties only on crystalline products would not lead to a shift in imports from crystalline products to thin film products and thin film would not replace crystalline products in the market.

k) The Authority concludes that different technologies as such do not make end products different and subject goods of crystalline and thin film technologies are required to be treated as like article for the purpose of defining the 'product under consideration' in this investigation. While determining this, the Authority acknowledges that the subject goods of crystalline and thin film technology broadly differs in terms of (a) Technology (b) usage of basic raw materials(c) production process (d) plant and machinery (e) Balance of System and (f) efficiency levels. However, the Authority places its reliance on the following conclusive similarities and factors to uphold that crystalline and thin film products are 'like article' and therefore substitutable:

- i. Difference in technology do not alter or impede the end uses of solar panels through either technology;
- ii. Even though the technology is different the principle adopted in both the technologies are similar i.e. photovoltaic process to convert sunlight into electricity;
- iii. Even though the basic raw materials differ, technical character of raw materials used under both the technologies have the qualities to suit photovoltaic technology;
- iv. Crystalline Solar cells are semiconductor p-n junction diodes which converts light into electricity. Similarly, thin film based solar cells are also semiconductor p-n junction diodes and convert light into electricity.

- v. There is a direct competition between both the technologies as the products of both the technologies can produce power out of solar light and developers can chose either of the technologies for their power projects in the inception stage and thereafter simultaneously in independent lines.
- vi. Significant penetration levels of thin films products in India which is evident as 25% of the total imports from subject countries were of thin film products;
- vii. Very insignificant price difference at per watt level between the products extending commercial substitutability as the difference in landed price of thin film and crystalline modules were less than 5% during the POI;
- viii. Subject goods are offered in module/panel form to the ultimate end user under both the technologies;
- ix. The cost/pricing is also decided based on factors such as Watt per unit, efficiency of the cell/modules and the competition in the market parlance between the crystalline and thin film products are also generally based on such factors under both the technology;
- x. The Solar Cells of all technologies are classified under common Customs Classification chapter heading 8541 40 11 with common tariff heading.
- xi. Imposition of antidumping duty on the product of one technology, which is functionally substitutable with the product of another technology would be futile, as the product having no duty can replace the other in the market.
- xii. The domestic content criteria laid down by the MNRE for the JNNSM projects do not differentiate between the technologies.

v. In view of the above position, the Authority notes that solar cells made of thin film technology and crystalline technology is technically and commercially substitutable and is like articles within the meaning and

scope of Rule 2(d) of the Anti-dumping Rules. The Authority also notes that since it is established that thin film products are like article to the crystalline products produced by the domestic industry, the question of non-production of thin film products by domestic industry is irrelevant.

- vi. Even the opposite interested parties have acknowledged that solar cells made of thin film and crystalline technologies are alternative article. The Authority notes that by virtue of being alternative article, they are substitutable.
- vii. Considering the magnitude of contentions raised by interested parties regarding non-production of thin film by the domestic industry, the Authority also takes note of the practices by European Commission in certain anti-dumping investigations as follows:
 - a) In *Cargo Scanning Systems originating from China* (EC No.1242/2009 dated 16 December 2009) the product under consideration was defined as “systems for scanning cargo, based on the use of neutron technology or based on the use of X-rays with an X-ray source of 250 KeV or more, or based on the use of alpha, beta or gamma radiations”. Thus, the PUC covered products based on three different technologies namely neutron technology, x-ray technology and alpha, beta or gamma radiation technology. There was only one domestic producer within the EC and it was argued that cargo scanners with neutron technology or gamma technology were not produced within the European Community. European Commission concluded as follows in their final findings:

(17) In view of the above, it is concluded that all types of systems for scanning of cargo, based on the use of neutron technology or based on the use of X-rays with an X-ray source of 250 KeV or more or based on the use of gamma radiations, currently falling within CN codes ex 9022 19 00, ex 9022 29 00, ex 9027 80 17 and ex 9030 10 00 and motor vehicles equipped with such systems currently falling within CN code ex 8705 90 90 share the same basic physical and technical characteristics, have the same basic end-uses and compete with one another on the Union market. On this basis, the conclusions in recitals (10) to (15) of the provisional Regulation are hereby confirmed to the extent they do not refer to alpha and beta radiation technologies”.(Emphasis Added)

b) In the matter of *Black Color formers* originating in Japan (COUNCIL REGULATION (EC) No 2263/2000) EC held as follows;

(33) It was argued that since the Community industry only produces two types of black color formers, i.e. ODB-1 and ODB-2, the product under consideration should be limited only to those types produced by the Community industry.

(34) It should firstly be noted that, in anti-dumping proceedings, the product under consideration and the like product are defined by reference to its basic physical, chemical and/or technical characteristics and its basic use. Once the product under consideration is defined, i.e. the product exported from Japan, it has to be examined whether the product produced and sold domestically, and the product produced and sold by the Community industry in the Community are like products to the product under consideration. In this respect, the fact that a certain product type is not produced in the Community is irrelevant.

c) In the matter of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China [Council Implementing Regulation (Eu) No 1238/2013 EC held as follows;

(49) One interested party claimed that there was no production of mono crystalline cells in the Union, and that their exports of mono crystalline cells were not competing with the Union industry. The investigation showed however that there was indeed production of mono crystalline cells in the Union. This argument was therefore rejected. In any event, the General Court held in Brosmann that the absence of Community production of a particular product type is not decisive.

d) The Authority notes the judgment of the general court (Eighth Chamber) in Brosmann Case (T-401/06) as follows:

"135 The arguments relating to the existence of separate production lines for the manufacture of patented technology footwear, the absence of Community production of that type of footwear and the existence of a patent are not conclusive. The manufacturing process

does not, in itself, influence consumer perception nor, therefore, the interchangeability of a number of types of footwear, if the physical characteristics and the intended use of the products are the same. The same is true of the absence of Community production of patented technology footwear since the decisive question is whether that type of footwear is, on account of its physical characteristics, its intended use and, therefore the perception which consumers have of it, in competition with footwear of Community production. In that context, clearly the fact that a type of footwear enjoys the protection of a patent is not indicative as regards its competitive position with respect to products of Community origin". (Emphasis added)

viii. Authority also takes note of direct competition between crystalline solar producers and thin film producers in the market. Discussion in the Annual Report of 2011 of one of the thin film producers from USA namely First Solar Inc, which is extracted below, shows that a direct competition between crystalline and thin film products exists:

"Competition- The renewable energy, solar energy, and solar module sectors are highly competitive and continually evolving as these sector participants strive to distinguish themselves within their markets and compete within the larger electric power industry. We face intense competition, which may result in significant price reductions, reduced margins, or loss of market share. With respect to our components business, our primary sources of competition are currently crystalline silicon solar module manufacturers, as well as other thin-film module manufacturers and companies developing solar thermal and concentrated PV technologies. Certain of our existing or future competitors may be part of larger corporations that have greater financial resources and greater brand name recognition than we do and, as a result, may be better positioned to adapt to changes in the industry or the economy as a whole. Certain competitors may have direct or indirect access to sovereign capital, which could enable such competitors to operate at minimal or negative operating margins for sustained periods of time.

Among PV module and cell manufacturers, the principal methods of competition include price per watt, production capacity, conversion efficiency, reliability, warranty terms, and payment terms. In 2011, industry average module pricing declined significantly as competitors reduced prices to sell-through inventories in Europe and elsewhere. If

competitors reduce module pricing to levels near or below their manufacturing costs, or are able to operate at minimal or negative operating margins for sustained periods of time, our results of operations could be adversely affected. At December 31, 2011, the global PV industry consisted of more than 150 manufacturers of solar modules and cells. In the aggregate, these manufacturers have installed production capacity that significantly exceeded global demand in 2011. We believe this structural imbalance between supply and demand (i.e., where production capacity significantly exceeds current global demand) will continue for the foreseeable future, and we expect that it will continue to put pressure on pricing, which could adversely affect our results of operations". (Annual Report of FSI for 2011)

- ix. While the Chinese exporters have argued in the present investigation that thin film is different from crystalline cells and vehemently pitched for its exclusion from the purview of the PUC, the Authority notes the following submissions made by the Chinese exporters through CCCME(Association) before the US authorities as extracted below from the USITC final finding Nos. 701-TA-481 and 731-TA-1190 November, 2012:

"In the preliminary investigations, the CCCME Respondents asked to define the domestic like product more broadly than the scope to include thin-film products, which Petitioner opposed. Based on that record, the Commission did not include thin-film products in the domestic like product, but stated it would revisit this issue after concluding this was "a close question" at the time.

In the final investigations, the CCCME Respondents again ask the Commission to define a single domestic like product that includes CSPV cells and CSPV modules as well as thin-film photovoltaic products ("thin-film products"). Based on the Commission's usual six-factor analysis, they argue that CSPV and thin-film products are part of the same domestic like product. Petitioner Solar World contends that the Commission should define a single domestic like product consisting of CSPV cells and modules and not including thin-film products.

The CCCME Respondents argue that CSPV and thin-film products each consist of laminated photovoltaic layers, although thin-film products require less silicon. They note that both products are fitted with junction boxes, connected through inverters, and then combined with BOS equipment for mounting on the ground or roof. They acknowledge that thin-film products convert sunlight into electricity at a lower efficiency range per square meter than multi- and mono-crystalline CSPV products, but they argue that thin-film products work more efficiently in hot-weather conditions and during periods of lower sunlight. In commercial reality, both technologies compete directly to serve large-utility, commercial, and residential-rooftop applications, and both are sold directly to large utilities and through wholesalers and distributors for commercial and residential applications. Whereas one technology may not be used as a “drop-in substitute” for the other and the two technologies would not be mixed within a particular project, the CCCME Respondents argue that both are interchangeable and compete with one another for new solar projects and for government subsidies. They contend that according to industry publications, marketing brochures, annual reports, and questionnaire data, customers and producers perceive both technologies to be competitors, particularly for utility applications, although they admit there is at most minimal overlap in terms of production facilities, processes, and employees. They argue that CSPV and thin-film products are both priced in dollars/kilowatt and that CSPV solar systems compete on a price basis with thin-film solar systems, even if thin-film components tend to be less expensive than CSPV components in a system and thin-film systems cost more to install to achieve the same energy output as CSPV systems. They argue that the price differential for the two systems has declined since 2009 as polysilicon prices dropped. CCCME Respondents’ Preh’g Brief at 4-18”[Source: USITC finding].

- x. As regards the submission that USA and EU in a similar AD investigation found solar cells of crystalline and thin film technology as two different products, the Authority notes that the investigations initiated by DGAD are independent from any such investigations by any other agencies.

However, the Authority has taken note of the exclusion of thin film products from the product scope of PUC by US and Europe. It has also taken a note of the submissions of Chinese exporters through CCCME (Association) before the US Authority that thin film should be included in the product scope and CCCME extended arguments to draw the similarities between solar cells through crystalline and thin film technology. Since subject goods imported into India include solar cells of thin film technology and crystalline technology, these have been appropriately included within the scope of the product under consideration. Further, the Authority notes as follows with regard to the product definition adopted by US and EU which is evidently different from PUC definition in the present investigation:

EU (EC)

"(72) In view of the above, the product scope is definitively defined as crystalline silicon PV modules or panels and cells of the type used in crystalline silicon PV modules or panels, originating in or consigned from the PRC unless they are in transit in the sense of Article V GATT. The cells have a thickness not exceeding 400 micrometres. This product is currently falling within CN codes ex 8501 31 00, ex 8501 32 00, ex 8501 33 00, ex 8501 34 00, ex 8501 61 20, ex 8501 61 80, ex 8501 62 00, ex 8501 63 00, ex 8501 64 00 and ex 8541 40 90.

(73) The following product types are excluded from the definition of the product concerned:

-solar chargers that consist of less than six cells, are portable and supply electricity to devices or charge batteries,

-thin film photovoltaic products,

-crystalline silicon photovoltaic products that are permanently integrated into electrical goods, where the function of the electrical goods is other than power generation, and where these electrical goods consume the electricity generated by the integrated crystalline silicon photovoltaic cell(s),

-modules or panels with a output voltage not exceeding 50 V DC and a power output not exceeding 50 W solely for direct use as battery chargers in systems with the same voltage and power characteristics"(Council Implementing Regulation (EU) No 1238/2013).

US (USITC)

“{CSPV} cells, and modules, laminates, and panels, consisting of {CSPV} cells, whether or not partially or fully assembled into other products, including, but not limited to cleaning, etching, coating, and/or addition of materials (including, but not limited to, metallization and conductor patterns) to collect and forward the electricity that is generated by the cell.

Subject merchandise may be described at the time of importation as parts for final finished products that are assembled after importation, including, but not limited to, modules, laminates, panels, building-integrated modules, building-integrated panels, or other finished goods kits. Such parts that otherwise meet the definition of subject merchandise are included in the scope of this investigation.

Excluded from the scope of this investigation are thin film photovoltaic products produced from amorphous silicon (a-Si), cadmium telluride (CdTe), or copper indium gallium selenide (CIGS).

Also excluded from the scope of this investigation are {CSPV} cells, not exceeding 10,000 mm² in surface area, that are permanently integrated into a consumer good whose function is other than power generation and that consumes the electricity generated by the integrated {CSPV} cell. Where more than one cell is permanently integrated into a consumer good, the surface area for purposes of this exclusion shall be the total combined surface area of all cells that are integrated into the consumer good” (Italics supplied)(Investigation Nos. 701-TA-481 and 731-TA-1190 (Final)

- xi. The Authority also notes that unlike the product definition forming part of the present investigation which includes thin film, EU and US never included thin film in the product scope in their investigations. Relevant extracts of EU and US findings in this respect are *inter alia* extracted below:

EU (EC)

“(296) The investigation showed that although thin film PV products are less expensive than the product under investigation, they only capture a limited market share of the total Union solar market as they have much lower conversion efficiencies and a lower wattage

output than crystalline silicon modules. According to the information available, the market share of thin film products was not significant comparing to the total Union solar market during the IP. Therefore, the findings in recital (208) to the provisional Regulation, that although there may be some competition between the thin film products and the product under consideration, this competition is considered to be marginal, are confirmed. On these grounds, the arguments brought forward in this regard had to be rejected". (Council Implementing Regulation (EU) No 1238/2013)

US (USITC)

Conclusion: As noted above, in the preliminary determinations, the Commission did not define the domestic like product to include thin-film products. In these final investigations, we have had the opportunity to survey domestic producers, importers, and purchasers on this issue. Based on the current record, we again conclude that thin-film products should not be included in the same domestic like product as CSPV cells and CSPV modules. The record demonstrates a number of differences between CSPV and thin-film products. Specifically, the two products are manufactured using different raw materials, manufacturing facilities, manufacturing processes, and production employees. Differences between the two products in terms of chemical composition, weight, size, conversion efficiency, output, inherent properties, and other factors limit their interchangeability after the design phase and in specific projects, and they also limit overlap in distribution channels, particularly for non-utility sales. A number of market participants reported viewing CSPV and thin-film products as sometimes competitive, but generally different products; they reported CSPV products to be generally higher-priced than thin-film products. On balance, we find that the differences between CSPV and thin-film products are more significant than their similarities in today's evolving marketplace and weigh in favor of a finding of a single domestic like product consisting of the CSPV products within the scope of the investigations. (Italics supplied)(Investigation Nos. 701-TA-481 and 731-TA-1190 (Final)

- xii. While the reason for exclusion of thin film in the case of EU and US is evident from the above paras, the Authority notes that in India the

competition between thin films and crystalline products are very high and significant and the low efficiency of thin film modules hasn't vitiated the growth of demand for thin film products. Consumers perceive both the products as similar and find them as perfect substitutes. Under such market conditions prevailing in India, exclusion of one product will open up backdoor entries to the other type nullifying the purpose of entire exercise. Thus, subject goods cover both crystalline and thin film technology.

- xiii. As regards the submission that other advanced technologies produced by the exporter also to be excluded the Authority notes that PUC covers crystalline and thin film technology only.
- xiv. As regards the submission that modules namely QSAR II (mono crystalline) and WARATAH (polycrystalline), New Edge modules, Quartech module with innovative 4 bus bar solar cell technology, BIPV modules and Andes Solar Home System, which are not manufactured by the domestic industry, should be excluded from the scope of the PUC, the Authority notes that such modules are not different products and are merely innovations or improvisations and therefore cannot be considered as different from the PUC.
- xv. As regards the submission that Indian products are inferior in Quality and Product warranty given by the exporters are for a longer period as high as 25 years, the Authority notes that there are no evidences provided by the opposing parties to support such arguments. On the contrary, applicants submitted that Indian products are at par with subject goods imported into India and warranties as per the industry practices are provided by the domestic industry as well. Moreover, quality factor is not relevant in differentiating like articles in an anti-dumping investigation.
- xvi. As regards the submission of certain opposing module manufacturers that anti-dumping duty should only be imposed on modules and not on cells the Authority notes that solar cells and modules are not different products. Solar modules are basically an array of solar cells.

C. SCOPE OF DOMESTIC INDUSTRY & STANDING

Submissions made by producers/exporters/importers/other interested parties

17. The submissions made by the producers/exporters/importers/other interested parties during the course of the investigation with regard to scope of domestic industry & standing and considered relevant by the Authority are as follows:

- i. The majority of the petitioners is SEZ/EOU units and therefore cannot be considered as constituting domestic industry under the AD Rules. Moreover, their production does not constitute a major proportion in Indian production and therefore the petition does not have standing under the AD Rules.
- ii. All the three participating companies are not manufacturing thin films and therefore do not constitute domestic industry.
- iii. The present petition has been filed by domestic industry that is almost non-existent in the domestic market. Out of the total demand of the product under consideration in India, the petitioner domestic industry has met a meager 1.32% of the Indian demand during injury period and a meager 1.04% during the POI.
- iv. The total production of the Participating Companies is 12.10% of the total production in India. If cells and modules are considered as distinct products, the participating companies have produced modules attuning to only 1MW, which is 0.26% of the total production.
- v. The 25 % test regarding locus standi of the domestic industry to file the Application as mandated under Rule 5 of the AD rules has not been satisfied. Besides, a number of domestic producers of the subject goods have been excluded merely on the plea that they have been importers of the subject goods as well. The contention of the petitioner that all other domestic producers are importers is a mere statement without any verifiable evidence. There is no evidence on record of the authority which establishes that all other producers are indeed importers of the product under consideration. There are 90 producers of subject goods in India and not 42 as claimed by the domestic industry. Applicants have deliberately not provided production details of all the domestic producers in India.
- vi. Moser Baer being a major importer of the subject goods from the subject countries cannot be treated as domestic industry under the

AD Rules. Further, any information pertaining to Moser Baer cannot be taken on record at this stage for the reason that the same has not been made available to other interested parties.

Submissions made by the Domestic Industry

18. The submissions made by the domestic industry during the course of the investigation with regard to scope of domestic industry & standing and considered relevant by the authority are as follows:

- i. The petition has been filed by Solar Manufacturer's Association on behalf of Indian producers of Subject goods. Three domestic producers i.e. Indosolar Ltd, Jupiter Solar Power Ltd and Websol Energy Systems Ltd have provided all relevant information for the purpose of the said petition. Petitioner has identified as per the information available around 42 producers engaged in the manufacturing of subject goods in India. Petitioner has provided names and address of all such 42 producers prior to the initiation of the investigation to the Authority. The claim of some interested parties that there are more producers in India is baseless.
- ii. The applicant producers constitute domestic industry within the meaning of Rule 2(b) of AD Rules.
- iii. Although participating domestic producers have crystalline technology, Moser Baer, who has supported the petition, is a producer of subject goods using thin film technology. Post initiation, Moser Baer has provided complete information to the Authority and requested to treat them a part of domestic industry. Inclusion of Moser Baer within the scope of domestic industry would ensure availability of information pertaining to thin film. The Authority has the discretion to include Moser Baer within the scope of domestic industry even though Moser Baer has imported the product.
- iv. There is no explicit exclusion of EOUs and SEZs from the scope of domestic industry or as a domestic manufacturer under Rule 2(b) of AD Rules. SEZ/EOU units need to be treated as part of domestic industry within the meaning of Rule 2 (b) and any deeming provision of FTP or SEZ Act are irrelevant for the purpose of AD investigations.

- v. It is incorrectly argued by the opposing parties that SEZ and EOU units are linked to Customs duty leviable on imports into India hence should be treated as imports and not domestic sales. Discussion on what can be sold in DTA and what cannot be sold in DTA are irrelevant for the purposes of construing the meaning of domestic industry. As per Rule 2(b) of AD Rules the definition of DI is not sale specific rather production specific. "Domestic industry" means the domestic producers as a whole engaged in the manufacture of the like article and not domestic sellers of the goods under consideration.
- vi. EOUs and SEZs both are located in India and are producing the goods within India and carry made in India label and thus as per definition they are very much part of domestic industry of India. They contribute to GDP of India and Indian economy as a domestic industry and nothing else. By no stretch of imagination they can be called foreign industry (as opposed to domestic industry of India).
- vii. Under customs law the manufactured goods of SEZ/EOU do not qualify as imports into India. The nature of EOU and SEZ remains that of domestic industry, however, for quantification of their tax liability references are made to Customs Law.
- viii. Petitioner provided details of all known other Indian producers as per reliable sources (MNRE). Petitioner provided reasonable information with regard to all such other producers and it was reasonably asserted that they were all importing the material during the POI. This assertion of the petitioner is not yet proved wrong by any of such other producers.

EXAMINATION BY THE AUTHORITY

19. The various submissions made by the interested parties with regard to the scope of domestic industry & standing and considered relevant by the Authority are examined and addressed as follows:

- i. The application has been filed by Solar Manufacturer's Association of India on behalf of three of its member companies namely M/s Indosolar Ltd (100% EOU), M/s Jupiter Solar Power Limited (DTA unit) and M/s Websol Energy Systems Ltd (SEZ unit). As claimed by the applicant

there are thirty nine other producers of the product under consideration in India out of which 21 are the members of the association and 18 are not the members of the association. Majority of such producers are engaged in manufacturing modules, mostly importing crystalline cells from the subject countries. While, a few domestic producers including the domestic industry manufacture crystalline cells, none of them, except Moser Baer, have the capacity to manufacture thin films. Even Moser Baer, which holds the capacity to manufacture thin films, is a major importer of subject goods and is stated to have manufactured a very nominal quantity of thin films during the POI. It has been also submitted by the applicant that all other producers in India have imported the subject goods from subject countries during the POI and such producers who have imported the subject goods should be excluded for the purpose of determination of standing under Rule 2 (b). The Authority notes that none of the interested parties including the other domestic producers have disputed this position with substantiated information.

- ii. As already elaborated in this final finding, prior to the initiation of the investigation, Authority had also obtained the details regarding the producers of the subject goods in India from the concerned administrative department. As per the information provided by the concerned administrative department, there are 42 domestic producers of the subject goods including the applicant industries.
- iii. Following the initiation of investigations another producer in India i.e Moser Baer who originally supported the application and who has got two SEZ units to produce the subject goods namely Moser Baer Photovoltaic Ltd and Moser Baer Solar systems Pvt Ltd provided the relevant injury information and requested the Authority to consider them in the scope of domestic industry even though they have admittedly imported the subject goods from subject countries during the POI. In the event of Moser Baer being a major importer of the subject goods from the subject countries during the POI, Authority does not consider them as domestic industry under the Rules. Similarly, M/s Tata BP Solar India Ltd, one of the supporters of the application, also submitted some injury information post initiation. However, the Company acknowledged to have imported subject goods from the subject countries during the POI. In view of the above

position, the Authority does not consider them also as domestic industry under the Rules.

- iv. The Authority notes that M/s Indosolar Ltd (100% EOU), M/s Jupiter Solar Power Limited (DTA unit) and M/s Websol Energy Systems Ltd (SEZ unit) jointly constitute domestic industry for the purpose of present investigation. The Authority also notes from the submissions of the applicant that rest of the producers have imported the subject goods from the subject countries during the POI. Also, none of such producers haven't come before the Authority by providing any information even though ample opportunities provided to them as per the rules apart from Moser Baer. And no information to refute the claims of the applicant either have been provided by such known other producers in India. The Production by the three participating producers holds 11.96% of total Indian production. However, 11.96% production by these three producers should be considered as constituting 100% as rest of the producers do not qualify to constitute domestic industry considering the imports made by such producers. Thus, the production of the applicant domestic producers as provided herein above accounts for "a major proportion" in the total production of the product under consideration in India.
- v. As regards the contention that the applicant constitutes only a negligible share in the Indian production and they do not even hold 25% of total Indian production, the Authority notes that the applicants account for "a major proportion" in the total production of the product under consideration in India. With regard to the negligible share in the total Indian production the views of the Authority are consistent with the view taken by the Hon'ble High Court of Madras vide their orders dated 23rd December, 2011 while disposing off the writ petition No. 23515 of 2011 filed by M/s Saint Gobain Glass India Ltd in the matter concerning dumping Soda Ash into India. The operative part of the judgment, *inter alia*, is as follows:

"78. In the light of the above, even though I agree with the contentions of the petitioner on the interpretation placed on Rule 2(b), that the provision does not reserve any discretion with the Designated Authority to bring in an excluded category into the definition of 'domestic industry', yet, going by the said definition that M/s DCW Limited is a domestic industry, it fully satisfies the

requirement under Rule 5(3)(a) proviso. In the circumstances, while setting aside that portion of the order of the Designated Authority relating to this interpretation on Rule 2(b), I uphold the order of the Designated Authority in so far as it relates to the satisfaction on Rule 5(3)(a) proviso on 4% production of M/s DCW Limited as constituting 100%. Consequently, I reject the Writ Petition on this aspect”.

vi. As regards the submission of the interested parties that the applicants being a 100% EOU unit or SEZ unit cannot be considered as domestic industry, the Authority notes that Rule 2(b) of the Anti-dumping Rules defines domestic industry as under:-

(2)(b) “domestic industry” means the domestic producers as a whole engaged in the manufacture of the like article and any activity connected therewith or those whose collective output of the said article constitutes a major proportion of the total domestic production of that article except when such producers are related to the exporters or importers of the alleged dumped article or are themselves importers thereof in such case the term ‘domestic industry’ may be construed as referring to the rest of the producers”;

vii. With regard to the eligibility of the 100% EOU units and conditions to sale in the DTA, the Authority notes that Paragraph 6.8 (a) and (h) of the Foreign Trade Policy, 2009-14 lays down the relevant provisions as follows:

“6.8 Entire production of EOU/EHTP/STP/BTP units shall be exported subject to following:

(a) Units, other than gems and jewellery units may sell goods upto 50% of FOB value of exports, subject to fulfilment of positive NFE, on payment of concessional duties. Within entitlement of DTA sale, unit may sell in DTA, its products similar to goods which are exported or expected to be exported from units. However, units which are manufacturing and exporting more than one product can sell any of these products into DTA, up to 90% of FOB value of export of the specific products, subject to the condition that total DTA sale does not exceed the overall entitlement of 50% of FOB

value of exports for the unit, as stipulated above. No DTA sale at concessional duty shall be permissible in respect of motor cars, alcoholic liquors, books, tea (except instant tea), pepper & pepper products, marble and such other items as may be notified from time to time. Such DTA sale shall also not be permissible to units engaged in activities of packaging/labeling/segregation/refrigeration/compacting/micronisation/pulverization/granulation/conversion of monohydrate form of chemical to anhydrous form or vice-versa. Sales made to a unit in SEZ shall also be taken into account for purpose of arriving at FOB value of export by EOU provided payment for such sales are made from Foreign Exchange Account of SEZ unit. Sale to DTA would also be subject to mandatory requirement of registration of pharmaceutical products (including bulk drugs). An amount equal to Anti-Dumping duty under section 9A of the Customs Tariff Act, 1975 leviable at the time of import, shall be payable on the goods used for the purpose of manufacture or processing of the goods cleared into DTA from the unit.”

“(h) EOU/EHTP/STP/BTP units sell finished products, except pepper and pepper products and marble, which are freely importable under FTP in DTA, under intimation to DC, against payment of full duties, provided they have achieved positive NFE. An amount equal to Anti-Dumping duty under section 9A of the Customs Tariff Act, 1975 leviable at the time of import, shall be payable on the goods used for the purpose of manufacture or processing of the goods cleared into DTA from the unit.”

viii. With regard to the eligibility of the SEZ units and conditions to sale in the DTA, the Authority notes that Section 47 of the SEZ Rule 2006 lays down the relevant provisions as follows:

“47. Sales in Domestic Tariff Area — (1) A Unit may sell goods and services including rejects or wastes or scraps or remnants or broken diamonds or by-products arising during the manufacturing process or in connection therewith, in the Domestic Tariff Area on payment of customs duties under section 30, subject to the following conditions, namely:—

a) *Domestic Tariff Area sale under sub-rule (1), of goods manufactured by a Unit shall be on submission of import licence, as applicable to the import of similar goods into India, under the provisions of the Foreign Trade Policy:*

Provided that goods imported or procured from the Domestic Tariff Area and sold as such without being subjected to any manufacturing process shall be subject to the provisions of the Foreign Trade Policy as applicable to import of similar goods into India;

(b) *Domestic Tariff Area sale under sub-rule (1) of rejects or scrap or waste or remnants arising during the manufacturing process or in connection therewith by the Unit shall not be subject to the provisions of the Import Trade Control (Harmonized System) of Classification of Export and Import Items:*

Provided that the Central Government may notify restrictions, as it deems fit on all or any class of such goods mentioned under this clause”.

- ix. In several earlier investigations involving imports of Compact Discs-Recordable (CD-Rs) from China PR, Hong Kong, Singapore and Chinese Taipei. (F. No.14/15/2005-DGAD), Compact Disc – Recordable (CD-R) from Iran, Malaysia, Korea ROK, Thailand, UAE and Vietnam (F. No.14/9/2007-DGAD), Digital Versatile Discs-Recordable (DVD-R and DVD-RW) from China PR, Hong Kong, and Chinese Taipei (F. No.14/17/2007-DGAD), etc., the Authority had considered 100% EOUs as domestic industry.
- x. As regards the eligibility of SEZ units for the status of domestic producer/domestic industry under the AD Rules, although there seems to be no precedent in any earlier AD investigations conducted by the Authority, the following points are relevant:
 - a. Although the SEZ units are specially delineated areas beyond the Customs Tariff Zone, they belong to the national geographic territory of India.
 - b. The SEZ Act and SEZ Rules allow the SEZ units to sell their products in the DTA subject to fulfilment of

positive NFE and on payment of Customs duties and other applicable duties.

- c. The AD Rules, especially Rule 2(b) and 5(3), nowhere prohibit an SEZ unit to be considered as a part of the domestic producer/domestic industry.
- d. When an SEZ unit or an EOU unit sells their products in the domestic tariff area, they also compete with their DTA counterparts as well as the imported goods.
- e. As claimed by the petitioner, the subject goods are IT products and part of the WTO IT Agreement and attract nil Customs Duty, thereby directly competing with the subject goods emanated from the DTA.

xii. In terms of the above stated Rule, there is no explicit exclusion of EOUs/SEZs from the scope of domestic industry. The Authority, however, notes that EOU/SEZ units may form part of the domestic industry to the extent of their domestic sales within the limit of their entitlement permitted under the foreign trade policy of India and SEZ Rules, 2006 as amended time to time.

xiii. The Authority also notes that Paragraph 6.5 of the FTP with regard to EOU and Section 53 of the SEZ Rules with regard to SEZ units stipulate that EOU/SEZ unit shall be a positive Net Foreign Exchange (NFE) unit. It is further noted that Paragraph 6.9 (f) FTP and Section 53 (A) (I) of the SEZ Rules provides that supplies of Information Technology Agreement (ITA -1) effected from EOU/SEZ units to DTA will be counted for fulfillment of positive NFE. Since subject goods falls under the ITA list, units can maintain their positive NFE situation without taking any physical exports. The Authority notes that conditions of EOU/SEZ scheme do not restrict the ability of producers who are EOU/SEZ units to supply in the DTA.

“6.5 EOU / EHTP / STP / BTP unit shall be a positive net foreign exchange earner except for sector specific provision of Appendix 14-I-C of HBP v 1, where a higher value addition shall be required. NFE Earnings shall be calculated cumulatively in blocks of five years, starting from commencement of production. Whenever a unit is unable to export due to prohibition / restriction imposed on export of any product mentioned in LoP, the five year block period for

calculation of NFE earnings may be suitably extended by BoA. BoA may also consider extension of block period by another one year, for calculation of NFE, on case to case basis, for those units which complete 5 years block period in between 30.09.2008 and 30.09.2009, keeping in view the decline in exports in that particular unit, due to economic slowdown only.

6.9 Following supplies effected from EOU/ EHTP / STP / BTP units to DTA will be counted for fulfilment of positive NFE:

(f) Supplies of Information Technology Agreement (ITA -1) items and notified zero duty telecom / electronics items.

53. Net Foreign Exchange Earnings — The Unit shall achieve Positive Net Foreign Exchange to be calculated cumulatively for a period of five years from the commencement of production according to the following formula, namely:—

Positive Net Foreign Exchange = A - B >> 0

Where:—

A: is Free on Board value of exports, including exports to Nepal and Bhutan against freely convertible currency, by the Unit and the value of following supplies of their products, namely:—

(I) supply of Information Technology Agreement items and notified zero duty telecom or electronic items, namely, Color Display Tubes for monitors and Deflection components for colour monitors or any other items as may be notified by the Central Government;”

xiii. As regards the submission that automatic exclusion of domestic producers, who have allegedly imported the subject goods, not permitted, the Authority notes that some domestic producers may not wish to support an anti-dumping application merely because they themselves are importing the product. The discretion vested in the Authority in this regard enable the Authority to exclude such entities for the bonafide redressal of injury caused to the domestic producers who are not engaged in importing the dumped goods.

20. After detailed examination the Authority determines domestic producers as provided herein above account for a major proportion of the total domestic production of the subject goods during the POI and constitutes domestic industry within the meaning of the Rule 2 (b) and satisfies the criteria of standing in terms of Rule 5 (3) of the Anti- dumping Rules.

D. CONFIDENTIALITY

Submissions made by producers/exporters/importers/other interested parties

21. The various submissions made by the producers /exporters/ importers/other interested parties with regard to confidentiality and considered relevant by the Authority are as follows:

- i. Applicant has claimed excessive and unwarranted confidentiality in their submissions.
- ii. Confidentiality granted to the export and import data of the DI is not warranted.

Submissions made by the domestic industry

22. The various submissions made by the domestic industry with regard to confidentiality and considered relevant by the Authority are as follows:

- i. Exporters claimed excessive confidentiality on each and every information restricting the petitioner from offering any meaningful comments in complete violation of antidumping rules.
- ii. There are instances wherein the exporters merely claimed confidentiality but such information are publically available.

EXAMINATION BY THE AUTHORITY

23. As regards the submissions concerning confidentiality the Authority notes that Rule 7 of Anti-dumping Rules provides as follows:-

Confidential information: (1) Notwithstanding anything contained in sub-rules and (7) of rule 6, sub-rule (2), (3) (2) of rule 12, sub-rule (4) of rule 15 and sub-rule (4) of rule 17, the copies of applications

received under sub-rule (1) of rule 5, or any other information provided to the designated authority on a confidential basis by any party in the course of investigation, shall, upon the designated authority being satisfied as to its confidentiality, be treated as such by it and no such information shall be disclosed to any other party without specific authorization of the party providing such information.

(2) The designated authority may require the parties providing information on confidential basis to furnish non-confidential summary thereof and if, in the opinion of a party providing such information, such information is not susceptible of summary, such party may submit to the designated authority a statement of reasons why summarization is not possible.

(3) Notwithstanding anything contained in sub-rule (2), if the designated authority is satisfied that the request for confidentiality is not warranted or the supplier of the information is either unwilling to make the information public or to authorise its disclosure in a generalized or summary form, it may disregard such information.

24. Information provided by the interested parties on confidential basis was examined with regard to sufficiency of the confidentiality claim. On being satisfied, the Authority has accepted the confidentiality claims, wherever warranted and such information has been considered confidential and not disclosed to other interested parties. Wherever possible, parties providing information on confidential basis was directed to provide sufficient non confidential version of the information filed on confidential basis. The Authority also made available the non-confidential version of the evidences submitted by various interested parties in the form of public file.

E. MISCELLANIOUS SUBMISSIONS

Submissions made by producers/exporters/importers/other interested parties

25. The miscellaneous submissions made by producers/ exporters/importers /other interested parties and considered relevant by the Authority are as follows:

- i. The import of the subject goods from the European Union during the Period of Investigation stands at over 5.5% of total imports into India during the POI, which is above the de-minimis margin. With regard to the price, the Product under Consideration is being imported at an assessable rate of Rs. 41 per watt. Thus, non-inclusion of European Union (EU) as a Subject Country/Territory is incorrect and discriminatory. Filing of a separate anti-dumping application by the petitioners in respect of imports of subject goods from EU and Japan confounds this position. Thus the present investigation is void *ab initio* and therefore be terminated forthwith.
- ii. Authority is required to examine the accuracy and adequacy of the information/data as provided in the Application before initiating an investigation. However, the adequacy and accuracy test has not been done by the Authority before initiating the investigation. There is absence of 'sufficient evidence' in the application filed to justify initiation of this investigation.
- iii. The initiation of the investigation is not legally founded because the evidence on dumping causing injury for the period from January 2011 through June 2012 was not submitted to the authorities before the initiation of the investigation.
- iv. It has been contended by the petitioners that imports of thin film have been done in view of Exim Financing available to the Indian consumers. Such being the case, there is no basis for the argument that thin film products are being preferred because of possible dumping of the product. The Exim-financing available to Indian buyers is totally irrelevant to the issue of dumping. It has neither impacted normal value, nor it has impacted export price.
- v. None of the submissions made by Gujarat Borosil should be considered relevant for the purpose of present investigation, as the company lacks status of an interested party.
- vi. Petitioners have adopted Impex Statistic Services for assessment of volume and value of imports into India. The petitioners have adopted "watt" as a unit of measurement. The said import data does not contain sufficient information with regard to the volume of imports in individual import transactions when expressed in "watt".

- vii. Imposition of retrospective duties in the present case is not justified in view of the facts that it is not a case of massive dumping. The petitioners have not established their claim for retrospective imposition of anti-dumping duty on the basis of the requirements as laid down under Anti-dumping Rules.
- viii. Imposition of antidumping duties on imported solar products is against the overall public interest of India. Levy of antidumping duties will only increase the construction costs of photovoltaic power stations and the electric energy produced by them, which is not in the best interest of India's long-term and overall development.
- ix. China and India are both BRICS countries with strategic partnership and have a vast cooperation prospective and numerous business opportunities in the field of green energy. India should handle this case with prudence, refrain from applying trade remedy measures in green energy, and encourage industries in both countries to enhance dialogue and communication.
- x. The Petitioners' claim that stringent measures by EU and USA have put further pressure on Chinese producers to dump in a market like India is not correct. EU and China have reached a common understanding following the recent price undertaking agreement between the two nations. As a result, the "pressure" on Chinese producers to dump in India is buffered.
- xi. ADD should only be imposed on modules and not on cells. Indian solar cell manufacturing is about 700 MW however the module manufacturing is around 1250 MW. Capacity of solar manufacturer being low coupled with poor utilization will lead to low module manufacturing capacity utilization.
- xii. The methodology adopted to convert import transactions in terms of KW/MW is not disclosed also import data provided by the applicant are erroneous and unreliable.
- xiii. Costs and prices of each MW when sold as a Solar Cell on the one hand and when sold as Solar Module on the other hand are

significantly different and facts in this respect were not disclosed to the Authority.

xiv. The volume from US is below de minimis levels and exclusion of erroneous import transactions would show negative dumping margin from USA which requires termination of investigation against USA.

Submissions made by the domestic industry

26. The miscellaneous submissions made by the domestic industry and considered relevant by the Authority are as follows:

- i. There is no basis in the allegation of some parties with regard to exclusion of EU, as a petition against EU is already on record of the Authority.
- ii. The petitioner had relied upon import information as per secondary source i.e. Impex Statistics Services for the purpose of application, which was relied upon by the Authority for initiating the present investigation. The petitioner is now in receipt of the information as per DGCI&S. A comparative analysis of import of subject goods into India as per DGCI&S and Impex Statistics Services is as follows:

POI	As Per Impex Statistics		As Per DGCI&S	
	Qty KW	Rate/Watt	Qty KW	Rate/Watt
China PR	613145	43.33	636667	50.91
Taiwan	148145	41.37	249866	40.57
Malaysia	350434	46.93	177943	50.19
USA	90417	38.65	143884	45.19
Subject Countries Total	1202,142	43.79	1208,362	47.99

Petitioner has adopted the following methodology for making the above comparative analysis.

- a) The raw data received from DGCI&S were identified for PUC and Non PUC as the subheading for subject goods covered certain other products also.
- b) Certain entries concerning subject goods wherein description is not clear as to whether cell, module, or thin film or its wattage and numbers etc were identified as non-PUC to reduce the chances of erroneous conclusions.
- c) Entries of subject goods were converted into equivalents of KW as per the available information in the entries itself with regard to number of cells/modules and its wattage, also referring to the product brochures of the concerned producer and also as per the best knowledge of the applicant wherever the required information was unavailable otherwise.

It may be noted that DGCI&S data shows slightly higher volume of imports coincided with a higher price vis-à-vis imports reported by Impex Statistics Services.

- iii. In addition to our earlier submissions on issues of exclusion of EU from the scope of subject countries raised by the opposing parties, it may be noted that DGCI&S shows an import volume of 80,213 KW from EU as a whole which constitutes 5.73% of total imports into the country. However, the price reported by DGCI&S in case of EU is Rs61.43/Watt which is significantly higher than subject countries. It is submitted that the exclusion of EU issue raised by the opposing interested parties are irrelevant on this factual position alone. The Authority may consider DGCI&S information for the purpose of findings in the present case.
- iv. The following is the comparative analysis of the imports data as per Impex Statistics on the basis of which the petition was filed and the investigation was initiated by the Authority and the DGCI&S data:

	Volume (KW)	Value (Rs.Lacs)	Price /Rs watt	Share in Imports
Imports as per Impex Statistics				
Total Imports	13,74,402	6,05,996.77	44.09	100
Imports from	12,02,143	5,26,361.48	43.79	87.47

Subject Countries				
Imports from EU	75,026	30,786.72	41.03	5.46
Imports as per DGCI&S				
Total Imports	13,98,874	6,84,441.33	48.93	100
Imports from Subject Countries	12,08,362	5,79,780.68	47.98	86.38
Imports from EU	80,213	49,278.23	61.43	5.73

v. The petitioner further submits that the Designated Authority may take note of the comparison of DGCI&S and Impex Statistics Services data regarding imports of the subject goods from the various members of the EU during the POI as follows, which amply clarifies that the data from DGCI&S source shows reasonable prices vis-à-vis the Impex Statistics Services:

Country	Impex Statistics			DGCI&S		
	KW	Rate/Watt	Share%	KW	Rate/Watt	Share%
Belgium	506	12.15	0.0%	518	11.75	0.04%
Czech republic	1941	24.31	0.1%	960	32.90	0.07%
France	3925	20.34	0.3%	412	48.69	0.03%
Germany	36027	54.80	2.6%	53324	58.84	3.81%
Italy	6916	70.05	0.5%	18371	69.91	1.31%
Netherland	10292	18.77	0.7%	3696	71.00	0.26%
Norway	2272	10.69	0.2%	147	18.63	0.01%
Poland	24	68.72	0.0%	24	68.04	0.00%
Spain	15310	18.87	1.1%	2720	65.74	0.19%
Sweden	24	35.98	0.0%	27	48.39	0.00%
UK	61	33.89	0.0%	0	0.00	0
Greece	0	0.00	0	5	102.94	0.00%
Ireland	0	0.00	0	9	66.19	0.00%
Grand Total	77297	40.14	5.6%	80213	61.43	5.73%

vi. It can be seen that DGCI&S shows a higher volume in case of EU coincided with a higher per Watt price which is Rs.61.43/- vis-à-vis imports as per Impex Statistics which showed a quantity of 77297 KW imports at a

per watt price of Rs.40.14/- . It may also be noted that among the EU members Germany accounted maximum share of imports and the price of Germany as per both the sources remained comparable. Low prices reported by Impex in case of Czech Republic, France, Netherland, Sweden and Spain looks reasonable as per DGCI&S data even though price from Belgium, Czech Republic, and Norway still look low even though over all EU prices have increased by about Rs.20/- as per DGCI&S data

vii. Exclusion of EU from the subject countries does not imply that there is any kind of violation of the principle of non-discrimination. The petition was based on the data obtained from the secondary source i.e. Impex Statistics Service. As per the said source, the imports from the EU during the POI was above de minimus level and the per unit price was reported to be lesser than that of the subject countries. However, post-initiation, the petitioner obtained the data from the DGCI&S source, which is found to have reported the imports from the EU during the POI as above de minimus level, but the per unit price higher than that of the subject countries. The total quantity and value of imports is found to have been reported in the DGCI&S data at a higher level than that of the Impex Statistics Service source. Thus the contention of the opposite interested parties that the exclusion of EU from the purview of the subject countries makes the present investigation ab initio void and therefore be terminated forthwith has no relevance.

viii. Nevertheless, the imports from EU is a trivial issue as the same hasn't breached the causal link between dumped imports from subject countries and material injury suffered by the domestic industry. The non-inclusion of EU in the scope of present investigation has in no way prejudiced the present investigation. Exclusion of EU upholds the fact that there was a fair administration of test of negligible imports as none of the individual members of EU except Germany appeared to have exported any commercial volumes to India. Individual examination of imports from Germany would show that imports from Germany were well below the 3% threshold to determine de minimis levels and other members of EU were negligible and were at 1% or less of the total imports into India. In any case, petitioner found marginal increase in the import volumes from EU in the post POI period and a petition is filed for initiation of anti-dumping investigation against EU and also Japan.

- ix. At the time of initiation, the annualized volume of imports from subject countries were 801 MW in the POI, whereas the imports from EU were only 41 MW in which 24 MW was from Germany at a rate of Rs.54/Watt which was higher than the rates from subject countries. Even the share of German import was below 3% threshold.
- x. In the case of Pentaerythritol from EU other than Sweden, a similar situation was prevalent as imports from Saudi Arabia were above de minimis levels however was not included in the investigation. Nevertheless, a separate petition was filed by the domestic industry eventually and the case was later initiated.
- xi. Under-reporting of imports by the subject countries is a major problem which needs to be addressed by the authority. If the under reporting of imports as admitted by CCCME are corrected then any such minuscule level from EU would go further down in terms their percentage in total imports.
- xii. Chinese producers are facing huge challenges due to over capacity and low demand in domestic market. Since EU and USA have imposed anti-dumping measures against China, the Chinese exporters may prefer to dump the material more intensively in a robust market like India.
- xiii. The importers are enjoying foreign funded dumping especially from USA. The importers/users are getting subject goods at dumped prices and also fund support.
- xiv. The present case is a suitable case for recommending retrospective measures as the injury is caused by massive dumping of subject product occurred in a relatively short time and considering the huge volume of such imports, unless duty is recommended retrospectively as envisaged in Section 3 of the Anti-dumping Act, the desired remedial measures of anti-dumping duties may not be accomplished in the present case. Considering the magnitude of dumping and injury suffered by the domestic industry, the anti-dumping measures should be imposed retrospectively.
- xv. Parties like SIPPAA have made their submissions when they are yet to establish that they are interested parties within the meaning of AD rules.

- xvi. Any determination, consideration, examination etc in the initiation notification is *prima facie* only. There is nothing unusual in the word '*prima facie*' used in the present initiation notification.
- xvii. India has adequate capacity to meet the domestic demand.
- xviii. The import of dumped modules has a direct bearing on the market of supplier of glass, which is a major component of modules.
- xix. It was also argued that the Chinese and the US companies give 25 years warranty on their products unlike the Indian suppliers. The said parties should be asked to provide reliable evidence in support of their contention.
- xx. The EXIM Bank of USA is the official export credit agency of the USA. EXIM's mission is to assist and finance the export of US goods and services. Producers of solar cells from USA are getting financial assistance from EXIM Bank while exporting the material to India. Due adjustment for such financial assistance should be considered while determining normal value for US producers.

EXAMINATION BY THE AUTHORITY

27. Various miscellaneous issues raised by the interested parties and considered relevant by the Authority are examined herein below:

- i. As regards the submissions that anti-dumping duty should only be imposed on modules and not on cells as capacity of solar manufacturer being low coupled with poor utilization will lead to low module manufacturing capacity utilization, the Authority notes that anti-dumping duties imposed, would be applicable on the 'subject product' as determined herein above.
- ii. As regards the submission that the methodology adopted to convert import transactions in terms of KW/MW is not disclosed, the Authority notes that clarifications were sought from the petitioner prior to the initiation of investigations and replies from the petitioner were incorporated in the non-confidential version of the petition made available in the public domain which is self-explanatory and comprehensive.

- iii. As regards the submission that costs and prices of each MW when sold as a Solar Cell on the one hand and when sold as Solar Module on the other hand are significantly different and facts in this respect were not disclosed to the Authority, it is noted that the injury information pertaining to the subject goods as per the prescribed formats and to the extent considered necessary were provided by the petitioner.
- iv. As regards the submission that there is absence of 'sufficient evidence' in the application filed to justify initiation of this investigation, it is noted that there was sufficient justification to initiate the investigation. The investigations were initiated only upon receipt of a written application, which was in the form and manner as specified by the Authority and was supported by relevant and necessary evidence relating to dumping, injury and causal link. The investigations were initiated after determining that the application was made by or on behalf of the domestic industry and after sufficient examination with regard to accuracy and adequacy of the evidence provided in the application and due satisfaction of the Authority that there was sufficient evidence regarding dumping, injury and causal link to justify the initiation of investigations.
- v. As regards the submission that the pre-initiation submissions by petitioners should be provided to the interested parties, the Authority notes that pre-initiation scrutiny of application is a routine process. Once the petitioner has filed an updated application, incorporating therein information/submission made before initiation, it is not necessary that such information forming part of pre-initiation scrutiny of the Authority should be disclosed to other interested parties.
- vi. As regards the submission that Non-inclusion of European Union (EU) as a Subject Country/Territory is incorrect and discriminatory and present investigations should be terminated on this ground alone, the Authority notes that as per the information furnished by the petitioner from the secondary source based on which present investigations were initiated, individual volumes from EU members except Germany were all very insignificant and do not appear to be of any commercial volume. Imports from Germany were 2.62% of total imports at a price of Rs 55/Watt which was much higher than average price from subject countries. Rest of the EU members reported very negligible imports adding all of them together made the overall percentage from EU at

around 5.46% in total imports into India. Thus, it has not been shown that imports from EU have had significant adverse effects on the domestic industry to such an extent to break the causal link between injury to the domestic industry and dumping from subject countries. Exclusion of EU does not negate any injuries if caused to the domestic industry by dumping from subject countries.

- vii. The import data obtained from the DGCI&S and relied upon by the Authority for the purpose of the present findings shows an import of 80.21 MW of subject goods from EU at an average price of Rs61.43/Watt which is much higher than the average price of Rs47.98/Watt reported from the subject countries and also significantly higher than the net sales realisation of the domestic industry. Therefore, the imports of subject goods from EU could not have affected the situation of the domestic industry to the extent to break the causal link between the dumped imports from the subject countries and the material injury suffered by the domestic industry.
- viii. As regards the submission that imposition of duties are against Public interest, the Authority notes that the purpose of anti-dumping duties, in general, is to eliminate injury caused to the Domestic Industry by the unfair trade practices of dumping so as to re-establish a situation of open and fair competition in the Indian market, which is in the general interest of the Country. Imposition of anti-dumping measures would not restrict imports from the subject countries in any way and therefore would not affect the availability of the products to the consumers. The basic intent behind anti-dumping measures is to create a level playing field for the domestic industry vis-à-vis dumped imports and not to restrict the imports, which can continue though at higher cost. The imposition of antidumping duty in the instant case would not only enable the domestic industry to revive themselves in a more competitive manner, it may also leverage further Indian and foreign investments.
- ix. As regards the submission that adequacy and accuracy of the evidence in the petition is questionable with regard to USA and the volume from US is below de minimis levels and exclusion of erroneous import transactions would show negative dumping margin from USA which requires termination of investigation against USA, it is noted that dumping with regard to USA is examined in detail at the respective place in this final finding which is self-explanatory.

x. As regards the contention of the domestic industry that the Authority should make appropriate adjustments to the export prices of the American exporters due to the long-term funding of the developers by the US agencies which is not made available if the products are bought from the Indian suppliers, the Authority notes that such long term funding may be stated to have impacted the market prospects of the American exporters, but cannot be stated to have facilitated dumping.

28. Apart from the submissions made by various interested parties which are considered relevant and addressed by the Authority, the following views were also received from the Ministry of Environment and Forests (MOEF), Government of India, Ministry of New And Renewable Energy (MNRE) Government of India, Department of Electronics & Information Technology, National Manufacturing Competitiveness Council (NMCC) and Centre for Science & Environment (CSE):

- a) The MOEF opined that imposition of anti-dumping duty will lead to increase in the cost of generating solar energy.
- b) The MNRE opined that the scheme of reserving/procuring solar power with a condition of domestic content may provide enough business and protection to the manufacturers of cells and modules in India. MNRE further opined that imposition of antidumping duty may have adverse implications on the ongoing JNNSM projects.
- c) NMCC opined that the domestic solar manufacturing sector is suffering from cheap imports from China etc. Anti-dumping duty is essential for nurturing this sunrise high technology sector. The nascent domestic manufacturing industry is in difficulty and delay in imposition of antidumping duty is coming in the way of the achievement of one of the primary objectives of National Solar Mission which is the creation of the domestic manufacturing capacity.
- d) CSE opined that the solar manufacturing sector in India is not in a very healthy state to-day. Therefore, the domestic solar manufacturers should get a level playing field so as to be able to compete with the exporters from USA, China, etc.
- e) Department of Electronics & Information Technology opined that in the absence of antidumping duty, the solar industry is facing

extreme financial stress. Almost all solar cell manufacturers have been referred to BIFR and further investments have dried. Unless domestic manufacturing takes place, there is threat of perpetuating dependence on import of solar products and technology.

The Authority notes that in terms of Rule 4 of the Anti-dumping Rules, the Designated Authority is to investigate as to the existence, degree and effect of any alleged dumping in relation to import of any article, to identify dumping, injury and causal link and to recommend the amount of anti-dumping duty, which, if levied by the Central Government, would remove the injury to the domestic industry. Anti-dumping measures neither restrict nor prevent imports. The intent of anti-dumping measures is to create a level playing field for the domestic industry vis-à-vis the dumped imports.

F. MARKET ECONOMY TREATMENT, NORMAL VALUE, EXPORT PRICE AND DUMPING MARGIN

29. The Authority notes that in the past three years China PR has been treated as a non-market economy country in anti-dumping investigations by India and other WTO Members. China PR has been treated as a non-market economy country subject to rebuttal of the presumption by the exporting country or individual exporters in terms of the Rules.

30. As per Paragraph 8 of Annexure I of the Anti-dumping Rules, the presumption of a non-market economy can be rebutted, if the exporter(s) from China PR provide information and sufficient evidence on the basis of the criteria specified in sub paragraph (3) of Paragraph 8 and establish the facts to the contrary. The cooperating exporters/producers of the subject goods from People's Republic of China are required to furnish necessary information/sufficient evidence as mentioned in sub-paragraph (3) of paragraph 8 in response to the Market Economy Treatment questionnaire to enable the Authority to consider the following criteria as to whether:

- a. the decisions of concerned firms in China PR regarding prices, costs and inputs, including raw materials, cost of technology and labour, output, sales and investment are made in response to market signals reflecting supply and demand and without significant State interference in this regard, and whether costs of major inputs substantially reflect market values;

- b. the production costs and financial situation of such firms are subject to significant distortions carried over from the former non-market economy system, in particular in relation to depreciation of assets, other write-offs, barter trade and payment via compensation of debts;
- c. such firms are subject to bankruptcy and property laws which guarantee legal certainty and stability for the operation of the firms and
- d. the exchange rate conversions are carried out at the market rate.

31. The Authority notes that consequent upon the initiation notice issued by the Authority and intimation of sampling, the following Chinese producers and exporters have submitted their exporter's questionnaire responses including the market economy questionnaire responses and sought to rebut the non-market economy presumption.

- i. CEEG Nanjing Renewable Energy Co., Ltd
- ii. China Sunergy (Nanjing) Co., Ltd
- iii. Canadian Solar Manufacturing (Changshu) Inc
- iv. Canadian Solar Manufacturing (Luoyang) Inc
- v. CEEG (Shanghai) Solar Science Technology Co., Ltd
- vi. Baoding Tian Wei Solar Films Co., Ltd.
- vii. Ja Solar Technology Yangzhou Co., Ltd.
- viii. JingAo Solar Co., Ltd.
- ix. Shanghai JingAo Solar PV Technology Co., Ltd.
- x. Shanghai JA Solar Technology Co., Ltd

32. The questionnaire responses and the market economy responses of the responding producers and exporters were examined and deficiencies in the submissions were pointed out and clarifications were sought.

33. The submissions concerning market economy, normal value, export price and dumping margin made by the producers/exporters/importers/other interested parties and considered relevant by the Authority are as follows:

- i. The normal value as arrived by the domestic industry in respect of the subject countries is incorrect.
- ii. The dumping margin in respect of exports by First Solar from US and Malaysia are de-minimus. Therefore, the investigation is required to be terminated immediately.
- iii. Canadian Solar Inc, China PR is a market economy entity and Authority should arrive at the normal value of exports of the

subject goods on the basis of the data on costs and pricing structure as provided by the exporters.

- iv. Despite the fact that China PR is considered as a NME country, China Sunergy Group operates under market economy principles and should be treated so by the authority for arriving at the normal value.
- v. Export price has been calculated at ex-factory level by reducing various post factory expenses calculated as a percentage of total gross value per Watt. The expenses such as port expenses, inland freight, ocean freight and commission are not calculated on a per watt basis.

34. The submissions made by the domestic industry concerning market economy, normal value, export price and dumping margin and considered relevant by the Authority are as follows:

- i. None of the Chinese producers satisfy market economy status and therefore normal value should be constructed as per Para 7 of Annexure 1 of the AD Rules.
- ii. Recently concluded investigations by EU and USA found Chinese producers operating under Non Market Economy conditions and all the producers from China were denied MET. Applicants reiterate that the circumstances based on which EU and USA denied MET to Chinese producers hasn't changed and India also should deny MET to any of the producers from China.
- iii. India is an appropriate surrogate country for Chinese producers. Therefore cost of production in India should be taken for construction of normal value with due adjustments in respect of China PR.
- iv. Dumping margin from subject countries are not only more than de-minimus but also very substantial.
- v. Large number of importers who have participated in the present investigation hasn't filed any questionnaire response. In view of that the export price claimed by the exporters does not seem to be

reliable. The Authority should compare export prices claimed by the exporters with that reported by Indian customs.

EXAMINATION BY THE AUTHORITY

35. The Authority notes that subject goods, originating in or exported from China PR, has been subjected to anti-dumping duty in European Union and USA in the recent period. EU and USA did not grant MET to the Chinese companies on the grounds of prevailing Non Market Economy conditions in China and the inability of Chinese producers to meet all the MET criteria. The Authority notes that the following findings by EU and USA are relevant;

EU (EC)

(54) The verification established that all seven exporting producers (groups of companies) claiming MET did not meet the requirements of the criteria laid down in Article 2(7)(c) of the basic Regulation.

(64) The main substantial comments received concerned the preferential tax regime and grants. Exporters did not contest the facts established, but questioned their importance for the fulfilment of the MET criterion 3. In particular, they argued that State benefits do not represent a significant proportion of their respective turnovers.

(65) It is noted in this regard that an income tax system that treats favourably certain companies deemed strategic by the Government is clearly not one of a market economy. Such a system is still heavily influenced by State planning. It is also noted that distortions introduced by income tax reductions are significant, as they completely change the amount of pre-tax profits the company has to achieve in order to be attractive to investors. The distortions are also permanent, and the absolute benefit received during the investigation period is, because of the nature of the advantage, irrelevant for assessing whether the distortion is 'significant'. Rather, the assessment of the significance has to be based on the overall impact of the measure on financial and economic situation of the company.

(66) With regard to criterion 2, three groups of companies claimed that they complied with the respective rules of the international accounting standards since their US consolidated accounts were fully in line with

those standards. Some companies also claimed that, in general, their accounts were in compliance with Chinese accounting standards, which they consider to be equivalent to the international ones. This issue at hand, however, is not whether Chinese accounting standards are in line with international accounting standards. The issue at hand is whether the accounts comply with the applicable accounting standards or not. In particular, those comments failed to address the fact that, with regard to the individual financial statements of the Chinese companies in question, a number of international accounting standards (and the corresponding Chinese equivalent), including in particular inventory depreciation and disclosure of related parties' transactions, were found to be violated.

(67) With regard to criterion 1, taking into account comments received from the parties and in the light of the judgment Case C-337/09 P (1), it is concluded that this criterion is met by all companies. However, overall MET determination for all sampled exporters remains unchanged since they still fail to meet the requirements of criteria 2 and 3.

(68) With regard to criterion 4, the company group referred to in recital 57 above could demonstrate that a bankruptcy proceeding was initiated against the main Chinese group company in the meantime. It is therefore concluded that this criterion is met by this company group. However, overall MET determination for this company group remains unchanged since they fail to meet the requirements of criteria 2 and 3.

(69) In conclusion, it has not been shown that MET criteria 2 and/or 3 were fulfilled by either of the sampled exporting producers. Therefore, MET cannot be granted to any of these companies.

(85) In the absence of other comments regarding the Market Economy Treatment, all determinations in recitals (50) to (69) to the provisional Regulation are confirmed. (Council Implementing Regulation (EU) No 1238/2013 and Commission Regulation (EU) No 513/2013)

US (DOC)

“Nonmarket Economy Country: The Department considers the PRC to be a nonmarket economy (“NME”) country. In accordance with section

771(18)(C)(i) of the Act, any determination that a foreign country is an NME country shall remain in effect until revoked by the administering authority. The Department continues to treat the PRC as an NME for purposes of this final determination." (77 FR 63791, October 17, 2012)

36. As regards the contention that the normal value and export price as arrived by the domestic industry in respect of the subject countries is incorrect, the Authority notes that the information furnished by the applicant at the time of initiation is *prima facie*. However, for the purpose of this final finding the Authority has determined the normal value and export price as per the Rules. The specific submissions made by the exporters with regard to their normal value and export price have been addressed in the respective paras of this final finding.
37. The Authority notes that Baoding Tian Wei Solar Films Co., Ltd did not provide consent for verification of their data/information. In view of this the Authority treats the said company as non-cooperative and also does not treat the company as market economy. The Authority further notes that M/s Wuxi Suntech Power Co Ltd, Wuxi, China PR has not claimed market economy treatment.
38. The following Chinese producers/exporters who claimed market economy treatment and filed questionnaire response to that effect, could not substantiate their claim during on the spot verification and withdrew their market economy treatment claim by furnishing a letter to that effect:
 - CEEG Nanjing Renewable Energy Co., Ltd
 - China Sunergy (Nanjing) Co., Ltd
 - CEEG (Shanghai) Solar Science Technology Co., Ltd
 - Canadian Solar Manufacturing (Changshu) Inc
 - Canadian Solar Manufacturing (Luoyang) Inc
39. The verification reports were sent by the Authority to the concerned Chinese companies for their comments. The Authority notes that in response to the verification report, as regards their MET claim, the above stated Chinese companies stated that it was found appropriate to waive the right for market economy treatment as due to time constraints it was impossible to satisfy the MET claim by the companies.
40. The Authority notes that the anti-dumping investigations are time bound. The intimation regarding the verification and the obligation of the

concerned Chinese companies to be ready with the required information and evidence to be provided to the verification team to establish their MET claim was intimated to them much in advance prior to the verifications. In terms of Anti-dumping Rules, the onus of rebutting the presumption of non-market economy condition lies with the concerned Chinese companies and not with the Authority.

41. The Authority also notes that in the anti-dumping findings of USA and EU concerning solar cells, the authorities in the respective countries have not granted market economy status to any of the Chinese companies, including the above stated companies.
42. In view of the above stated positions, the Authority treats the above stated Chinese companies as operating under non-market economy conditions.

JA Solar Technology Yangzhou Co., Ltd, JingAo Solar Co., Ltd, Shanghai JA Solar PV Technology Co., Ltd and Shanghai JA Solar Technology Co., Ltd

- i. The Authority notes that JA Solar Technology Yangzhou Co., Ltd, JingAo Solar Co., Ltd, Shanghai, JingAo Solar PV Technology Co., Ltd and Shanghai JA Solar Technology Co., Ltd who filed MET response and claimed market economy treatment in the present investigation are related parties. As submitted by the respondent companies, the control over these companies is vested in M/s JA Solar Holding Co Ltd, and form part of Jinglong Group.
- ii. As per the consent and convenience of the above stated related parties, the Authority conducted on the spot verification of the information / data provided by the said parties. The concerned parties were informed much in advance to keep the relevant information/data/documents inter alia concerning the origin and history of the companies, their shareholding patterns, investments, relationships and activities, capital goods, raw materials and utilities purchase details, history, ownership and activities of the related and parent companies, etc to substantiate the MET claim made by the concerned Chinese companies in their MET response. During the verification, the respondent companies were asked to substantiate their claim for MET with supportive documents. But, the companies could not rebut their non-market position by furnishing satisfactory

information/documents. Instead, the concerned Chinese companies expressed their inability in writing to provide the required documents during the course of on the spot verification.

- iii. The verification reports were sent by the Authority to the concerned Chinese companies for their comments. The Authority notes that in response to the verification report, as regards their MET claim, the above stated Chinese companies acknowledged that the intimation regarding the verification and the obligation of the concerned Chinese companies to be ready with the required information and evidence to be provided to the verification team to establish their MET claim was intimated to them as early as 17th February, 2014. As regards their comment that it is the responsibility of the Authority to ask for and verify the documents substantiating the MET claim made by the Chinese companies, the Authority notes that the onus of rebutting the presumption of non-market economy condition lies with the concerned Chinese companies and not with the Authority in terms of Anti-dumping Rules.
- iv. The Authority also notes that in the anti-dumping findings of USA and EU concerning solar cells, the authorities in the respective countries have not granted market economy status to any of the Chinese companies, including the above stated companies.
- v. In view of the above positions, the Authority does not grant market economy treatment to JA Solar Technology Yangzhou Co., Ltd, JingAo Solar Co., Ltd, Shanghai JA Solar PV Technology Co., Ltd and Shanghai JA Solar Technology Co., Ltd.

G. DETERMINATION OF NORMAL VALUE

Determination of Normal Value for producers and exporters in China PR

43. The Authority notes that none of the sampled producers/exporters from China PR have been found to be operating under market economy condition for determination of normal value in China in terms of Para-6 of Annexure-I to the Rules. Under the circumstances, the Authority is not in a position to apply Para 8 of Annexure 1 to the Rules to the above named Chinese companies and the Authority has to proceed in accordance with Para 7 of Annexure - I to the Rules.

44. Paragraph-7 of the Annexure-1 to the Anti-dumping Rules provides as follows:

"In case of imports from non-market economy countries, normal value shall be determined on the basis of the price or constructed value in the market economy third country, or the price from such a third country to other countries, including India or where it is not possible, or on any other reasonable basis, including the price actually paid or payable in India for the like product, duly adjusted if necessary, to include a reasonable profit margin".

45. According to these Rules, the normal value in China can be determined on any of the following basis:

- a) On the basis of the price in a market economy third country, or
- b) The constructed value in a market economy third country, or
- c) The price from such a third country to other countries, including India.
- d) If the normal value cannot be determined on the basis of the alternatives mentioned above, the Designated Authority may determine the normal value on any other reasonable basis including the price actually paid or payable in India for the like product duly adjusted to include reasonable profit margin.

46. The Authority notes that for determination of normal value based on third country cost and prices, the complete and exhaustive data on domestic sales or third country export sales, as well as cost of production and cooperation of such producers in third country is required, which is not available with the Authority in the present investigation. Also, no such verifiable information with regard to prices and costs prevalent in other such market economy third countries have been provided either by the applicant or by the responding exporters, nor any publicly available information could be accessed, nor the responding Chinese companies have made any claim with regard to an appropriate market economy third country. Under such circumstances the Authority proceeds to construct the normal value based on any other reasonable basis.

47. The Authority proceeds to determine Normal Value for China PR on available fact basis in terms of Para 7 of Annexure 1 to the Rules. Accordingly, the ex-works weighted average Normal Value for the product under consideration considering Crystalline Solar Cells, Crystalline Solar

Modules and Thin Films has been determined based on constructed costs of production of the most efficient domestic industry, duly adjusted to include selling, general & administrative costs/expenses and reasonable profits i.e. 5%. The CNV for Thin Films is considered as the same for Crystalline Solar Modules since both are treated as substitutable and like article. The constructed normal value (CNV) determined by the Authority for the product under consideration covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average constructed normal value (CNV) determined by the Authority for the product under consideration is US\$***/Watt.

Determination of Normal Value for producers and exporters in USA, Malaysia and Chinese Taipei

48. Under section 9A (1) (c), the normal value in relation to an article means:

- (i) *The comparable price, in the ordinary course of trade, for the like article, when meant for consumption in the exporting country or territory as determined in accordance with the rules made under sub-section (6), or*
- (ii) *When there are no sales of the like article in the ordinary course of trade in the domestic market of the exporting country or territory, or when because of the particular market situation or low volume of the sales in the domestic market of the exporting country or territory, such sales do not permit a proper comparison, the normal value shall be either:*
 - (a) *Comparable representative price of the like article when exported from the exporting country or territory or an appropriate third country as determined in accordance with the rules made under sub-section (6); or*
 - (b) *The cost of production of the said article in the country of origin along with reasonable addition for administrative, selling and general costs, and for profits, as determined in accordance with the rules made under sub-section(6):*

Provided that in the case of import of the article from a country other than the country of origin and where the article has been merely

transshipped through the country of export or such article is not produced in the country of exporter there is no comparable price in the country of export, the normal value shall be determined with reference to its price in the country of origin.

Determination of Normal Value for producers and exporters in USA

First Solar Inc, USA

49. The Authority notes that only one producer from USA namely First Solar Inc filed exporter's questionnaire response. M/s. First Solar Inc, USA has provided cost of production and selling price in the USA market to be considered as normal value. M/s First Solar Inc, USA has reported total domestic sales of ***MW of subject goods during POI for the total invoice value of US\$ ***.

50. During the verification, it was observed that *** KW of the subject goods have been sold by First Solar Inc, USA in the USA market by accounting the transactions through its related party M/s First Solar GmbH Mainz, Germany. First Solar Inc, USA claimed the same transactions as domestic sales arguing that the goods are supplied within USA itself, although the payments were received in free foreign exchange. This fact was pointed out to M/s First Solar Inc, USA in the verification report. In response, M/s First Solar Inc, USA reiterated their earlier position and continued to claim the said supplies as domestic sales. The Authority notes that First Solar Inc, USA has supplied the subject goods locally, but received payment from First Solar GmbH Mainz, Germany in foreign exchange. Moreover, when First Solar Inc, USA has sold subject goods in USA market to other affiliated and non-affiliated parties without accounting through First Solar GmbH Mainz, Germany and received the payment in US\$. First Solar, USA has not explained clearly why it was invoicing the goods to USA party through its related party in Germany, even though it was having its invoicing department in USA. This shows that there is some unexplained cause behind such transactions. Therefore, supply of subject goods inside USA and invoicing through First Solar GmbH Mainz, Germany and claiming the same as domestic sale is not acceptable. The Authority notes that First Solar Inc, USA has claimed to have made sales in USA market through three modes i.e. direct sales to affiliated parties in USA, direct sales to unaffiliated parties in USA and sales in USA to affiliated/unaffiliated parties through its affiliated party in

Germany. The practice of invoicing some local sales through a foreign country involving realisation of sale proceeds in foreign exchange cannot be considered as domestic sale for the purpose of determination of normal value.

51. Further, First Solar Inc, USA has made substantial volume of sale of subject goods to its affiliated party namely First Solar Electric, Inc, USA and claimed the same as not domestic sale on the ground that First Solar Electric Inc, USA has not purchased thin film products from its affiliated company for resale in either US or other international markets. First Solar Electric has bought/procured thin film products from its affiliated companies only for setting up of power plant. This company is situated in USA. Hence, sales made to First Solar Electric cannot be treated as sales of product under consideration at all. It was further claimed that such transactions are on cost basis governed by the transfer price policy of the company. The Authority notes that the sales made to the related company is on cost price basis as per the transfer price policy which is much below the price at which such sales are made to un-affiliated companies and therefore they are not at arm's length basis. It is further noted that First Solar Electric Inc, USA is not selling the thin film modules. In view of the above, the Authority does not treat the sales made by First Solar Inc, USA to First Solar Electric Inc, USA as domestic sales.

52. Thus, excluding the sales made by First Solar Inc, USA accounted through First Solar GmbH Mainz, Germany and the sales made by First Solar Inc, USA to First Solar Electric Inc, USA and taking only the sales made to unaffiliated parties in USA, the Authority determines the normal value in respect of First Solar Inc, USA as US\$ ***/Watt.

Normal value for non-cooperative exporters from USA

53. The Authority notes that no other exporter/producer from USA has responded to the Authority in present investigation. For the non-cooperative exporters/producers of the product consideration in USA, the Authority determines the normal value on the basis of best available information. The normal value (NV) determined by the Authority for the non-cooperative exporters/producers of the product consideration in USA covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average normal value of the product under consideration determined on the above basis is US\$ ***/Watt.

Determination of Normal Value for producers and exporters in Malaysia

54. The following sampled producers/exporters from Malaysia have filed exporter's questionnaire response:

- i. First SolarSDN BHD, Malaysia.
- ii. Q-CellsMalaysia SDN BHD, Malaysia

First Solar SDN BHD, Malaysia

55. M/s. First Solar SDN BHD, Malaysia has provided cost of production and selling price in Malaysia market to be considered as normal value. Information filed by the company has been verified by the Authority and a verification report was provided to the company. Comments offered by the company and considered relevant by the Authority have also been examined and addressed in this final finding. The Authority notes that First Solar SDN BHD, Malaysia, in addition to their exports through their related party namely First Solar GmbH, Mainz, Germany, has made substantial volume of exports of the subject goods to India during the POI through many parties who have not cooperated in the present investigation. Consequently, the complete value chain of the exports of subject goods by First Solar SDN BHD, Malaysia to India during the POI is absent before the Authority. Consequently, the Authority is not in a position to determine and grant individual margins to First Solar Malaysia. Under the above stated circumstances, determination of normal value concerning First Solar Malaysia is not considered to be relevant. In view of this position, the Authority does not determine individual normal value for M/s. First Solar SDN BHD, Malaysia based on the information provided by the said exporter.

Q-Cells Malaysia SDN BHD, Malaysia

56. M/s. Q-Cells Malaysia SDN BHD, Malaysia has provided cost of production and selling price in Malaysia market to be considered as normal value. Q-Cells Malaysia SDN BHD, Malaysia has reported the entire domestic sales of *** KW of subject goods during only one month of the POI for the total invoice value of US\$ ***. During the on the spot verification by the Authority, the Company could not demonstrate the authenticity of the costing and financial data in the SAP System claimed to be maintained by the Company. In view of this position, the Authority

does not determine individual normal value for M/s. Q-Cells Malaysia SDN BHD, Malaysia based on the information provided by the said exporter.

Normal value for non-cooperative exporters from Malaysia

57. The Authority notes that no other exporter/producer from Malaysia has responded to the Authority in present investigation. For all the non-cooperative exporters/producers in Malaysia, including the above stated companies, the Authority determines the normal value for Crystalline Solar Cells, Crystalline Solar Modules and Thin Films on the basis of best available information. The normal value (NV) determined by the Authority for the non-cooperative exporters/producers of the product consideration in Malaysia covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average normal value of the product under consideration determined on the above basis is US\$ ***/Watt.

Determination of Normal Value for producers and exporters in Chinese Taipei

Motech Industries INC, Chinese Taipei

58. M/s. Motech Industries INC, Chinese Taipei provided cost of production and selling price in Chinese Taipei market to be considered as normal value. Motech Industries INC, Chinese Taipei has reported total domestic sales of ***MW of subject goods during POI for the total invoice value of US\$ ***lakhs.

59. In the EQ response, at Para A.5, with regard to information regarding all subsidiaries or related companies in all countries which are involved with the product concerned, Motech Industries INC declared AE Polysilicon Corporation, USA as the only subsidiary involved in the manufacture of subject goods. But, during the on the spot verification it has come to notice of the Authority that Motech Industries INC has many other related companies in Chinese Taipei and also in other countries namely TSMC Solar, Taiwan, Motech (Suzhou) Renewable Energy Co Ltd, China PR, Motech America LLC and Itogumi Motech, Japan which are also involved in the subject goods but not declared by Motech Industries INC in the EQ response filed before the Authority. Further, as per the information available with the Authority M/s Motech (Suzhou) Renewable Energy Co

Ltd, China PR, one of the related companies, has made substantial volume of export of subject goods to India during the POI, the details of which has not been declared by Motech Industries INC in the EQ response filed before the Authority, despite China PR being one of the subject countries in the present investigation.

60. The verification report was provided by the Authority to Motech Industries INC, Chinese Taipei for comments. In their comments to the verification report, Motech Industries INC stated that M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR had submitted the sampling questionnaire but not sampled by the Authority. Further, it is acknowledged that solar cells have been sold by Motech Industries INC, Chinese Taipei to M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR for producing modules for sale to other countries and not India. The subject goods exported by M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR are of Chinese origin.
61. The Authority notes that non-selection of M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR in the sampling process does not justify non-declaration of the details of the said related party along with other such related parties in the exporter's questionnaire response filed by Motech Industries INC, Chinese Taipei. Further, China PR being a subject country, the post verification submission of Motech Industries INC, Chinese Taipei that the solar cells sold by Motech Industries INC, Chinese Taipei to M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR during the POI are meant for producing modules by M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR for sale to other countries and not India and the subject goods exported by M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR to India during the POI are of Chinese origin, are not verifiable and therefore cannot be accepted.
62. In view of the above position, the Authority does not treat the exporter's questionnaire response filed by Motech Industries INC, Chinese Taipei and the data provided therein as reliable. In view of this position, the Authority does not determine individual normal value for M/s. Motech Industries INC, Chinese Taipei based on the information provided by the said exporter.

Normal value for non-cooperative exporters from Chinese Taipei

63. The Authority notes that no other exporter/producer from Chinese Taipei has responded to the Authority in present investigation. For all the non-cooperative exporters/producers in Chinese Taipei, the Authority determines the normal value for Crystalline Solar Cells, Crystalline Solar Modules and Thin Films on the basis of best available information. The normal value (NV) determined by the Authority for the non-cooperative exporters/producers of the product consideration in Chinese Taipei covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average constructed normal value (CNV) determined by the Authority for the product under consideration is US\$***/Watt.

H. EXPORT PRICE

China PR

Determination of Export Price for Cooperative Exporters in China PR

64. The Authority notes that Baoding TianWei Solar Films Co., Ltd, China PR, although sampled by the Authority, did not cooperate/consent for verification and therefore treated as non-cooperative party by the Authority.

65. The following are the sampled respondent cooperative producers/exporters from China PR, whose data/information were verified by the Authority:

- i. M/s Wuxi Suntech Power Co Ltd, Wuxi, China PR.
- ii. M/s Canadian Solar Manufacturing (Changhsu) Inc, Changshu City, Jiangsu Province, China PR.
- iii. M/s Canadian Solar Manufacturing (Luoyang) INC, Luoyang City, Henan Province, Chin PR.
- iv. M/s Canadian Solar International Ltd, Hong Kong.
- v. M/s China Sunergy (Nanjing) Co Ltd, Nanjing, China PR.
- vi. M/s CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR.
- vii. M/s CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR.
- viii. M/s JA Solar Technology, Yangzhou, China PR.

- ix. M/s Shanghai JA Solar Technology Co Ltd, Fengxian District Shanghai, China PR.
- x. M/s Shanghai JA Solar PV Technology Co., Ltd, Zhabei China PR.
- xi. M/s JiangAo Solar Co Ltd, Nangjin, Hebei, China PR.

A. Wuxi Suntech Power Co Ltd, Wuxi, China PR

- 66. Wuxi Suntech Power Co Ltd, China PR is a producer of both Crystalline Solar Cells and Modules. During the POI, Wuxi Suntech exported only crystalline solar modules to India. During the POI, it reported *** export transactions to various importers in India. The total reported quantity of export of modules to India during POI was *** pieces (***) with gross invoice value of USD ***.
- 67. Out of the total reported exports to India during the POI, Wuxi Suntech exported *** pieces (export value USD ***) and *** pcs (export value USD ***) through M/s ***, Singapore and ***, Germany respectively, constituting *** % of the total claimed quantity of export to India during the POI. The Authority notes that M/s *** Singapore and *** Germany have not cooperated and filed exporter's questionnaire response in the present investigation, in the absence of which, the complete value chain in respect of the said channels of export cannot be established.
- 68. In response to the verification report, Wuxi Suntech submitted that M/s *** Singapore and *** Germany may have no obligation to file EQ response since they are neither exporter in China nor related to Wuxi Suntech. However, the Authority notes once again that unless such exports are brought before the Authority by the concerned exporters, the complete value chain cannot be established. In view of the fact that substantial volume of exports made by Wuxi Suntech through *** Singapore and *** Germany is not before the Authority due to non-cooperation by *** Singapore and *** Germany, the Authority does not grant individual export price to Wuxi Suntech Power Co Ltd, China PR.

B. JA Solar Technology Yangzhou Co., Ltd, JingAo Solar Co., Ltd, Shanghai JA Solar PV Technology Co., Ltd and Shanghai JA Solar Technology Co., Ltd

- 69. The Authority notes that JA Solar Technology Yangzhou Co., Ltd, JingAo Solar Co., Ltd, Shanghai JA Solar PV Technology Co., Ltd and Shanghai

JA Solar Technology Co., Ltd are related parties. Out of these related companies, JA Solar Technology Yangzhou Co., Ltd is the major exporter (contributing about ***% of the total exports by the group) of the subject goods to India during the POI.

70. The Authority verified the data/information furnished by the above stated Chinese companies and reports were sent to them for comments. The comments considered relevant by the Authority are addressed in this final finding.
71. JA Solar Technology Yangzhou Co., Ltd is a producer of both crystalline solar cells & modules. During the POI the Company claimed to have directly exported *** pcs (***)KW) crystalline solar cells to India in ***transactions for the gross invoice value USD ***. The company also exported solar cells through Shanghai JA Solar PV Technology Co., Ltd.
72. During on the spot verification, it was observed that being the major exporter, JA Solar Technology Yangzhou Co., Ltd made ***% of the exports of subject goods to three importers namely ***, ** and ***. The Authority notes that the said exports claimed to have been made to these three importers have not been reported in the DGCI&S data relied upon by the Authority in the present investigation. The reasons for the said discrepancy was sought from the concerned exporter during the on the spot verification. The verification report was provided to the above stated companies for comments. In response to the verification report, JA Solar Technology Yangzhou Co., Ltd informed that being an exporter in China, they cannot provide accurate reasons for any such discrepancy.
73. After considering the response of the concerned Chinese companies, the Authority notes that ***% (**% of the total exports made by the group) of the exports of the subject goods claimed to have been made by JA Solar Technology Yangzhou Co., Ltd cannot be relied upon since the said transactions have not been found to have been reported in the DGCI&S data. Moreover, despite opportunity given by the Authority, JA Solar Technology Yangzhou Co., Ltd could not justify the above stated discrepancy in the claimed exports. In view of the above position and considering the fact that JA Solar Technology Yangzhou Co., Ltd, JingAo Solar Co., Ltd, Shanghai JA Solar PV Technology Co., Ltd and Shanghai JA Solar Technology Co., Ltd are related companies, the Authority does not grant individual export price to any of these companies.

C. Canadian Solar Manufacturing (Changhsu) Inc, China PR and Canadian Solar International Ltd, Hong Kong

74. Canadian Solar Manufacturing (Changshu) Inc, China PR and Canadian Solar International Ltd, Hong Kong, who had filed exporters questionnaire response, are related companies. The Authority verified the data/information furnished by the above stated companies and reports were sent to them for comments. The comments considered relevant by the Authority are addressed in this final finding.

75. Canadian Solar Manufacturing (Changshu) Inc is a producer of Crystalline Solar Modules and Canadian Solar International Ltd, Hong Kong is a Hong Kong based related trading company. Solar modules produced by Canadian Solar Manufacturing (Changshu) Inc have been exported by Canadian Solar International Ltd, Hong Kong to India during the POI.

76. During the on the spot verifications, it was noted that as per the information available with Authority Canadian Solar Manufacturing (Changshu) Inc exported a small quantity of Solar Modules to India directly during the POI. This observation was intimated to the company in the verification report for comments. In response to the verification report, the company has commented that CSAS has not invoiced any goods directly to any entity in India. The said goods were invoiced to a Singapore entity and will therefore not appear as an India sale in the Company's database.

77. During the POI, Canadian Solar Manufacturing (Changshu) Inc shipped *** Pcs (***) KW of crystalline solar modules directly to the Indian buyers, but invoiced through Canadian Solar International Ltd, Hong Kong. Canadian Solar Manufacturing (Changshu) Inc made payments to Canadian Solar International Ltd, Hong Kong on lump sum basis at certain intervals and payments from the Indian buyers were realized by Canadian Solar International Ltd, Hong Kong. The invoice value of the subject goods to India is US\$ **. The total adjustments of US\$ *** were made on account of Inland Freight, Overseas Freight, Insurance Charges, Bank Charges, Cargo Handling Charges and Credit Cost and SGA Expenses of M/S Canadian Solar International Ltd. After making the above adjustments, the Authority determines net export price (NEP) of Canadian Solar Manufacturing (Changshu) Inc for the modules exported through Canadian Solar International Ltd, Hong Kong at US\$ **/Watt.

D. M/s China Sunergy (Nanjing) Co Ltd, China PR, CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR and CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR

78. The Authority notes that China Sunergy (Nanjing) Co Ltd, China PR, CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR and CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR are related companies. The Authority verified the data/information furnished by the above stated Chinese companies and reports were sent to them for comments. The comments considered relevant by the Authority are addressed in this final finding.

79. China Sunergy (Nanjing) Co Ltd, China PR is a producer of crystalline solar cells only. During the POI, China Sunergy (Nanjing) Co Ltd exported *** pcs (**KW) of crystalline photovoltaic cells to India for the gross invoice value of US \$ ***.

80. CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR is a manufacturer of only crystalline photovoltaic modules. It manufactures crystalline photovoltaic modules by procuring solar cells from their related companies. CEEG Nanjing Renewable Energy Co Ltd exported to India ***KW (** pcs) of Modules of a gross invoice value of US \$ *** during the POI. Out of the total sales to India, *** PCS were exported to India through M/s **, Singapore and *** pcs were exported to India through M/s **, Hong Kong, together accounting for about ***%. However, the Authority notes that **, Singapore and **, Hong Kong have not filed exporter's questionnaire response in the present investigation, in the absence of which, the complete value chain in respect of the said channels of export constituting about ***% of the total exports to India made by CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR cannot be established.

81. CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR is a manufacturer of only crystalline photovoltaic modules. It manufactures crystalline photovoltaic modules by procuring solar cells from their related company i.e. M/S CEEG (Nanjing) Renewable Energy Company Limited, China PR. During the POI, CEEG (Shanghai) Solar Science &Technology Co Ltd exported *** pcs (KW -) of Modules of a gross invoice value of US \$ ***. Out of the total sales of ***pcs, *** pcs

(*** %) of the total sales were exported through ***, Hong Kong and only ***pcs were exported directly to India. The Authority notes that ***, Hong Kong has not filed exporter's questionnaire response in the present investigation, in the absence of which, the complete value chain in respect of the said channel of export constituting about *** % of the total exports to India made by CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR cannot be established.

82. The Authority verified the data/information of the above stated Chinese companies and the verification report was provided to the said companies for their comments. In response to the observations in the verification report, the said companies submitted that the sales made through ***, Hong Kong and ***, Singapore were shipped directly to India by the Company and were duly reported and disclosed under the Appendix-2 filed with the Designated Authority. They further submitted that ***, Hong Kong and *** Singapore are unrelated entities and therefore could not force them to file EQ response.

83. The Authority notes that the above stated related respondent producers/exporters have made significant exports of the subject goods to India during the POI through ***, Singapore and ***, Hong Kong. However, ***, Singapore and ***, Hong Kong have not filed exporter's questionnaire response in the present investigation, in the absence of which, the complete value chain in respect of the said channel of export made by China Sunergy (Nanjing) Co Ltd, China PR, CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR and CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR cannot be established. In view of the above position, the Authority does not grant individual export price to China Sunergy (Nanjing) Co Ltd, China PR, CEEG Nanjing Renewable Energy Co Ltd, Nanjing, China PR and CEEG (Shanghai) Solar Science &Technology Co Ltd, Shanghai, China PR.

84. The Authority notes that M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR had filed the sampling questionnaire but not sampled by the Authority. In the sampling questionnaire filed by the Company, it was declared that Power Island Ltd is the 100% owner of the Company. But, during on the spot verification of M/s Motech Industries Inc, Chinese Taipei, a respondent producer/exporter from Chinese Taipei in the present investigation, it has come to the notice of the Authority that M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR is a subsidiary

company of M/s Motech Industries Inc, Chinese Taipei involved in the production of Solar Modules by procuring Solar Cells from M/s Motech Industries Inc, Chinese Taipei and exporting the subject goods to India during the POI. Since the Authority has not granted individual export price to M/s Motech Industries Inc, Chinese Taipei for the reasons well explained in the respective para pertaining to M/s Motech Industries Inc, Chinese Taipei in this final finding, the Authority does not consider M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR as eligible for the export price determined for the non-sampled category of exporters from China PR.

Non-cooperative Exporters From China PR

85. In respect of all other exporters from China PR who are treated to be non-cooperative, the Authority has determined their net export price as per facts available in terms of Rule 6(8) of the Rules. The net export price determined by the Authority for the non-cooperative exporters/producers of the product consideration in China PR covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$-***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average net export price of the product under consideration determined on the above basis is US\$ ***/Watt.

USA

Determination of Export Price for Cooperative Exporters in USA

86. The Authority notes that only First Solar Inc, USA filed exporters questionnaire response from USA along with its related exporter namely First Solar, GMBH Germany, whose data/information have been verified by the Authority. As per the responses filed and verified, the Authority notes that M/s First Solar Inc, USA is a producer of thin films and it has exported the said goods to India through its related company namely M/s First Solar GMBH, Germany. M/s First Solar Inc, USA exported a total of ***KW of subject goods (thin film modules) to India during POI through its related company First Solar GmbH – Mainz Germany for a gross CIP value of US \$ ***. In all the cases, material was shipped directly to India and invoices routed through First Solar GmbH Mainz – Germany. Out of the total exports to India, an insignificant volume (***) was invoiced by First Solar GmbH – Mainz Germany through *** USA, in respect of which exporter's questionnaire response has not been filed. In view of the above

position, the Authority excludes the export of ***KW of subject goods from the total exports and determined the net export price for First Solar Inc, USA and First Solar GmbH – Mainz Germany. The Authority has determined net export price (NEP) at US\$ ***/Watt in respect of the subject producer/exporter after making due adjustments for inland/overseas freight, overseas insurance and packing cost as claimed by the exporter and as verified by the Authority.

Non-cooperative Exporters From USA

87. In respect of all other exporters from USA who are treated to be non-cooperative, the Authority has determined their net export price as per facts available in terms of Rule 6(8) of the Rules. The net export price determined by the Authority for the non-cooperative exporters/producers of the product consideration in USA covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$-***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average net export price of the product under consideration determined on the above basis is US\$ ***/Watt.

Malaysia

Determination of Export Price for Cooperative Exporters in Malaysia

88. The Authority notes that the following producers/exporters from Malaysia had filed sampling questionnaire response and were sampled by the Authority. Further, the same sampled producers/exporters from Malaysia filed the exporters questionnaire response:

- i. Q-cells Malaysia SDN BHD (renamed as Hanwha Q Cells Malaysia SDN BHD).
- ii. First Solar Malaysia SDN BHD, Malaysia.

Q-Cells Malaysia SDN BHD (renamed as Hanwha Q Cells Malaysia SDN BHD)

89. The Authority notes that only Q-Cells Malaysia SDN BHD (renamed as Hanwha Q Cells Malaysia SDN BHD) filed the exporter's questionnaire response from Malaysia whose data/information has been verified by the Authority. The Company produced and exported only crystalline solar cells to India during the POI. The exports were made to four customers in

India during the POI on ex-works basis. During the verification it was observed that the exports of the subject goods have been made by Hanwha Q Cells Malaysia SDN BHD through its related German Company namely ***Germany. On being asked to explain the modality of the transactions having taken place through the stated related German Company when the same fact has not been reported in the EQ response filed by Hanwha Q Cells Malaysia SDN BHD, it was informed that ***Germany gets the orders from Indian buyers, raises the invoices on Indian buyers and gives direction to Hanwha Q-Cells Malaysia to deliver the goods to the Indian buyers. Further, ***Germany, after effecting the sales for and on behalf of Q-Cells Malaysia, collects the sales proceeds from the Indian buyers and remits the money to Hanwha Q-Cells Malaysia on a periodic basis after deducting its commission at the rate of ***% as agreed in the agency agreement.

90. The verification report was supplied to Hanwha Q Cells Malaysia SDN BHD for comments. In their comments on the verification report, the respondent Company reiterated their position, which was not found to be satisfactory. The Authority notes that the entire shipments have been made by Hanwha Q Cells Malaysia SDN BHD on account of ***Germany. Moreover, payments have also been realised by ***Germany from the Indian buyers. Despite the above nature of transactions, neither Hanwha Q-Cells Malaysia declared the involvement of ***Germany in the export sales channel to India in the exporter's questionnaire response, nor ***Germany filed exporter's questionnaire response in the present investigation. In view of the above position, in the absence of exporter's questionnaire response of ***Germany, the complete value chain in respect of the claimed exports to India during the POI cannot be established. In view of the above position, the Authority does not grant Hanwha Q Cells Malaysia SDN BHD individual export price in the present investigation.

First Solar Malaysia SDN BHD, Malaysia

91. The Authority notes that M/s First Solar SDN BHD, Malaysia, along with First Solar, GMBH Mainz Germany filed the exporter's questionnaire response, whose data/information have been verified by the Authority. As per the response filed and as verified, the Authority notes that M/s First Solar Malaysia is a producer of thin films which has exported the said goods to India through its related company namely M/s First Solar GMBH,

Germany. During the POI the First Solar SDN BHD, Malaysia exported a total of *** KW of the subject goods for a total CIP value of US \$ *** through First Solar, GMBH Germany. In all the cases, material is shipped directly to India by First Solar Malaysia Sdn Bhd and invoices routed through First Solar GmbH – Mainz Germany. Out of the total *** KW exports of subject goods to India during the POI, produced by First Solar SDN BHD, Malaysia, First Solar, GMBH Germany exported directly to India *** KW (***%) and the balance ***KW (***%) was exported through various other parties in different countries namely, ***, Germany (** KW), ***, Germany (**KW), ***, Germany (** KW), ***Germany (** KW), West ***UAE (**KW), ***, USA (** KW), ***, Spain (** KW) and ***, Netherlands (** KW), in respect of which exporter's questionnaire response has not been filed by the concerned parties.

92. This fact was brought to the notice of First Solar in the exporter's verification report. In response to the verification report, it is argued by First Solar that the values & consequent price in most of these transactions are higher than the values & consequent price reported by First Solar in its questionnaire response. It is further argued by First Solar that Moser Baer, one of the supporters of the petition in the present case, is related to and has purchased the subject goods from *** and that's why *** did not cooperate with the Authority in the present investigation.

93. The Authority notes that *** is not the only party which is involved in the export of subject goods produced by First Solar SDN BHD, Malaysia and exported by First Solar, GMBH Mainz Germany. There are many other parties as well namely ***, Germany ***, Germany, ***, Germany, ***Germany, ***, USA, ***, Spain etc. None of these parties have filed exporter's questionnaire response in the present investigation. The Authority further notes that Moser Baer, one of the supporting domestic producers in the present investigation, is an importer of the subject goods from the subject countries and therefore not considered as eligible domestic industry by the Authority. Moreover, neither First Solar SDN BHD, Malaysia nor First Solar, GMBH Mainz Germany has demonstrated with documentary evidence that they have acted to their best of their ability to ensure the participation and cooperation by all such third parties including *** through whom ***% of the exports through third parties. In view of this position, the existence of any compensatory arrangements between such parties cannot be ruled out.

94. The Authority notes that in the absence of exporter's questionnaire response filed by these parties, the complete value chain in respect of the exports of subject goods made by First Solar SDN BHD, Malaysia, through First Solar, GMBH Mainz Germany cannot be established. In view of the above position, the Authority does not determine individual export price to First Solar SDN BHD, Malaysia and First Solar, GMBH Mainz Germany.

Non-cooperative Exporters From Malaysia

95. In respect of all other exporters from Malaysia who are treated to be non-cooperative, the Authority has determined their net export price as per facts available in terms of Rule 6(8) of the Rules. The net export price determined by the Authority for the non-cooperative exporters/producers of the product consideration in Malaysia covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$-***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average net export price of the product under consideration determined on the above basis is US\$ ***/Watt.

Chinese Taipei

Determination of Export Price for Cooperative Exporters in Chinese Taipei

96. The Authority notes that the following producers/exporters from Chinese Taipei were selected in the sampling process:

- i. Motech Industries INC
- ii. M/s Sunwell Solar Corporation
- iii. M/s Del Solar Co Ltd

97. The Authority notes that M/s Motech Industries INC is the only respondent cooperative producer/exporter from Chinese Taipei which filed exporters questionnaire response. The data/information furnished by Motech Industries INC was verified by the Authority. The Authority further notes that in the EQ response, Motech Industries INC, Chinese Taipei claimed export of ***pcs (***)KW for a gross value of US \$ *** of subject goods to India during the POI.

98. In the EQ response, at Para A.5, with regard to information regarding all subsidiaries or related companies in all countries which are involved with

the product concerned, Motech Industries INC declared AE Polysilicon Corporation, USA as the only subsidiary involved in the manufacture of subject goods. But, during the on the spot verification it has come to notice of the Authority that Motech Industries INC has many other related companies in Chinese Taipei and also in other countries namely TSMC Solar, Taiwan, Motech (Suzhou) Renewable Energy Co Ltd, China PR, Motech America LLC and Itogumi Motech, Japan which are also involved in the subject goods but not declared by Motech Industries INC in the EQ response filed before the Authority. Further, as per the information available with the Authority M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR, one of the related companies, has made substantial volume of export of subject goods to India during the POI, the details of which has not been declared by Motech Industries INC in the EQ response filed before the Authority, despite China PR being one of the subject countries in the present investigation.

99. The verification report was provided by the Authority to Motech Industries INC, Chinese Taipei for comments. In their comments to the verification report, Motech Industries INC stated that M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR had submitted the sampling questionnaire but not sampled by the Authority. Further, it is acknowledged that solar cells have been sold by Motech Industries INC, Chinese Taipei to M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR for producing modules for sale to other countries and not India. The subject goods exported by M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR are of Chinese origin.
100. The Authority notes that non-selection of M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR in the sampling process does not justify non-declaration of the details of the said related party along with other such related parties in the exporter's questionnaire response filed by Motech Industries INC, Chinese Taipei. Further, China PR being a subject country, the post verification submission of Motech Industries INC, Chinese Taipei that the solar cells sold by Motech Industries INC, Chinese Taipei to M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR during the POI are meant for producing modules by M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR for sale to other countries and not India and the subject goods exported by M/s Motech (Suzhou) Renewable Energy Co Ltd, China PR to India during the POI are of Chinese origin, are not verifiable and therefore cannot be accepted.

101. In view of the above position, the Authority does not accept the EQ response filed by Motech Industries INC, Chinese Taipei as reliable and therefore does not grant individual export price to Motech Industries INC, Chinese Taipei in the present investigation.

Non-cooperative Exporters From Chinese Taipei

102. In respect of all other exporters from Chinese Taipei who are treated to be non-cooperative, the Authority has determined their net export price as per facts available in terms of Rule 6(8) of the Rules. The net export price determined by the Authority for the non-cooperative exporters/producers of the product consideration in Chinese Taipei covering Crystalline Solar Cells, Crystalline Solar Modules and Thin Films as US\$***/Watt, US\$***/Watt and US\$ ***/Watt, respectively. The weighted average net export price of the product under consideration determined on the above basis is US\$ ***/Watt.

I. DUMPING MARGIN

Sampled and Cooperative Exporters from China PR

103. Considering the Normal value and Export prices as determined above, the dumping margins have been determined as follows for the sampled cooperative exporters from China PR:

Sl.No.	Channel of Export	Producer	Exporter	Normal Value - US\$/ Watt	Net Export price - US\$/ Watt	Dumping Margin - US\$/ Watt	Dumping Margin - %	Dumping Margin Range - %
1	China - Hong Kong - India	Canadian Solar Manufacturing (Changhsu) Inc, China PR	Canadian Solar International Ltd, Hong Kong	***	***	***	***	60-70

Non Sampled Exporters from China

104. The dumping margin for the following exporters who had made themselves known in response to the sampling questionnaire but not sampled by the Authority, has been determined on the basis of the dumping margin determined for the above stated cooperative exporter in China in terms of Rule 18(2) of the Rules. Thus the dumping margin in respect of the non-sampled exporters from China PR is as per the table below:

Sl. No	Name of the producer	Name of the Exporter	Dumping Margin - US\$/Watt	Dumping Margin - %	Dumping Margin Range - %
1	Hanwha Solar One (Qidong) Co Ltd, China PR	Hanwha Solar One (Qidong) Co Ltd, China PR			
2	Chint Solar (Zhejiang), Co Ltd, China PR	Chint Solar (Zhejiang), Co Ltd, China PR			
3	Jinko Solar Co Ltd, China PR	Jinko Solar Import & Export Co Ltd, China PR			
4	Zhejiang Jinko Solar Co Ltd, China PR	Jinko Solar Import & Export Co Ltd, China PR			
5	Del Solar (Wujiang) Ltd, Chin PR	Del Solar (Wujiang) Ltd, Chin PR			
6	LDK Solar Hitech (Suzhou) Co Ltd, China PR	LDK Solar Hitech (Suzhou) Co Ltd, China PR			
7	Changzhou Trina Solar Energy Co Ltd, China PR	Changzhou Trina Solar Energy Co Ltd, China PR			

8	Shangluo BYD Industrial Co Ltd, China PR	Shangluo BYD Industrial Co Ltd, China PR			
9	Dongfang Electric (Yixing) Magi Solar Power Technology Co Ltd, China PR	Dongfang Electric (Yixing) Magi Solar Power Technology Co Ltd, China PR			
10	JiangyinHareon Power Co Ltd, China PR	JiangyinHareon Power Co Ltd, China PR			
11	Hengdian Group DMEGC Magnetics Co Ltd, China PR	Hengdian Group DMEGC Magnetics Co Ltd, China PR			
12	HanzhouDahe Thermo Magnetics Co Ltd, China PR	HanzhouDahe Thermo Magnetics Co Ltd, China PR			
13	Zhejiang Jinko Solar Co Ltd, China PR	Zhejiang Jinko Solar Trading Co Ltd, China PR			
14	AnjiDaSol Solar Energy Science & Technology Co Ltd, China PR	AnjiDaSol Solar Energy Science & Technology Co Ltd, China PR			
15	YuhuanSinosula Science & Technology Co Ltd, China PR	YuhuanSinosula Science & Technology Co Ltd, China PR			
16	Perlight Solar Co Ltd, China PR	Perlight Solar Co Ltd, China PR			
17	CNPV Dongying Solar Power Co Ltd, China PR	CNPV Dongying Solar Power Co Ltd, China PR			

18	Ningbo Qixin Solar Electricals Appliance Co Ltd, China PR	Ningbo Qixin Solar Electricals Appliance Co Ltd, China PR			
19	Yingli Energy (China) Co Ltd, China PR	Yingli Energy (China) Co Ltd, China PR			
20	Shanghai BYD Co Ltd, China PR	Shanghai BYD Co Ltd, China PR			
21	Renesola Jingsu Ltd, China PR	RenesolaJingsu Ltd, China PR			
22	Shenzhen Topray Solar Co Ltd, China PR	Shenzhen Topray Solar Co Ltd, China PR			
Dumping Margin			***	***	60-70

All other exporters from China PR

105. Dumping margin for all other non-cooperating exporters from China PR has been determined by the Authority on the basis of best available facts as given in the table below:

Particulars	Normal Value - US\$/Watt	Net Export price - US\$/Watt	Dumping Margin - US\$/Watt	Dumpi ng Margin - %	Dumping Margin Range -%
All other Producers/Exp orters	***	***	***	***	100-110

Dumping Margin in case of USA

106. Considering the normal value and export price as determined above, the dumping margin for the producers/exporters from USA is determined as follows:

Sl.No.	Channel of Export	Producer	Exporter	Normal Value - US\$/Watt	Net Export price - US\$/Watt	Dumping Margin - US\$/Watt	Dumping Margin - %	Dumping Margin Range - %
1	USA - Germany - India	First Solar Inc, USA	First Solar GmbH Mainz, Germany	***	***	***	***	5-15
2	Any	All Other Producers from USA	All Other Exporters from USA	***	***	***	***	40-50

Dumping Margin in case of Malaysia

107. Comparing the normal value and export prices as determined in the preceding paragraphs, the dumping margin has been determined by the Authority with regard to Malaysia as per the table below:

Particulars	Normal Value - US\$/Watt	Net Export price - US\$/Watt	Dumping Margin - US\$/Watt	Dumping Margin - %	Dumping Margin Range - %
All Producers/Exporters	***	***	***	***	60-70

Dumping Margin in case of Chinese Taipei

108. Comparing the normal value and export prices as determined in the preceding paragraphs, the dumping margin has been determined by the Authority with regard to Chinese Taipei based on best available facts as per the table below;

Particulars	Normal Value - US\$/ Watt	Net Export price - US\$/ Watt	Dumping Margin - US\$/ Watt	Dumping Margin - %	Dumping Margin Range - %
All Producers/Exporters	***	***	***	***	70-80

J. METHODOLOGY FOR INJURY DETERMINATION AND EXAMINATION OF INJURY AND CAUSAL LINK

INJURY EXAMINATION

Submissions made by the producers/exporters/importers/other interested parties

109. The following are the injury related submissions made by the producers/exporters/importers/other interested parties:

- i. Injury analysis is based on the injury data of only 12% of the total production of the PUC in India and the same cannot be considered as representative of domestic industry.
- ii. There is a huge gap between the capacity and demand. Domestic module producers working at 100% capacity utilization would only fulfil 13% of the total demand. Indian demand is being met by imports, as the Indian industry was created and focused itself on exports.
- iii. PCN-wise Analysis is required for a Heterogeneous PUC in order to meet the “fair comparison” requirements under WTO Agreement.
- iv. There has been a significant dip in the prices of major inputs as well as the PUC on a month-wise basis over the POI. Price fluctuations in the PUC and major inputs thereof call for a month-wise analysis to avoid skewed results.
- v. The domestic industry has not suffered injury due to imports into India. Performance of the domestic industry has materially improved as far as domestic market is concerned. The reasons for significant price decline are significant decline in the cost of basic input, silicon wafer. The cost of production of the domestic industry has increased due to incidence of fixed costs due to collapse of exports of the domestic industry.
- vi. Domestic Industry has created significant excess capacity considering export markets, which collapsed. Petitioners have invested too heavily in

the product under consideration which are not only disproportionately higher as compared to capacity additions but also were intended for exports.

- vii. A determination of injury shall involve an objective examination of both (a) the volume of the dumped imports and the effect of the dumped imports on prices in the domestic market for like article and (b) the consequent impact of these imports on domestic producers of such products. The Designated Authority is required to determine both.
- viii. The domestic industry had capacity utilization of 88.61% in 2008-09, which implies that the domestic industry could have produced 410.26 MW during period of investigation. As against this, the domestic industry produced only 26.03 MW. Thus, the domestic industry was faced with exorbitant fixed cost, high depreciation, high interest cost during this period which had to be absorbed on the production of 26.03 MW only. Thus, petitioners have suffered very heavy high fixed cost during this period which is the sole cause of decline in profitability.
- ix. The petitioners have claimed steep decline in profits despite significant decline in raw material cost which clearly establishes that decline in profits is due to steep increase in the fixed cost as a result of collapse of export market.
- x. For determining injury margin, Authority is required to determine non injurious price for thin film. However, the Designated Authority cannot determine non injurious price for thin film for the reason that there is no producer of thin film who is part of petitioners. Thus, possibility of thin film substituting crystalline products, in any case, cannot be a ground for including thin film products within the scope of the product under consideration.
- xi. Cost of production of Moser Baer for thin film could not have been an appropriate benchmark for the reason that Moser Baer itself has found its production facilities insufficient/inappropriate/incompetitive and instead of production, the company has resorted to significant imports.
- xii. Imports price from subject countries and non-subject countries are at comparable level. Thus, if the petitioners contend that these imports are at dumped prices, they have proceeded on a discriminatory basis in violation of Rule 19. Further, if petitioners maintain that these imports are undumped imports, this directly attracts the provisions of causal link. Either way, the petition is not maintainable in its present form.
- xiii. It would be seen that depreciation cost of the two companies increased from Rs.267 lacs to 5417 lacs i.e. about twenty times, whereas interest cost increased from 960 lacs to 9100 lacs, i.e., about ten times. The

disproportionate increase in depreciation & interest cost is because of collapse of export market. Even though petitioners have stated that they have segregated injury because of exports, it seems the same has been done only in respect of profits and not in respect of other parameters such as production, capacity utilization, sales volumes, etc. and also not done for apportionment of expense between domestic and exports. The depreciation and interest cost must be charged to domestic production for the purpose of determining domestic profit in the ratio of capacity.

xiv. Further, on the same lines, conversion and all other fixed costs of the company must be charged onto the domestic production in the ratio of capacity. Since petitioner domestic industry has not even produced the product under consideration during the relevant period despite enhancement of capacities to the extent it has produced in the past, such high fixed cost cannot be charged to the domestic production for the purpose of determining domestic profit under Annexure-II.

xv. Since collapse of export market is clearly a different factor and since this injury cannot be charged to the domestic market for the purpose of determining profit under Annexure-II, the DA should normate the fixed cost and thereafter determine profits.

xvi. The analysis of import and determination of volume and value of import is full of serious errors. There are hundreds of transactions where the assessment of imports volume is flawed. If import volumes are rectified in all these transactions, the emerging position shall be entirely different than what claimed by the petitioners.

xvii. The imports from non-subject countries increased significantly in period of investigations as compared to preceding year. It would, therefore, be inappropriate to discriminatorily proceed against imports from subject countries and ignore imports from non-subject countries.

xviii. Domestic industry is selling the product at a price materially below the landed price of imports. Such being the case, the domestic industry cannot claim that imports have adversely impacted the domestic industry.

xix. It is submitted that the level of co-operation from USA is 100% in this investigation. Therefore, the Designated Authority is required to consider the weighted average export price of co-operating exporters for the purpose of examination of price effect of the alleged dumped imports on the domestic industry.

xx. Petitioners have reported significant increase in per unit costs during period of investigation. There is no justification for such a massive increase in the cost of sale during POI particularly because there is no

material increase in the prices of various materials/inputs consumed in the production of the product concerned.

xxi. The domestic industry has resorted to massive capacity expansion over the period. It is obvious that such robust capacity expansion could not be commercialised immediately. Further, it also shows that the capacity expansion have been made without adequate consideration to the market situation. It would be seen that these capacity additions were not made keeping in mind the domestic demands. These were made keeping in mind the export demands. However, unfortunately for the petitioners, the market for product under consideration has not done well in the global market and the global situation is faced with severe economic recession, thus leading to collapse of performance of the domestic industry.

xxii. The decline in selling price of the domestic industry is far too high as compared to decline in cost of production. At the same time, there is increase in landed price of imports. There is therefore, no relation between cost, price and landed price.

xxiii. The petitioners have completely withheld a vital fact from the Designated Authority that the silicon wafer prices have very dramatically declined over the injury period, which is the primary cause of the decline in the prices of c-Si PV products.

xxiv. Thin Film and c-Si PV do not and cannot compete with each other. These are alternatives and not like articles. The developer's decision on Thin Film or c-Si PV or even others totally depends on overall project cost and profitability of the developers. It would, therefore, be inappropriate to compare Thin Film price with c-Si PV price.

xxv. The petitioner's claim that per unit cost have increased in period of investigation as compared to previous year is not correct. None of the inputs involved with product under consideration have shown so significant increase in the cost that the same shall result in so significant increase in the cost of production. Indeed, increase in cost by 50% in POI as compared to preceding year is very significant increase and the same is totally unjustified. Rather one of the plausible reasons for significant increase in the cost seems to be the decline in the production in the POI, which plummeted because of significant decline in exports. Thus, the reason for increase in cost of production is not on account of either increase in the input cost or any other factor associated with the production for the domestic market but because of collapse of exports.

xxvi. The increase in depreciation is extremely high as compared to the increase in capacity, production and Gross Fixed Assets. Evidently, the depreciation charged to the product under consideration for domestic

market does not in fact pertain to domestic operations thus leading to an excessive high cost of production and resultantly lower profits in the product under consideration.

xxvii. Whereas domestic production and domestic sales have shown a consistent increase over the entire period, the profits of the domestic industry have very steeply declined over the period. There can be no justification for so significant decline in profitability when (a) domestic production and domestic capacity utilisation have improved, (b) cost of production has declined globally due to decline in input costs and (c) price undercutting is negative.

xxviii. While it is not clear whether information with regard to capital employed has been segregated for domestic and exports, it appears that the information presented is in respect of overall operations. The capital employed appears to have increased far disproportionate to the increase in the capacities.

xxix. The trend in working capital is also highly erratic. There was significant increase in working capital during 2009-10 and decline thereafter. Further, working capital declined in period of investigation.

xxx. The parameters such as employment, productivity and wages of the domestic industry during the POI showed improvement.

xxxi. As regards price undercutting, the claim of the petitioner is actually a result of serious errors in assessment of import volume and resultantly import price. The price undercutting during the period of investigation in fact is negative.

xxxii. Non-utilization of investments is because of adverse performance in exports and not due to domestic performance.

xxxiii. The installed capacity with petitioners shows an increase in first twelve months and then a decline in subsequent six months. There appears no rationality for this aberration barring some possible inaccuracy in the data.

xxxiv. Production of petitioners significantly declined in this period from 157 MW in 2007-08 to 81 MW in first twelve months and 10 MW in later six months of POI.

xxxv. Domestic sales volumes of the domestic industry have shown continued increase from almost '0' in base year to 2, 3, 5 and then 10 MW respectively in subsequent periods. Further, sales volumes in later six months of period of investigation were doubled of sales volumes in first twelve months of period of investigation (i.e., four times increase in later six months in a situation where the sales volumes in first 12 months were already higher than previous year).

- xxxvi. Comparison of production and sale shows that the entire production in later six months was for domestic market and exports have declined to zero.
- xxxvii. The drop in selling price appears far disproportionate to the decline in import price during the period.
- xxxviii. Petitioners have claimed the same per unit cost in twelve and eighteen months, which implies the same per unit cost in first twelve and next six months of period of investigation. This is impossible and clearly shows either some error or non updation of cost of production by the domestic industry.
- xxxix. Profit before tax steeply declined despite the fact that sales volumes doubled between first twelve months and later six months. This clearly shows adverse effect of large fixed cost that are being incurred by the petitioners because of their exports orientation and total collapse of export markets.
- xl. Interest shows whopping increase in eighteen months as compared to twelve months which implies significant increase in interest cost in later six months as compared to first twelve months of the proposed period of investigations.
- xli. Profit before interest and tax shows a position similar to profit before tax. In fact, data shows far higher deterioration in profit before interest as compared to profit before tax because of whopping increase in interest cost.
- xlii. Depreciation trend shows a position similar to that of interest. There is whopping increase in depreciation in six months despite three times increase in the domestic production and domestic sales.
- xliii. Productivity of the domestic industry has very steeply declined in period of investigation and the same may not be attributed to alleged dumped imports.
- xliv. Market share of domestic industry shows a robust increase in six months.
- xlv. Even when performance of the domestic industry declined significantly in later six months of the period of investigation; the decline is very clearly due to collapse of export market which became zero in later six months of the period of investigation. Performance of the domestic industry has shown robust improvement in the domestic market while export performance collapsed. Thus, injury cannot be attributed to imports of the subject goods.
- xlvi. The segmented assets of Indosolar are segregated purely on geographical basis and its asset base in India should not be construed to be solely for domestic operations. Both Indosolar and Websol are having

very high interest and depreciation cost due to their high capital investments and borrowing, mainly for catering to export markets, thereby breaking the causal link.

xlvii. The lower quality of cells and modules offered by the Indian producers is a direct result of the Petitioners being unable to employ the new technological changes in the world. Thus the alleged dumping and injury have no causal link.

xlviii. The injury analysis provided by the Applicants is inconsistent with their own claims of dumping. At one instance, the Applicants have done a product to product comparison of dumping. On the other hand, the injury analysis appears to be presented for the entire product under consideration as one. Such an analysis pre-supposes interchangeability between cells, modules and thin films. This is bound to create an unbalanced and untenable injury analyses.

xlix. Most of the solar cell and module manufacturers of India do not provide anti-reflective coating to protect against Potential Induced Degradation (PID) i.e. loss of system power caused by leakage of current at high voltage and at high temperatures.

- I. While most of the imported modules come with 25 years warranty supported by insurance policy, the Indian industries do not provide any such facility.
- ii. Not all the domestic producers manufacturing modules, and, so injury should be seen separately for cells and modules.
- iii. There is no causal link between alleged dumping and injury. Domestic Industry has erroneously attributed injury caused by other factors (as also admitted in their Annual reports) to dumping.

Submissions made by the domestic industry

110. The following are the injury related submissions made by the domestic industry:

- i. The issue that the petitioners are 100% EOU/SEZ unit does not negate their rights and interests in domestic market. The segregated injury information shows that the domestic producers have suffered material injury due to dumping from subject countries.
- ii. The allegation that the domestic industry does not have sufficient capacity to meet the Indian demand is baseless.

- iii. Cumulative assessment of the effect of imports is appropriate since the subject goods are like articles and are competing in the same market; the imported products are being sold through the comparable channel of distribution and to comparable category of customers; products from the subject countries are undercutting the prices of the domestic industry in the market and imports from subject countries are increasing.
- iv. Though the demand has increased significantly during POI as compared to base year, the market share of domestic industry went up only nominally which evidently shows that the domestic industry has been crowded out by such huge dumped imports. Entire increase in demand was absorbed by dumped imports putting the domestic industry in an absolute adverse situation.
- v. Imports from subject countries increased in absolute term as also in relation to total imports, production and consumption in India. Imports from subject countries constituted almost 87% of the total Indian demand.
- vi. During POI, the price undercutting was significant. Further the decline in selling price was higher than such decline in cost of production that the domestic industry remained in financial losses. This shows there is price depression as well.
- vii. Domestic industry has suffered material injury as well as threatened with continued injury.
- viii. The production and capacity utilization of the domestic industry have declined both in absolute and relative term in the POI. Production and sales of the domestic industry that should have increased with the pace of increase in demand of product in India have on the contrary shown a significant decline in POI. Almost 80% of its capacity is lying idle despite increasing demand.
- ix. Performance of the domestic industry has declined over the years as a result of increase in dumped imports from subject countries. Dumping is causing huge financial losses to the domestic producers and the domestic industry is unable to pass on even the cost of sales to the customers leave aside any profit.
- x. Market share of the domestic industry has severely declined or never materialized whereas that of imports from subject countries has materially increased and in a way dominated the Indian market leaving no space for the Indian producers.
- xi. Solar Cell industry has the potential to provide large number of employment to skilled, semi-skilled and unskilled class of labor. The

ability of the industry to provide more employment did not materialize as the domestic industry was almost wiped out from the market.

- xii. Productivity of the domestic industry declined in the POI over the previous year in line with decline in production.
- xiii. Both ROI and cash profit was increasing till 2010-11 and has declined significantly thereafter.
- xiv. Since petitioner was not able to utilize its capacity fully, inventories level has been kept as low as possible to minimize the blockage of working capital. In spite of that fact inventories during 2010-11 and thereafter has increased significantly.
- xv. Growth in terms of, production, capacity utilization, market share, profit per Watt, PBIT, cash profit and ROI has been negative.
- xvi. Given the state of affairs of the domestic industry, substantial fresh investments could not have been made. Yet, small investments have been made to debottleneck capacities in an effort to achieve higher scale of production.
- xvii. The installed capacity of applicant domestic industry is about 308 MW. In a scenario of increasing demand for the PUC, the domestic industry should have achieved a significant market share and operated at 100% capacity utilization. On the contrary the domestic industry has only been able to operate its plant at 20% capacity utilization (POI) mainly due to low priced dumped imports from subject countries.
- xviii. The price undercutting and underselling are so significant that domestic industry is not able to match the price which does not cover even cost.
- xix. The domestic producers as a whole have invested more than Rs. 10,000 Crores in fixed assets alone which are likely to become a sunken investment if the corrective actions to address dumping are not initiated immediately.
- xx. Various interested parties contented that the injury to the domestic industry is due to self-inflicted reasons referring to annual reports of some of the producers. There is no legal or factual basis to this claim. The non-attribution analysis would show that the injury to the domestic industry is primarily caused by the dumped imports.
- xxi. Petitioner has exported the product under consideration. However, the claimed injury to the domestic industry is on account of domestic operations in respect of product under consideration only.

- xxii. There is significant difference between the prices offered by the domestic industry and foreign producers. Resultantly, domestic industry lost sales volumes. Thus, decline in sales volumes is a direct consequence of dumped imports from subject country.
- xxiii. Increase in import volumes led to decline in production, domestic sales and capacity utilization of the domestic industry.
- xxiv. Market share of the imports from subject countries increased significantly. As a direct consequence, the market share of the Indian producers declined or remained at negligible levels.
- xxv. Growth of the domestic industry became negative in respect of a number of parameters.
- xxvi. Injury to the domestic industry is only due to dumping. The fact of the matter is when the demand for the product showed robust growth in the country, the sales thereby share of the domestic industry remained at minuscule levels seriously impacting the profitability. When the dumped imports from subject countries was around 801 MW in the POI (Annualized), the sale that of the domestic industry was only 9.67 MW.
- xxvii. The capacity of the domestic industry which was 10 MW in the base year has been increased to 308 MW in the POI where as the demand which was 130 MW in the base year increased to almost 931 MW. So, any enhancement in the capacity was targeting the growing Indian demand and the factor which requires a special mention here is that the imports from subject countries which were 28MW in the base year increased to 801 MW in the POI. Thus, it can't be said that the increase in capacity by the petitioner was not in tandem with the increase in domestic demand.
- xxviii. The aggressive dumping practiced by the producers/exporters from subject countries has literally bulldozed the domestic industry and the domestic industry was left in a situation of serious injuries.
- xxix. Decline in sales volumes of domestic industry is a direct consequence of dumped imports from subject countries; Imported product is severely undercutting the prices of the domestic industry and there is serious price underselling; Imported product is severely undercutting the prices of the domestic industry and there is serious price underselling; Increase in import volumes led to decline in production, domestic sales and capacity utilization of the domestic industry; Market share of the imports from subject countries increased significantly. As a direct consequence, the market share of the Indian producers declined or remained at negligible levels

irrespective of the mammoth growth in demand; Growth of the domestic industry became negative in respect of a number of parameters.

- xxx. Injury to the domestic industry needs to be examined based on different injury parameters as per the rule and factor like volatility in input price or any alleged other reasons in the annual reports can't be the sole factor with regard to determination of injury and causal link.
- xxxi. Export performance of the company doesn't have any linkage to the injury information in the application as the applicant has segregated injury data for domestic and exports. Information about exports by the applicants is also provided at the appropriate places in this final finding.

Examination by the Authority

- 111. Article 3.1 of the WTO Agreement and Annexure-II of the AD Rules provide for an objective examination of both, (a) the volume of dumped imports and the effect of the dumped imports on prices, in the domestic market, for the like products; and (b) the consequent impact of these imports on domestic producers of such products. With regard to the volume effect of the dumped imports, the Authority is required to examine whether there has been a significant increase in dumped imports, either in absolute term or relative to production or consumption in India. With regard to the price effect of the dumped imports, the Authority is required to examine whether there has been significant price undercutting by the dumped imports as compared to the price of the like product in India, or whether the effect of such imports is otherwise to depress the prices to a significant degree, or prevent price increases, which would have otherwise occurred to a significant degree.
- 112. As regards the impact of the dumped imports on the domestic industry para (iv) of Annexure-II of the AD Rules states as follows.

“The examination of the impact of the dumped imports on the domestic industry concerned, shall include an evaluation of all relevant economic factors and indices having a bearing on the state of the Industry, including natural and potential decline in sales, profits, output, market share, productivity, return on investments or utilization of capacity; factors affecting domestic prices, the magnitude of margin of dumping actual and potential

negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital investments.”

113. The injury analysis made by the Authority hereunder ipso facto addresses the various submissions made by the interested parties. However, the specific submissions made by the interested parties are addressed by the Authority as below:
 - i. As regards the contention that injury analysis is based on the injury data of only 12% of the total production of the PUC in India and the same cannot be considered as representative of domestic industry, the Authority notes that in terms of Rule 11 read with Annexure II of the Anti-dumping Rules, the designated authority shall determine injury to the domestic industry vis-à-vis dumped imports. Further, the domestic industry has been defined under Rule 2(b) of the Rules. The applicants in the present investigation constitute domestic industry under Rule 2(b) of the Anti-dumping Rules and the injury analysis has been done on the basis of the verified information pertaining to the domestic industry.
 - ii. As regards the submission that there is a huge gap between the capacity and demand in India and imports are inevitable, the Authority notes that it is neither mandatory on the part of the domestic industry under the Anti-dumping Rules to fulfill the entire demand to be eligible for a fair price in the market, nor justifies dumping by any country. Moreover, the Authority notes that imposition of anti-dumping measures do not prevent the importers/users to import, but rather ensures multiple sources of supply at fair and competitive prices. The Authority also notes that despite significant increase in domestic demand, the market share of the domestic industry increased very nominally which signifies that the entire domestic demand is absorbed by dumped imports.
 - iii. As regards the submission that PCN-wise Analysis is required for a “fair comparison”, the Authority notes that the PUC in the present investigation consists of Crystalline Cells and Modules and Thin Film Modules and the injury analysis is conducted taking in to consideration the data both individually and cumulatively considering the PUC as defined for the present investigation.

- iv. As regards the submission that a month-wise analysis is required in the present investigation due to significant fluctuation in the prices of major inputs and the finished products during the POI, the Authority notes that the price undercutting has been done on monthly basis
- v. As regards the submission that the domestic industry has not suffered injury due to imports, but rather due to fluctuations in the input prices, fall in the export market etc, the facts as laid down in the injury analysis herein below, which has taken in to account all such factors, is self-explanatory. Moreover, while conducting injury analysis, the Authority has segregated the information concerning exports by the domestic industry and the export performance has no bearing on the injury determined in the present investigation. As regards the submission that NIP should be determined taking into consideration the export orientation of domestic industry it is noted that NIP is determined as per Annexure III of the AD Rules.
- vi. As regards the contention that the domestic industry has created excess capacity considering export markets and fall in the export market has caused real injury to the domestic industry, the Authority notes that the domestic industry has in fact added capacity during the injury period, but not primarily to cater to the overseas markets alone. The Authority further notes that during the same period, the demand in the domestic market has shown significant increases. Despite increasing demand and increased capacity, the domestic industry could not increase its market share due to dumping. Thus, the market share of the domestic industry has remained at abysmally low level throughout the injury period.
- vii. As regards the contention that the silicon wafer prices have very dramatically declined over the injury period, and is the primary cause of the decline in the prices of c-Si PV products, the Authority notes that impact of such decline in the prices of major raw materials is an international phenomena and true of all markets. Thus, decline in the prices of major raw materials do not vitiate the eligibility of the producer to realize a fair price in the market and landed price of imports from subject countries have also influenced domestic prices.
- viii. As regards the submissions that no injury and no causal link between injury and dumping and annual reports of the producers show other reasons of injury such as long term raw material contracts, authority

notes that it is not necessary that dumping should only be the conclusive reason for injury to the domestic industry but what is important is any injury due to other reasons are not attributed as injury due to dumping and an examination of any such other factors are done at the appropriate places in this final finding.

K. Cumulative Assessment

114. The Annexure II (iii) of the Anti-Dumping Rules requires that where imports of a product from more than one country are being simultaneously subjected to anti-dumping investigations, the designated authority will cumulatively assess the effect of such imports, only when it determines that :
 - i. The margin of dumping established in relation to the imports from each country is more than two percent expressed as percentage of export price and the volume of the imports from each country is three percent of the import of like article or where the export of individual countries is less than three percent, the imports collectively accounts for more than seven percent of the import of like article; and
 - ii. Cumulative assessment of the effect of imports is appropriate in light of the conditions of competition between the imported article and the like domestic articles.
115. The Authority notes that the dumped imports are entering the Indian market simultaneously from the subject countries. Therefore, the issue of cumulative assessment of the injury caused to the domestic industry due to dumped imports from these sources has been examined with respect to the above parameters and it was observed that:
 - i. The margins of dumping of individual products from each of the subject countries are more than the *de-minimis* limit;
 - ii. The volume of imports of individual products from each of the subject countries is more than the *de minimis*;
 - iii. Imports from the subject countries are significantly undercutting the prices of the domestic industry in the market;
116. In view of the above, the Authority considers it appropriate to cumulatively assess the effects of dumped imports of the subject goods from the subject countries on the domestic industry in the light of conditions of

competition between imported product and like domestic product. The Authority notes that the margin of dumping and quantum of imports from subject countries are more than the limits prescribed above.

117. Annexure-II of the Anti-dumping Rules provides for an objective examination of both, (a) the volume of dumped imports and the effect of the dumped imports on prices, in the domestic market, for the like articles; and (b) the consequent impact of these imports on domestic producers of such articles. With regard to the volume effect of the dumped imports, the Authority is required to examine whether there has been a significant increase in dumped imports, either in absolute term or relative to production or consumption in India. With regard to the price effect of the dumped imports, the Authority is required to examine whether there has been significant price undercutting by the dumped imports as compared to the price of the like product in India, or whether the effect of such imports is otherwise to depress the prices to a significant degree, or prevent price increases, which would have otherwise occurred to a significant degree.
118. As regards the impact of the dumped imports on the domestic industry. Para (iv) of Annexure-II of the Anti-dumping Rules states as follows:

"The examination of the impact of the dumped imports on the domestic industry concerned, shall include an evaluation of all relevant economic factors and indices having a bearing on the state of the Industry, including natural and potential decline in sales, profits, output, market share, productivity, return on investments or utilization of capacity; factors affecting domestic prices, the magnitude of margin of dumping actual and potential negative effects on cash flow, inventories, employment wages growth, ability to raise capital investments."

119. For the examination of the impact of imports on the domestic industry in India, the Authority has considered such further indices having a bearing on the state of the industry as production, capacity utilization, sales quantum, stock, profitability, net sales realization, the magnitude and margin of dumping etc. in accordance with Annexure II(iv) of the Rules supra.

L. Volume Effect of the Dumped imports on the Domestic Industry

a) Demand and market share

120. Authority has defined, for the purpose of the present investigation, demand or apparent consumption of the product in India as the sum of domestic sales of the Indian Producers and imports from all sources. The demand so assessed is given in the table below:

i) Demand

Particulars	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Demand	KW	1,45,833	1,67,455	2,43,277	14,17,230	9,44,820
Indexed	Trend	100	115	167	648	648
Imports from Subject Countries	KW	57,661	1,00,871	1,73,015	12,08,362	8,05,575
Imports from Other Countries	KW	84,593	59,623	61,930	1,90,512	1,27,008
Sales of Domestic Industry	KW	70	1,982	3,482	10,181	6,788
Sales of other Indian Producers (Estimated)	KW	3,510	4,980	4,850	8,175	5,450

ii) Market Share in Demand

Particulars	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Imports from Subject Countries	%	39.54	60.24	71.12	85.26	85.26
Imports from Other Countries	%	58.01	35.61	25.46	13.44	13.44
Sales of Domestic Industry	%	0.05	1.18	1.43	0.72	0.72

Sales of other Indian Producers	%	2.41	2.97	1.99	0.58	0.58
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121. Considering imports from various sources and sales of the Indian Producers, market share of subject imports in demand in India was examined. It is seen that the demand for the product under consideration increased significantly in the country throughout the injury period and also during the POI. While the share of imports from subject countries which was 39.54% in the base year has increased to 85.26% in the POI, the share of the domestic industry which has increased to 1.43% in the immediate previous year has declined to 0.72% in the POI. Thus, the imports from subject countries constituted a significant increase, whilst the share of domestic industry remained abysmally low.

b) Import volume and market share

122. Imports volume from subject country and other countries are as under:-

Particulars		Unit	2009-10	2010-11	POI	POI Annualized
Volume	Subject Countries	KW	57,661	1,00,871	1,73,015	12,08,362
	Other countries	KW	84,593	59,623	61,930	1,90,512
	Total imports	KW	1,42,253	1,60,494	2,34,945	13,98,874
Market Share in Imports	Subject Countries	%	40.53	62.85	73.64	86.38
	Other countries	%	59.47	37.15	26.36	13.62

123. It is observed from the above table that imports from subject countries increased significantly. It is also noted that imports from subject countries account very significant proportion of total imports of product under consideration in India. Market share of imports from other countries showed a declining trend.

c) Share of imports in relation to production

124. Authority observes that the imports from subject countries have increased in relation to the production of the domestic industry, as is evident from the following table:

	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Imports from Subject Countries	KW	57,661	1,00,871	1,73,015	12,08,362	8,05,575
Production of domestic industry	KW	8,861	42,039	1,56,313	89,621	59,747
Imports in relation to production of domestic industry.	%	651	240	111	1,348	1,348

d) Production

125. Production data of the domestic industry is given in the following table:-

	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Production	KW	8,861	42,039	1,56,313	89,621	59,747
Trend	Indexed	100	474	1,764	674	674
Demand	KW	1,45,833	1,67,455	2,43,277	14,17,230	9,44,820
Trend	Indexed	100	115	167	648	648
Production in relation to Demand	%	6.08	25.10	64.25	6.32	6.32

It is observed that the production of the domestic industry has increased from 6.08% in 2008-09 to 64.25% in 2010-11 and thereafter declined to 6.32% in the POI.

e) Sales volume

126. Sales volume of the domestic industry is given in the following table:

	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Domestic sales	KW	70	1,982	3,482	10,181	6,788
Demand	KW	1,45,833	1,67,455	2,43,277	14,17,230	9,44,820
Market Share of domestic industry in Demand	%	0.05	1.18	1.43	0.72	0.72

It is observed from the above table that market share of the domestic industry has showed increasing trend between 2008-09 and 2010-11 and declined thereafter in the POI though the demand for the product has been increasing significantly during the injury period. It is noted that in 2010-11, the production of the domestic industry had reached the peak level of 64.25% of the demand.

I. Price Effect of the Dumped imports on the Domestic Industry

127. With regard to the effect of the dumped imports on prices, the Designated Authority is required to consider whether there has been a significant price undercutting by the dumped imports as compared with the price of the like product in India, or whether the effect of such imports is otherwise to depress prices to a significant degree or prevent price increases, which otherwise would have occurred, to a significant degree. For the purpose of this analysis, the weighted average cost of production (COP), weighted average Net Sales Realization (NSR) and the Non-Injurious Price (NIP) of the domestic industry have been compared with the landed cost of imports from the subject countries.

i. Price Undercutting

128. The net sales realization was arrived after deducting outward freight and taxes. The subject goods are freely imported into India as the product falls under the ITA agreement. Landed value of imports has been calculated by adding 1% handling charge only, and the same was compared with net sales realization of the domestic industry and it was found that the dumped imports are undercutting the prices of the domestic industry as per the table below. The Authority has analysed month-wise the data in respect of the product under consideration comprising of by Crystalline Solar Cells, Crystalline Solar Modules and Thin Films while determining the price undercutting on weighted average basis as given below:

Particulars	Units	China-PR	Malaysia	Taiwan	USA	Subject Countries
Import Volume	KW	6,36,668	1,77,943	2,49,867	1,43,884	12,08,362
CIF Value	Rs.Lacs	3,24,073.95	89,316.77	1,01,371.08	65,018.88	5,79,780.68
CIF Price	Rs./Watt	50.90	50.19	40.57	45.19	47.98
Basic Customs Duty	%	-	-	-	-	-
Cess on BCD	%	-	-	-	-	-
Landed Value	Rs./Watt	51.41	50.70	40.98	45.64	48.46
Net sales realisation	Rs./Watt	***	***	***	***	***
Price Undercutting	Rs./Watt	***	***	***	***	***
Price Undercutting	%	***	***	***	***	***
Price Undercutting	Range %	10-20	25-35	5-15	25-35	15-25

It is observed from the above table that imports are undercutting prices of domestic industry. Undercutting is found to be significant and positive in the case of subject countries.

ii. **Price Underselling**

129. Authority notes that the price underselling is an important indicator of assessment of injury. Non-injurious price has been worked out and compared with the landed value of the subject goods to arrive at the extent of price underselling. The non-injurious price has been determined considering the cost of production of the domestic industry for the product under consideration during the POI, in accordance with Annexure III of the Anti-dumping Rules.
130. The Authority has analysed the data in respect of the product under consideration constituted by Crystalline Solar Cells, Crystalline Solar Modules and Thin Films while determining the price underselling on weighted average basis as given below:

Particulars	Units	China-PR	Malaysia	Taiwan	USA	Subject Countries
Import Volume	KW	6,36,668	1,77,943	2,49,867	1,43,884	12,08,362
CIF Value	Rs.Lacs	3,24,073.95	89,316.77	1,01,371.08	65,018.88	5,79,780.68
CIF Price	Rs./Watt	50.90	50.19	40.57	45.19	47.98
Basic Customs Duty	%	-	-	-	-	-
Cess on BCD	%	-	-	-	-	-
Landed Value	Rs./Watt	51.41	50.70	40.98	45.64	48.46
NIP	Rs./Watt	***	***	***	***	***
Price Underselling	Rs./Watt	***	***	***	***	***
Price Underselling	%	***	***	***	***	***
Price Underselling	Range %	50-60	55-65	70-80	70-80	60-70

It is observed from the above table that imports of subject goods from the subject countries are causing underselling effects on the prices of domestic industry.

iii. **Price suppression/depression**

131. The Authority examined whether the dumped imports are depressing the prices of the like article in India, or preventing price increases which would have otherwise occurred. The details are given in the table below:

Particulars	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Cost of production	Rs./Watt	***	***	***	***	***
Indexed	Trend	100	55	49	77	77
Selling Price	Rs./Watt	***	***	***	***	***
Indexed	Trend	100	32	35	26	26

132. It can be seen from the above table that while the cost of production has decreased from 100 to 77(indexed points) from 2008-09 to POI which is primarily due to the fall in basic raw material price consistent with the global trends with regard to silicon wafer prices, the selling price decreased from 100 to 26 (indexed points) during the same period. Thus the domestic selling prices were depressed on account of dumped imports.

M. Economic parameters of the domestic industry

i. Capacity & capacity utilization

133. As noted from the table below, there is an enhancement of capacity of the domestic industry in the period 2009-10 and 2010-11 keeping pace with increase in demand. However, capacity utilization of the domestic industry over the injury period has declined despite increase in demand, in the face of increase in imports from the subject countries.

	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Capacity	KW	10,000	2,63,093	2,96,869	4,45,303	2,96,869
Capacity utilization	%	88.61	15.98	52.65	20.13	20.13

ii. Profit/Loss

134. The profitability of the domestic industry is given in the following table:

Particulars	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Profits	Rs./Watt	***	***	***	***	***
	Indexed	100	-118	-59	-321	-321
Cash Profit	Rs./Watt	***	***	***	***	***
	Indexed	100	-51	-23	-178	-178
ROCE	%	***	***	***	***	***
	Indexed	100	-18	-32	-149	-149

It is seen from the above table that profitability of the domestic industry declined significantly during the injury period.

iii. Cash Flow

135. Authority has examined the trends in cash profits in order to examine the impact of dumping on cash flow situation of the domestic industry. Information regarding cash profit of the domestic industry is given in the following table:

	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Cash profits	Rs./Watt	***	***	***	***	***
Trend	Indexed	100	-51	-23	-178	-178

It is seen that the cash profits of the domestic industry declined over the injury period and were in cash losses.

iv. **Inventories**

136. The Inventory position of the domestic industry is as follows:

	Units	2008-09	2009-10	2010-11	POI	POI Annualized
Average Stock	KW	664	6,041	15,332	17,437	17,437
Stock as no. of days sale	Days	27	69	38	107	107

It is noted that inventories with the domestic industry increased in the POI as compared to the base year as well as the previous year.

v. **Productivity**

137. Authority notes that productivity of the domestic industry shows same trend as that of production. Productivity was increasing till 2010-11 and declined in POI.

Particulars	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Productivity per employee	KW/Nos.	***	***	***	***	***
Productivity per day	KW/day	24	115	428	164	164

vi. **Employment and Wages**

138. It is seen from the table below that the employment level has increased throughout the injury period.

	Unit	2008-09	2009-10	2010-11	POI	POI Annualized
Employment	Nos.	***	***	***	***	***
	Indexed	100	272	360	373	373
Wages	Rs.Lacs	***	***	***	***	***
	Indexed	100	444	670	651	651

vii. Magnitude of Dumping

139. The dumping margin determined in respect of the producers/exporters from the subject countries are above de minimis.

viii. Growth

140. The Authority notes from the table below that growth of the domestic industry in respect of production, capacity utilization, price and profit and ROI was negative.

	Unit	2008-09	2009-10	2010-11	POI
Production	%	--	374	272	(62)
Domestic sales	%	--	2742	76	95
Capacity utilisation	%	--	(72.63)	36.68	(32.53)
Imports from Subject Countries	%	--		75	72
Profit/ Watt	%	--	218	50	(445)
ROI	%	--	(20.56)	(2.49)	(20.51)
Selling Price/Watt	%	--	(67.71)	8.66	(25.49)

ix. Ability to raise capital investment

141. It is noted that the domestic industry's ability to rope in any additional investments in the product depends upon the market situation. As it is evident, the market share of the domestic industry is yet to reach any considerable levels.

x. Factors Affecting Domestic Prices

142. The examination of the import prices from the subject countries and other countries, change in the cost structure, competition in the domestic market, factors other than dumped imports that might be affecting the prices of the domestic industry in the domestic market, etc shows that the landed value of imported material from the subject countries is below the selling price and the non-injurious price of the domestic industry, causing significant price undercutting as well as price under selling in the Indian market. It is also noted that the demand for the subject goods was showing significant increase during the injury period and therefore it could not have been a factor affecting domestic prices. Thus, the principal factor affecting the domestic prices is landed value of subject goods from subject countries.

N. Conclusion on material injury

143. After examining and analysing the facts and figures concerning injury to the domestic industry, the Authority concludes that the dumped imports of the subject goods from the subject countries have increased in absolute terms as also in relation to production and consumption of the subject goods in India. It is further noted that imports of the product from subject countries were undercutting the prices of the domestic industry in the market. Even though cost of production decreased over the injury period, decline in selling price were higher than decline in cost of production. The imports were thus suppressing/depressing the prices of the domestic industry and preventing the price increase that would have otherwise occurred in the absence of dumped imports. With regard to consequent impact of the dumped imports on the domestic industry, it is noted that demand for the subject goods in the domestic market increased very significantly, whereas production and sales of the domestic industry remained at the minimal level and more or less stagnant in the face of dominant presence of the dumped imports from the subject countries.

O. CAUSAL LINK AND OTHER FACTORS

144. Having examined the existence of material injury, volume and price effects of dumped imports on the prices of the domestic industry, in terms of its price underselling and price suppression and depression effects, other indicative parameters listed under the Anti-dumping Rules have been examined to see whether any other factor, other than the dumped

imports have contributed to injury to the domestic industry. Accordingly, the following parameters have been examined:-

(a) Volume and prices of imports from third countries

145. During the POI, imports of the subject goods from non-subject countries (excluding EU) have been insignificant. As regards the imports from the EU, which has already been examined and addressed in the relevant para of this final finding, the Authority notes that in volume terms the import of the subject goods from EU during the POI was above de minimis level, but price-wise, the said imports are much above than that of the subject countries. Therefore, the imports of subject goods from EU could not have affected the situation of the domestic industry to the extent to break the causal link between the dumped imports from the subject countries and the material injury suffered by the domestic industry.

(b) Trade restrictive practices of and competition between the foreign and domestic producers

146. The Authority notes that the imports of the subject goods in India are freely importable. As regards competition between domestic and foreign producers, the Authority notes that the imported subject goods and domestically produced goods are like articles and are used for similar applications/end uses and are competing in the same market. Further, the Authority notes that imposition of anti-dumping duties by EU and USA on the imports of subject goods from China PR, may result in intensification of Chinese dumping in the Indian market, considering growing demand factor in the Indian market. On the basis of information provided by MNRE, the estimated volume of cell/module production capacity in India and the global capacity/demand is as follows:

- a) Installation of solar projects in India – so far to the tune of 1700 MW.
- b) India's current estimated capacity to produce cells – 1039 MW, Modules (including thin film) about 1937 MW.
- c) Estimated global capacity- 60000 MW
- d) Estimated global production – 40,000 MW.
- e) Estimated global demand - 25,000 MW.

(c) Contraction of demand or Changes in the pattern of consumption

147. The Authority notes that demand for the product showed significant increase during the injury period including the POI. Thus, the Authority that injury to the domestic industry was not due to contraction in demand.

(d) Development in Technology

148. None of the interested parties have furnished any evidence of any change in technology of production of the subject goods which can be construed as cause of injury to the domestic industry.

(e) Export performance of Domestic Industry;

149. The details of exports by the petitioner are as follows;

Period	2008-09	2009-10	2010-11	POI	POI Annualised
Volume in KW	***	***	***	***	***
Indexed	100	341	1,619	596	596

The Authority notes that the export performance of domestic industry has improved during the injury period and declined during the POI. However, in the injury analysis, the performance of the domestic industry has been segregated by the Authority for domestic and export markets. The segregated data has established injury to the domestic industry on account of dumped imports. Although during the POI there is a decline in exports, the domestic industry could not take advantage of increased demand in India by improving its domestic market share due to dumped imports.

P. FACTORS ESTABLISHING CAUSAL LINK

150. The Authority notes that while listed known other factors do not show injury to the domestic industry, the following parameters show that injury to the domestic industry has been caused by dumped imports.

- i. The dumped imports of the subject goods from the subject countries have increased in absolute terms as also in relation to production and consumption of the subject goods in India.
- ii. The imports of the subject goods from the subject

countries are undercutting the prices of domestic industry. Further, the dumped imports have caused price underselling, price suppression as well as price depression effects.

- iii. Significant increase in the demand coincided with significant increase in imports of subject goods from subject countries deprived the domestic industry from its rightful share in the domestic market;
- iv. Performance of the domestic industry with regard to production, sales, profits, market share, cash profit, capacity utilisation, return on investments, inventory level etc, have shown negative growth.

151. Thus the Authority concludes that the domestic industry suffered material injury due to dumped imports.

Q. MAGNITUDE OF INJURY AND INJURY MARGIN

152. The Authority has determined non-injurious price for the domestic industry on the basis of principles laid down in the Annexure III of the Anti-dumping Rules. The non-injurious price so determined has been compared with the landed prices of imports from the subject countries as follows:

China PR

Sampled Respondent Cooperative Exporters from China PR

Sl. No.	Channel of Export	Producer	Exporter	Non Injurious Price - US\$/ Watt	Landed price - US\$/ Watt	Injury Margin - US\$/ Watt	Injury Margin - %	Injury Margin Range - %
1	China - Hong Kong - India	Canadian Solar Manufacturing (Changhsu) Inc, China PR	Canadian Solar International Ltd, Hong Kong	***	***	***	***	50-60

Non Sampled Exporters from China

153. The injury margin for the following exporters who had made themselves known in response to the sampling questionnaire but not sampled by the Authority, has been determined on the basis of the injury margin determined for aforesaid cooperative exporter in China in terms of Rule 18(2) of the Rules. The injury margin in respect of the non-sampled exporters from China PR is as per the table below:

Sl. No	Name of the producer	Name of the Exporter	Injury Margin - US\$/ Watt	Injury Margin - %	Injury Margin Range %
1	Hanwha Solar One (Qidong) Co Ltd, China PR	Hanwha Solar One (Qidong) Co Ltd, China PR			
2	Chint Solar (Zhejiang), Co Ltd, China PR	Chint Solar (Zhejiang), Co Ltd, China PR			
3	Jinko Solar Co Ltd, China PR	Jinko Solar Import & Export Co Ltd, China PR			
4	Zhejiang Jinko Solar Co Ltd, China PR	Jinko Solar Import & Export Co Ltd, China PR			
5	Del Solar (Wujiang) Ltd, Chin PR	Del Solar (Wujiang) Ltd, Chin PR			
6	LDK Solar Hitech (Suzhou) Co Ltd, China PR	LDK Solar Hitech (Suzhou) Co Ltd, China PR			
7	Changzhou Trina Solar Energy Co Ltd, China PR	Changzhou Trina Solar Energy Co Ltd, China PR			
8	Shangluo BYD	Shangluo BYD			

	Industrial Co Ltd, China PR	Industrial Co Ltd, China PR			
9	Dongfang Electric (Yixing) Magi Solar Power Technology Co Ltd, China PR	Dongfang Electric (Yixing) Magi Solar Power Technology Co Ltd, China PR			
10	Jiangyin Hareon Power Co Ltd, China PR	Jiangyin Hareon Power Co Ltd, China PR			
11	Hengdian Group DMEGC Magnetics Co Ltd, China PR	Hengdian Group DMEGC Magnetics Co Ltd, China PR			
12	HanzhouDahe Thermo Magnetics Co Ltd, China PR	HanzhouDahe Thermo Magnetics Co Ltd, China PR			
13	Zhejiang Jinko Solar Co Ltd, China PR	Zhejiang Jinko Solar Trading Co Ltd, China PR			
14	AnjiDaSol Solar Energy Science & Technology Co Ltd, China PR	AnjiDaSol Solar Energy Science & Technology Co Ltd, China PR			
15	Yuhuan Sinosula Science & Technology Co Ltd, China PR	Yuhuan Sinosula Science & Technology Co Ltd, China PR			
16	Perlight Solar Co Ltd, China PR	Perlight Solar Co Ltd, China PR			
17	CNPV Dongying Solar Power Co Ltd, China PR	CNPV Dongying Solar Power Co Ltd, China PR			

18	Ningbo Qixin Solar Electricals Appliance Co Ltd, China PR	Ningbo Qixin Solar Electricals Appliance Co Ltd, China PR			
19	Yingli Energy (China) Co Ltd, China PR	Yingli Energy (China) Co Ltd, China PR			
20	Shanghai BYD Co Ltd, China PR	Shanghai BYD Co Ltd, China PR			
21	Renesola Jingsu Ltd, China PR	RenesolaJingsu Ltd, China PR			
22	Shenzhen Topray Solar Co Ltd, China PR	Shenzhen Topray Solar Co Ltd, China PR			
Injury Margin			***	***	50-60

All other exporters from China PR

154. Injury margin for all other non-cooperating exporters from China PR has been determined by the Authority on the basis of best available facts as given in the table below:

Particulars	Non Injurious Price - US\$/Watt	Landed price - US\$/Watt	Injury Margin - US\$/Watt	Injury Margin - %	Injury Margin Range - %
All other Producers/Exporters	***	***	***	***	90-100

USA

Injury Margin in case of USA

155. Considering the Non Injurious Price and landed value determined above, the injury margin for the producers/exporters from USA is determined as follows:

Sl. No.	Channel of Export	Producer	Exporter	Non injurious Price - US\$/Watt	Landed price - US\$/Watt	Injury Margin - US\$/Watt	Injury Margin - %	Injury Margin Range - %
1	USA - Germany - India	First Solar Inc, USA	First Solar GmbH Mainz, Germany	***	***	***	***	25-35
2	Any	All Other Producers from USA	All Other Exporters from USA	***	***	***	***	50-60

Malaysia

Injury margin in case of Malaysia

156. Considering the Non Injurious Price and landed value determined above, the injury margin for the producers/exporters from Malaysia is determined as follows:

Particulars	Non Injurious Price - US\$/Watt	Landed price - US\$/Watt	Injury Margin - US\$/Watt	Injury Margin - %	Injury Margin Range - %
All Producers/Exporters	***	***	***	***	55-65

Chinese Taipei

Injury Margin in case of Chinese Taipei

157. Considering the Non Injurious Price and landed value determined above, the injury margin for the producers/exporters from Chinese Taipei is determined as follows;

Particulars	Non Injurious Price - US\$/Watt	Landed price - US\$/Watt	Injury Margin - US\$/Watt	Injury Margin - %	Injury Margin Range - %
All Producers/Exporters	***	***	***	***	65-75

R. Post Disclosure Comments

158. The following are the post-disclosure submissions/comments made by the opposing interested parties and considered relevant by the Authority:

- i. The time granted by the Authority for disclosure comments is inadequate.
- ii. The petition on the basis of which the present investigation has been initiated does not have accurate and adequate evidence to justify initiation. Designated Authority should terminate the investigation on the ground of de-minimus dumping margin which may arise after establishing accurate and adequate evidences. Once DA comes to a conclusion that dumping margin in respect of thin film is de-minimus, dumping margin in respect of imports of thin film from USA and resultantly volume of dumped imports from USA become de-minimus, there is no surviving claim of dumping beyond de-minimus before the Designated Authority.
- iii. The disclosure statement has observed that import of the PUC from the European Union during the POI was priced much higher as compared to the import of the PUC from the subject countries and therefore there is no case of causing injury to the DI due to import of the PUC from the European Union. However this conclusion is erroneous as the DI itself has presently filed a petition before the DA alleging dumping and subsequently material injury due to import of the PCU from the European Union. Authority has acknowledged the fact that imports of the subject goods from non-subject countries have been insignificant, with the exception of the EU. Failure to include the EU as a subject country fails the causal link as well.
- iv. Petitioners have now contended that imports from EU are not causing injury because the import price from EU is higher than the import price from subject countries. However, any price comparison must be done separately for cells, modules and thin film, which would show that the

import price from EU were lower than the import price from subject countries.

- v. Despite the situation as per the DGCI&S data, exclusion of the EU as a subject country in the present investigation constitutes a violation of the legal provisions. Authority had initiated the investigation on the basis of the Impex Statistics data, shifting to a completely different data set towards the end of the investigation with no reasoned explanation is not justified.
- vi. The methodology adopted by the Applicant for conversion from Nos to Kgs and from Kgs to Watt peak is erroneous.
- vii. The volume and price of imports adopted by the authority is erroneous for the reason that the volume and price of imports reported by the petitioners is erroneous. Petitioners have erroneously considered the import transactions as imports of crystalline modules, while the description makes it evident that these are thin film products. The Authority should disclose the relevant data since petitioners seem to have manipulated the import data.
- viii. Weighted average analysis adopted by the Authority is appropriate where the PUC is a homogenous product. What is required in the present investigation is PCN wise analysis. The country-wise breakdown of PCN specific import data from the DGCI&S has not been provided by the Designated Authority.
- ix. The Indian Renewable Energy sector is a growing industry and the Solar Energy sector is potentially one of the largest sources of renewable energy for India in the foreseeable future. The developments of Solar Energy and related power projects in India is encumbered by the backward technology of the Indian producers which results in lower quality products being utilised for solar projects. The cost of solar power production will increase by at least Rs 1.6 crore per mw if anti-dumping duty is imposed on the subject imports
- x. The imposition of anti-dumping duty may invite similar retaliatory measures by other countries on the Indian export of the subject goods.
- xi. Project under development should be exempted from anti dumping duty.

- xii. Cells/modules and thin films are not like articles and therefore not substitutable. Thin film and CSPV are alternate articles but not like articles. Antidumping Rules however recognize like articles and not alternate articles. Therefore separate injury and causality examination should have been done for each of the products. Further, the imposition of anti-dumping duties only on crystalline products would not lead to a shift to thin film products.
- xiii. As the domestic industry does not produce thin film products, imports of thin film products cannot be causing injury to a domestic industry that produces only crystalline products.
- xiv. US Authorities have clearly held that thin film and crystalline modules constitute dislike articles. Report of Australian Anti-dumping Commission in the matter of anti-dumping investigations concerning imports of Certain Crystalline Silicon Photovoltaic Modules or Panels exported from the People's Republic of China has considered cells and thin film products as dislike article to Crystalline Silicon Photovoltaic Modules or Panels.
- xv. Applicants do not fulfill the requirement of domestic industry under the AD Rules. Moreover, Injury data does not cover major proportion of the domestic industry. The injury determination in the present investigation has been conducted based on the injury data of domestic producers that constitute only 12% of total domestic production. Injury analysis conducted must include information for the domestic producers and not the domestic industry.
- xvi. Rule 5(3) in clear terms provides that petition must be supported by at least those domestic producers whose collective shipment constitutes at least 25% of Indian production. In the instant case, the petitioner's production constituted only 11.62% of Indian production and therefore the conditions specified under the law are not met.
- xvii. Automatic exclusion of those domestic producers from the scope of "domestic industry" who may have imported the subject goods during the POI has led the Authority to conclude wrongly that the Applicant accounts for "a major proportion" of the total production of the product under consideration in India.

- xviii. Indosolar Ltd, one of the petitioners has themselves imported the subject goods as per the import information available.
- xix. The disclosure statement states that the petition was supported by 15 other domestic producers. However, supporting companies have not provided information with regard to imports made by them. Such being the case, the conclusion that all other producers barring participating companies were importer of the product under consideration is without factual basis.
- xx. Applicants do not fulfill the requirement of domestic industry under the Indian AD Rules as most of them are either SEZ units or 100% EOU and do not have major proportion of Indian production of subject goods. Further, the sole producer of thin film in India has produced thin film of a very small quantum during period of investigation.
- xi. Since an anti-dumping duty would be attracted if an SEZ unit sells the subject goods in the Domestic Tariff Area (DTA), the SEZ unit ought not to have been considered as part of the domestic industry.
- xxii. Normal Value has been calculated incorrectly by using the data of the domestic industry members who are inefficient. Instead, a third country exporter could easily have been selected from the list of cooperative producers whose consumption rates could have been utilised to formulate normal value.
- xxiii. The cost of production and price of thin film are lower than cost of production of crystalline. Such being the case, it is highly erroneous to apply crystalline modules normal value (and NIP) to thin film.
- xxiv. A significant dip in the prices of major inputs as well as the PUC on a month-wise basis over the POI requires month-wise injury analysis.
- xxv. An analysis of the conditions of competition between the domestic industry and the other domestic producers of the subject goods is necessary for a non-attribution analysis.
- xxvi. The domestic industry is selling the product at a price materially below the landed price of imports. Thus, alleged injury is unfounded.

- xxvii. With declining price undercutting over the injury period, the losses of the domestic industry have significantly increased indicating total absence of causal link between the dumping and injury. The per unit cost of the domestic industry has increased so significantly as a result of some other factors and not because of increase in the cost of inputs.
- xxviii. The domestic industry has added almost thirty times capacity over the injury period when the global market was suffering from recession. It is natural that this exploding capacity addition is one of the principal causes of injury to the domestic industry. Domestic Industry has created significant excess capacity considering export markets, which collapsed. However the disclosure statement failed to address such issues.
- xxix. The injury suffered by the domestic industry due to deterioration in performance largely due to exports cannot be attributed to alleged dumping and imports.
- xxx. The decline in production, sales as well as capacity utilisation is clearly because of decline in exports. While domestic sales have increased in the POI, export sales have declined. Thus, the decline in production and consequently capacity utilization and decline in sales is entirely because of decline in exports of the domestic industry.
- xxxi. PUC includes PV solar cells, modules and thin films which are different types of PUC and which cannot be used interchangeably. Therefore separate injury and causality examination should have been done for each of the products.
- xxxii. NIP cannot fluctuate from country to country since it is based on the domestic industry's figures. However as per the calculations presented in these submissions NIP appears to be fluctuating reflecting either an erroneous calculation or an improper non-confidential summary of the relevant data.
- xxxiii. The Designated Authority has not provided any reasons or justification to allow 22% return on capital employed to the domestic industry and has arbitrarily and unfairly accorded such an inexplicably high return to the domestic industry.

xxxiv. The Designated Authority has clearly calculated NIP separately for cells modules and thin films whereby injury margin and dumping margin should also have been disclosed separately for cell, modules and thin films.

xxxv. The stand taken by Authority that Q-Cells Malaysia SDN BHD (QCMY) could not demonstrate the authenticity of costing and financial data is erroneous and unreasonable. Authority should revise its decision and determine individual normal value for Q-Cells Malaysia SDN BHD and issue a revised Disclosure statement to enable to comment further on the 'Dumping margin' if any, determined for QCMY based on their data. It was mentioned in the EQR that Q-Cells Malaysia SDN BHD (QCMY) took assistance of *** Germany (****) for effecting sales during the POI wherein *** acted as facilitator and charged a fee for the assistance rendered. *** plays its role as an agent only to the extent of providing facilitation services which includes realization of sales proceeds from the buyers. Given the fact that *** role has been limited primarily to facilitation on behalf of the principal – QCMY, there is no reason why *** should have filed the EQR in the capacity of an agent. In the light of the above facts, we urge the Hon'ble Authority to grant individual export price for QCMY and issue a revised Disclosure statement to enable us to comment further on the 'Dumping margin' if any, determined for QCMY based on their data.

xxxvi. Hanwha SolarOne (Qidong) Co. Ltd., China (HSOL) should not be subjected to a dumping margin that has been determined, *inter alia*, based on the NME criteria due to rejection of the information/data of the sampled producers from China, primarily for the reason that HSOL had claimed market economy treatment (MET) as not only is it a foreign-equity owned company but also has not indulged in dumping practices. Authority determines an individual dumping margin for Hanwha SolarOne (Qidong) Co. Ltd., China (HSOL), based on its questionnaire response.

xxxvii. As regards rejection of individual margin to First Solar SDN Bhd Malaysia, mere fact that some part of the information is missing does not authorize an investigating authority from rejecting entire information. None of the companies to whom First Solar Malaysia has sold the module are in any way related to them. Therefore, it is not possible for First Solar to force these companies to cooperate with the Designated Authority. Moreover, WTO Appellate Body in the matter of United States – Anti-Dumping Measures On Certain Hot-Rolled Steel Products from Japan, upheld Panel

decision that facts available could be applied only if the investigating authority concludes that the party has not acted to the best of its abilities.

- xxxviii. Sales made by First Solar Inc, USA to the parties in USA through a related party in Germany should be considered as domestic sales and accordingly considered for the purpose of determining normal value as the goods have not left territorial waters of USA. Mere invoicing of goods by First Solar Inc to its related company in Germany, First Solar GmbH does not make such sales as exports.
- xxxix. First Solar Malaysia is a known, cooperative producer/ exporter, whose questionnaire response has been verified and First Solar is therefore entitled to individual dumping margin. The Designated Authority never considered the questionnaire responses from unaffiliated purchasers of First Solar Malaysia as mandatory requirement. After having accepted the questionnaire response of First Solar Malaysia and conducted on the spot verification at the premises of First Solar Malaysia, it is grossly inappropriate to reject the entire questionnaire response on the plea that the shippers have not filed questionnaire response.
- xl. Inability to determine export price for First Solar Malaysia on the basis of questionnaire response is grossly insufficient ground for not determining normal value on the basis of questionnaire response of First Solar Malaysia. The disclosure statement failed to appreciate that normal value and export price are two distinct elements for determination of dumping margin and even if one of the elements is missing the other one is required to be accepted.
- xli. The decision of the Designated Authority to reject the questionnaire response of First Solar, Malaysia is directly in contravention of the meaning of cooperation under Rule 6(8) and as interpreted by the WTO Dispute Settlement Body of in the matter of United States-Anti-Dumping and Countervailing Measures on Steel Plate from India WT/DS206/R.
- xlii. The disclosure statement has ignored its own proposed determination in respect of First Solar Inc. USA where the export price and dumping margin have been determined based on questionnaire response despite the fact that one of the customers to whom First Solar had invoiced the goods was outside India.

- xlvi. Determination of normal value for First Solar Malaysia on the basis of Indian costs is inconsistent when cost of production in Malaysia is available.
- xlv. The exports made by JA Solar group companies to India during the POI to the three companies as mentioned in the Disclosure Statement are SEZ units and therefore imports by these units are not reported in the DG (System)/DGCI &S data. The DGAD should satisfy itself about the authenticity and accuracy of the data from DGCI&S before disregarding the information of a sincerely participating exporter whose data has been duly verified by the team of officers.
- xlvi. Motech has filed true and complete information regarding its exportation of the subject goods during the POI with DGAD. Motech had no intention to deliberately mislead the Designated Authority. An inadvertent omission regarding related parties involved in the subject goods cannot be considered as a ground for rejection of the entire response.
- xlvi. It was mentioned in the EQR that Q-Cells Malaysia SDN BHD (QCMY) took assistance of *** Germany (*** for effecting sales during the POI wherein ***acted as facilitator and charged a fee the assistance rendered. Further, the stand taken by Authority that Q-Cells Malaysia SDN BHD (QCMY) could not demonstrate the authenticity of costing and financial data is erroneous and unreasonable. Authority should determine individual dumping margin for QCMY based on their data after issuing a revised disclosure statement.
- xlvii. Hanwha Solar One (Qidong) Co. Ltd., China (HSOL) is a foreign-equity owned company and not indulged in dumping practices. Their EQ Response should not be rejected on NME criteria due to rejection of the information/data of their related party namely Q-Cells Malaysia SDN BHD.
- xlviii. The mere fact that some part of the information is missing does not authorize an investigating authority to reject the entire information of First Solar. WTO Appellate Body in the matter of United States – Anti-Dumping Measures On Certain Hot-Rolled Steel Products from Japan, upheld Panel decision that facts available could be applied only if the investigating authority concludes that the party has not acted to the best of its abilities. None of the companies to whom First Solar has sold the module are in any way related to First Solar. Therefore, it is not possible for First Solar to force these companies to cooperate with the Designated Authority.

xlix. The exporters belonging to China Sunergy group are liable to receive individual treatment on the basis of the direct exports to India which have been duly verified and the denial of individual treatment is erroneous. The established practice of the Designated Authority has always been to allot one weighted average duty quantum for all related producers in one subject country. The Exporters being related parties are entitled to a Group wise margin based on the established practice and precedents followed by the Designated Authority.

- I. Wuxi Suntech Power co. Ltd. , China Sunergy (Nanjing) Co. Ltd.- data should not be rejected as the exporter are non related entities as unrelated parties are not under the control of these companies.
- ii. Procedural flaws and transparency in the investigation have prevented USA respondent from obtaining information.
- iii. Import prices have not been verified by DGAD

159. The following are the post-disclosure submissions made by the domestic industry and considered relevant by the Authority:

- i. The submission of the opposing interested parties that supplies from EOU/SEZ units should not be treated as domestic sales, the Authority may note that the Hon'ble Allahabad High Court in the matter of M/s India Exports Vs. State of U.P. & Ors [Civil Misc. Writ Petition No.1488 of 2009] observed that "*The arguments that since SEZ is deemed to be outside the customs territory of India, the sale from SEZ to DTA has to be treated as import, is not born out from the provisions of either SEZ Act, 2005 or Central Sales Tax Act, 1956*".
- ii. Producers/exporters who have not enabled the Authority to satisfy itself of the requirements of Article 6.6, Article 6.7, Article 6.8 and Para 5 of Annexure II of Agreement on implementation of Article VI of the WTO GATT, 1994 and also the Indian AD Rules by providing complete relevant information should not be considered for individual margin under Article 6.10 of the Agreement.
- iii. Individual margin to First Solar Inc, USA also needs to be rejected as determination of dumping margin is exporter or producer specific

and denial of individual margin to First Solar Malaysia should automatically lead to a denial of individual margin to First Solar USA as well. Non denial of individual margin to First Solar USA will lead to undue advantages to First Solar as a whole for the reason exports of subject goods henceforth would be undertaken by the route which has got an individual margin.

- iv. Adjustments on VAT refunds needs to be made in the Export Price with regard to China PR.
- v. The most appropriate and effective form of AD duty in the present case would be fixed form of duty imposed in terms of USD/Watt at a PUC level. Since there is no basic customs duty applicable on the import of the subject goods, the chances of mis-declaration of CIF value with an intention to avoid AD duties are not ruled out.
- vi. The developers are operating under significant profits and the supports from the govt to develop and run the power projects are also visible. The domestic producers who have got the capacity to produce subject goods are either getting closed down due presence of dumped imports or are running in huge losses. The ability of the solar industry to generate employment and thereby contribute to the GDP of the country can only be re-established by putting measures in place to curb dumping from subject countries.

160. The Authority notes that the post-disclosure comments/submission made by the interested parties is mostly reiterations and already examined suitably and adequately addressed in the relevant paras of this finding. However, the post-disclosure comments/submissions made by the interested parties and considered relevant by the Authority are examined as below:

- i. As regards the submission that the time granted by the Authority for disclosure comments is inadequate, the Authority notes that the anti-dumping investigations are time bound and reasonable time has been granted to the interested parties for furnishing comments on the disclosure statement. The Authority further notes that despite the limited time available with the Authority, the request of the interested parties for an extension of time was also considered to the extent possible.

- ii. As regards the submission that the petition on the basis of which the present investigation has been initiated does not have accurate and adequate evidence to justify initiation and the investigation should be terminated simply on the ground of de-minimus dumping margin especially in respect of thin film imports from USA, the Authority notes that First Solar Inc is the only cooperative producer of thin films from USA which has cooperated along with its related party in Germany with regard to its exports of thin films to India during the POI. While the *prima facie* information provided by the petitioner were considered relevant for the purpose of initiation, the actual position of dumping has been determined on the basis of verified data in respect of the above stated producer/exporter. The details of magnitude of dumping are elaborated in the relevant paras of this finding, which is self explanatory.
- iii. The opposing interested parties have submitted that the observations made in the disclosure statement that import of the PUC from the European Union during the POI was priced much higher as compared to the import of the PUC from the subject countries and therefore there is no case of causing injury to the DI due to import of the PUC from the European Union is erroneous. The Authority notes that the above observation was based on the supplementary information submitted by the domestic industry based on an analysis of the import data sourced from the DGCI&S. Further, the same data was placed in the public file for perusal and analysis by the other interested parties. As per the said data, the imports of the subject goods from EU in terms of volume is above de minimis level, but price-wise much above the prices of the subject countries. Therefore, the imports of subject goods from EU could not have affected the situation of the domestic industry to the extent to break the causal link between the dumped imports from the subject countries and the material injury suffered by the domestic industry.
- iv. Further, with regard to the argument that any price comparison must be done separately for cells, modules and thin film which would show that the import price from EU were lower than the import price from subject countries, the Authority notes that such separate analysis also show that the import prices of EU for cells,

modules and thin films were higher than the respective import prices from the subject countries.

- v. As regards the submission that Authority had initiated the investigation on the basis of the Impex Statistics data and shifting to a completely different data later during the course of the investigation is not justified, the Authority notes that the Anti-dumping Rules do not prohibit the Authority from relying upon the best available information at any stage of the investigation. Moreover, transaction-wise import information from the DGCI&S, which is primary source of information, has been relied upon by the Authority in several investigations.
- vi. As regards the submission that methodology adopted for conversion from nos. to kgs and from kgs to watt peak is erroneous, the Authority notes that it is an incorrect observation that import information in nos. to kgs and from kgs to watt peak has been straightaway adopted by the domestic industry. The imports of the subject goods are reported in various units of measurements such as nos, sets, pcs, units, kgs etc. In the present investigation the Authority has converted all such reported units into equivalent of Watt for effective analysis. The methodologies of such conversion as adopted by the domestic industry and adopted by the Authority to convert import transactions reported in terms of different units to equivalents of watt are given in the NCV version of the petition and also in various submissions which were made available in the public file.
- vii. As regards the submission that the projects under development should be exempted from anti dumping duty, the Authority notes that the purview and mandate of the present investigation does not cover such aspects.
- viii. With regard to the submission that the volume and price of imports adopted by the authority is erroneous, the Authority notes that the contention is not substantiated. With regard to the submission that petitioners have erroneously considered the import transactions of thin films as imports of crystalline modules while the description makes it evident that these are thin film products, the domestic industry has claimed that they had classified the data based on the description available in the transaction wise import data.

- ix. As regards the contention that the PUC being heterogeneous in nature, a PCN wise analysis would be more appropriate, the Authority notes that in the present investigation the dumping and injury margins have been determined and injury analysis has been made on the basis of weighted average import data of crystalline cells, modules and thin films constituting the PUC. Further, as regards the contention that the country-wise breakdown of PCN specific import data from the DGCI&S has not been provided to the interested parties, the Authority notes that the import information as per DGCI&S as made available in the public file contains segregated information for cells, modules and thin films.
- x. As regards the contention that the cost of solar power production will increase if anti-dumping duty is imposed on the imports of subject goods, the Authority notes that the basic objective of anti dumping investigations are to establish the facts of alleged dumping and injury to the domestic industry on account of dumping and to recommend suitable and adequate anti dumping measures for imposition by the central government to neutralize the injurious effect of dumping and to create a level playing field for the domestic industry vis-a-vis dumped imports. Anti-dumping measures neither restrict nor prevent imports. The consumers, who may be benefitting out of dumped prices, may have to buy the subject goods at fair prices after imposition of the anti-dumping duty.
- xi. As regards the submission that the imposition of anti-dumping duty may invite similar retaliatory measures by other countries, the Authority notes that the fear is presumptuous. Anti-dumping investigations are subject to WTO Agreement and therefore imposition or non-imposition of antidumping measures by one member country against another cannot entitle them to impose such measures without following due process of law.
- xii. As regards the submission that Cells/modules and thin films are not like articles and therefore not substitutable and Thin film and CSPV are alternate articles but not like articles, the Authority notes that the issues concerning substitutability and likeness of crystalline cells and modules and crystalline modules and thin films have been adequately examined and addressed in the relevant paras of this finding. The Authority has appropriately defined the product under

consideration (PUC) in the present investigation as "Solar Cells whether or not assembled partially or fully in Modules or Panels or on glass or some other suitable substrates" which includes products of both crystalline and thin film technology and the dumping and injury analysis have been carried out by the Authority accordingly.

xiii. As regards the contention that the domestic industry does not produce thin films and therefore same should be excluded from the purview of the PUC and anti dumping Authorities in other countries have held that thin film and crystalline modules are not like articles, the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this finding. The Authority notes once again that solar cells made of thin film technology and crystalline technology is technically and commercially substitutable and is like articles within the meaning and scope of Rule 2(d) of the Anti-dumping Rules. The Authority also notes that since it is established that thin films are like article and substitutable to the crystalline module produced by the domestic industry, the question of non-production of thin films by the domestic industry is irrelevant

xiv. As regards various comments concerning standing of the petitioner as domestic industry, the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this finding. As already established in this finding, the petitioners account for a major proportion of the total domestic production of the subject goods during the POI and constitutes domestic industry within the meaning of the Rule 2 (b) and satisfies the criteria of standing in terms of Rule 5 (3) of the Anti- dumping Rules.

xv. As regards the contention that Indosolar Ltd, one of the petitioners, has themselves imported the subject goods and therefore not eligible to be considered as domestic industry, the Authority notes from the information provided by the concerned interested party itself that goods involved in the transactions are basically export returns wherein the country of origin has been shown as India.

xvi. As regards the contention concerning the imports by other Indian producers, the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this

finding and none of such domestic producers have disputed the position taken by the Authority in this regard.

xvii. As regards the contention that the normal value has been calculated by the Authority incorrectly by using the data of the domestic industry members who are inefficient, the Authority notes that the details regarding determination of normal value has been adequately examined and addressed in the relevant paras of this finding. The Authority notes that the normal value has been determined in terms of Rules laid down for this purpose.

xviii. As regards the contention that the cost of production and price of thin film are lower than cost of production of crystalline modules and it is highly erroneous to apply crystalline modules normal value (and NIP) to thin film, the Authority notes that crystalline and thin film modules are like articles. Moreover, the landed price of imports shows that the consumers were getting the material at comparable prices indicating the price difference between crystalline modules and thin films is not significant.

xix. As regards the contention that a significant dip in the prices of major inputs as well as the PUC on a month-wise basis over the POI requires month-wise injury analysis, the Authority notes that the month-wise analysis of price undercutting has been made.

xx. As regards the need for analysis of the conditions of competition between the domestic industry and the other domestic producers of the subject goods for non-attribution analysis, the Authority notes that none of the interested parties including domestic producers who are not part of domestic industry have provided any data. However, the Authority has conducted non-attribution analysis of Trade restrictive practices of and competition between the foreign and domestic producers as per the AD Rules.

xxi. As regards the contention that the domestic industry is selling the product at a price materially below the landed price of imports, the Authority notes that the price undercutting determined for the subject countries was positive and the domestic industry suffered significant price injury during the POI.

xxii. As regards the contention that declining price undercutting over the injury period and increase in cost of production of domestic industry signifies absence of causal link between the dumping and injury, the Authority notes that price undercutting during the POI was positive and significant and the per unit cost of production of the domestic industry has declined during in the POI over the base year.

xxiii. As regards the contention that the domestic industry has added almost thirty times capacity over the injury period when the global market was suffering from recession, the Authority notes that the demand for the PUC has also increased significantly during the injury period i.e. from 145833 KW in 2008-09 to 944820 KW in annualized POI. The Authority further notes that if there were no dumped imports, the domestic industry could have improved its market share.

xxiv. As regards the contention that injury suffered by the domestic industry was largely due to exports and therefore cannot be attributed to the alleged dumping and imports, the Authority notes that it has made injury analysis taking into account the performance of the domestic industry in its domestic operations only.

xxv. As regards the contention that the decline in production, sales as well as capacity utilisation is clearly because of decline in exports, the Authority notes that in spite of steep increase in demand for the PUC during the injury period, the domestic industry was not in a position to increase its production, sales and capacity utilisation. The Authority holds that but for the dumped imports, the domestic industry could have improved its performance in domestic sales, production, etc.

xxvi. As regards the contention that separate injury and causality examination should have been done for each type of PUC, the Authority notes that it has made the analysis of price effects for the cells, modules and thin films and also for PUC as a whole.

xxvii. As regards the contention that NIP cannot fluctuate from country to country since it is based on the domestic industry's figures, the Authority notes that per unit NIP for different types of

products under consideration (Cells, Crystalline Modules and Thin films) has been determined which is uniform for all the subject countries. However, the weighted average NIP for the PUC as a whole would be different for different subject countries in view of the difference in the import volumes of different types of PUC.

xxviii. As regards the contention that the Designated Authority has not provided any reasons or justification to allow 22% return on capital employed to the domestic industry, the Authority notes that it has provided 22% return on capital employed as per its consistent practice.

xxix. As regards the submission that The Designated Authority should have disclosed dumping margin and injury margin separately for cells, modules and thin films, the Authority notes that it has disclosed the ranges of dumping and injury margin for the PUC as a whole.

xxx. As regards the contention by Q-Cells Malaysia SDN BHD (QCMY) that Authority should revise its decision and determine individual margin for it, the Authority notes that this issue has been adequately examined and addressed in the relevant paras of this finding. The Authority notes once again that during the on the spot verification, QCMY failed to demonstrate the authenticity of the costing and financial data in the SAP System claimed to be maintained by the Company. Further, in the absence of exporter's questionnaire response filed by its related party in Germany, the complete value chain in respect of the claimed exports to India during the POI cannot be established. Under the above circumstances, the Authority is not in a position to satisfy itself about the accuracy and adequacy of the information furnished by QCMY. In view of the above position, the Authority does not grant Hanwha Q Cells Malaysia SDN BHD individual margin in the present investigation.

xxxi. As regards the submission by Hanwha SolarOne (Qidong) Co. Ltd., China (HSOL) for individual margin, the Authority notes that the said Chinese company falls under the non-sampled category and the margin has been determined accordingly.

xxxii. First Solar Malaysia has argued that if some part of the information is missing, it does not authorize an investigating authority from rejecting the entire information. Moreover, as they argued, none of the companies to whom First Solar Malaysia has sold the modules are in any way related to them and it is not possible for them to force these companies to cooperate with the Designated Authority. They have further argued that WTO Appellate Body in the matter of United States – Anti-Dumping Measures On Certain Hot-Rolled Steel Products from Japan, upheld Panel decision that facts available could be applied only if the investigating authority concludes that the party has not acted to the best of its abilities. In this regard the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this finding. The Authority once again notes that information with regard to substantial volume of exports of the subject goods invoiced by First Solar Malaysia SDN BHD, Malaysia and its related exporter First Solar GMBH, Germany to India during the POI through many other parties have not brought before the Authority by filing exporters questionnaire response. Therefore, in the absence of complete information with regard to the exports made by the Company to India during the POI, the Authority is not in a position to satisfy itself about the accuracy and adequacy of the information furnished by First Solar Malaysia. In view of the above position, the Authority does not grant individual margin to First Solar Malaysia SDN BHD, Malaysia and its related exporter First Solar GMBH, in the present investigation.

xxxiii. As regards the contention by First Solar Malaysia that inability to determine export price is grossly insufficient ground for not determining normal value on the basis of questionnaire response, the Authority notes that for the purpose of determining individual margin, the Authority requires complete information as regards both export price and normal value. In the absence of complete value chain concerning exports mad by the company, the Authority is not in a position to grant individual margin to First Solar Malaysia. In view of the same, determination of normal value concerning First Solar Malaysia is irrelevant.

xxxiv. As regards the contention that sales made by First Solar Inc, USA to the parties in USA through a related party in Germany

should be considered as domestic sales for the purpose of determining normal value as the goods have not left territorial waters of USA, the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this finding. The Authority once again notes that First Solar Inc, USA has supplied the subject goods locally, but received payment from First Solar GmbH Mainz, Germany in foreign exchange. Moreover, First Solar Inc, USA has sold subject goods in USA market to other affiliated and non-affiliated parties, without accounting through First Solar GmbH Mainz, Germany. Therefore, the Authority holds that supply of subject goods inside USA to some other party and accounting the same through First Solar GmbH Mainz, Germany and claiming the same as domestic sale, not acceptable. Further, there is no logical basis for invoicing some sales for USA through Germany, when other sales for USA are made directly.

xxxv. As regards the contention that the disclosure statement has ignored its own proposed determination in respect of First Solar Inc. USA where the export price and dumping margin have been determined based on questionnaire response despite the fact that one of the customers to whom First Solar, USA had invoiced the goods was outside India, the Authority notes that the issue has been addressed in the relevant para of this finding. The Authority once again notes that out of the total exports to India, an insignificant volume was invoiced by First Solar GmbH – Mainz Germany through a party in USA, in respect of which exporter's questionnaire response has not been filed. Since the volume was found to be insignificant, the Authority excluded the said insignificant export from the total exports made by First Solar Inc, USA and First Solar GmbH – Mainz Germany and determined the net export price.

xxxvi. As regards the argument made by JA Solar group that exports made by the group companies to the SEZ units in India are not reported in DGCI&S data, the Authority notes that the argument is unsubstantiated. In the absence of complete information about the exports made by the group, the Authority is not in a position to satisfy itself about the accuracy and adequacy of the information furnished by the group.

xxxvii. As regards the argument made by Motech that the company has inadvertently omitted information in the EQ Response regarding related parties involved in the subject goods and therefore such action of Motech should not be considered as a ground for rejection of the entire response, the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this finding. The Authority notes that Motech has a number of related companies in various countries including China are involved in the subject goods. The Authority further notes that one of its related companies in China which are involved in the export of the subject goods to India during the POI. Such action by Motech not only amounts to mis-declaration, but also deprives the Authority of enabling the Authority to satisfy itself about the accuracy and adequacy of the information furnished by Motech.

xxxviii. As regards the argument made by China Sunergy group that they are entitled to receive individual treatment on the basis of the direct exports to India made by them which have been duly verified and the denial of individual treatment is erroneous, the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this finding. The Authority further notes that companies belonging to China Sunergy group have made significant exports of the subject goods to India during the POI through other parties situated in Singapore and Hong Kong. However, such parties have not filed exporter's questionnaire response in the present investigation, in the absence of which, the complete value chain in respect of the said channels of export made by China Sunergy group cannot be established. In view of the above position, the Authority does not grant individual margin to the group.

xxxix. As regards the submission made by Wuxi Suntech Power co. Ltd that their claim for individual margin should not be rejected by the Authority on the ground that substantial exports have been made by them through other parties since such parties are not related to them, the Authority notes that the issue has been adequately examined and addressed in the relevant paras of this finding. However, such parties have not filed exporter's questionnaire response in the present investigation, in the absence of which, the complete value chain in respect of the said channels

of export made by Wuxi cannot be established. In such circumstances the Authority is not in a position to satisfy itself about the accuracy and adequacy of the information furnished by the company. In view of the above position, the Authority does not grant individual margin to Wuxi Suntech Power Co Ltd, China PR.

- xl. As regards the submission that the laid down procedures and transparency principles have not been followed in the present investigation, the Authority notes that the investigation has been conducted as per the procedure. The interested parties have been given opportunities to make submissions at each stage of the investigation i.e. initiation of the investigation, oral hearing and disclosure statement. The non-confidential information furnished by the interested parties are made available in the public file. The representatives of USA respondent has verified the public file time and again and obtained non-confidential information. Thus the contention is not based on facts.
- xli. As regards the submission that the import data is not verified by the Authority, it is noted that the Authority has relied upon the secondary source data furnished by applicant *prima facie* for initiation and relied upon the DGCIS data for the investigation. The said data are available in public file. It is also noted that Authority has verified the data furnished by the domestic industry as well as the cooperative exporters.
- xlii. The Authority notes that post-disclosure First Solar Inc, USA, First Solar SDN BHD Malaysia and Solar Power Developers Association (SDPA) filed writ petitions before the Hon'ble High Court of Delhi vide WP (C) No. 3202/2014, 3203/2014 and 3206/2014.
 - a. First Solar Inc, USA vide their WP (C) No. 3202/2014 has *inter alia* argued that determination of normal value by ignoring significant domestic sales in USA market made by them by invoicing through their related party in Germany is flawed.
 - b. First Solar SDN BHD Malaysia vide their WP (C) No. 3203/2014 has *inter alia* argued that they should have been given an individual margin based on the normal value and export price claimed by them and not otherwise. Even if Authority does not accept export price, the normal value

should have been determined based on the information provided by them, in line with authority's earlier findings and WTO Panel Report.

- c. Solar Power Developers Association (SDPA) vide their WP (C) No. 3206/2014 has inter alia challenged the entire disclosure statement emphasizing that the domestic industry has catered to only about 2% of the total Indian demand.

xliii. The matters were heard and disposed by the Hon'ble Division Bench on 20th May, 2014. The operative part of the order is as follows:

“.....This Court has considered the submissions. As one understands the procedures mandated by the CT Act and the 1995 Rules, the disclosure statement made available to the parities to the enquiry under Rule 16 of the 1995 rules, is in the nature of a tentative view of the Designated Authority. By no means can it be considered as conclusive because the parties are given one more chance to respond to this disclosure statement. This Court would, advisedly, refrain from making any comment on the merits of the arguments as to the inclusion or exclusion of the particular transactions or even as to the nature of the material and the determination, which the Malaysian company urges in these proceedings as that would necessarily have a direct bearing on the final decision of the Designated Authority. Both the Malaysian company and the US company have urged that the impugned order is contrary to India's position before the WTO in the matter of dispute relating to United States- Anti- Dumping and Countervailing measure on Steel Plated from India (WT/DS206/R) and the previous decisions of the authorities itself. We note that this aspect has been highlighted before the Designated Authority by these petitioners. In these circumstances, we do not propose to say anything further except to say that all these aspects would be considered at the stage of final decision by the Designated Authority.

The petitions are disposed off in the above terms.”

xliv. Pursuant to the above orders and submissions made by the concerned parties, the Authority has taken note of certain past cases by DGAD and also decision by WTO as cited by First Solar SDN BHD Malaysia. In the matter of United States anti-dumping and countervailing measures on steel plate from India (WT/DS206/R) with regard to SAIL, the Authority notes that the WTO dispute settlement Panel has found as follows;

"7.78 In our view, USDOC's final determination clearly demonstrates that certain of the information submitted by SAIL was found to be unverifiable, or not timely submitted, or to have other flaws which made it unduly difficult to use. However, no such conclusions are set forth with respect to the US sales price information. Indeed, throughout the investigation, it appears that the principal problems were with the information concerning SAIL's home market transactions and cost of production. The references to problems with respect to the US sales price information, to the extent they are mentioned, are treated as minor. Thus, it seems clear to us that USDOC did not in fact reject the US sales information based on the application of the criteria of paragraph 3 to that information, but rather on the basis of problems associated with other information submitted.

7.79. Thus, on the basis of the facts and explanations on the record before us, we consider that USDOC's decision rejecting the US sales price information submitted by SAIL lacked a valid basis under paragraph 3 of Annex II of the AD Agreement. Therefore, we conclude that USDOC acted inconsistently with Article 6.8 and paragraph 3 of Annex II of the AD Agreement in concluding, with respect to US sales price information, that necessary information was not provided and relying entirely on facts available in determining the dumping margin applicable to SAIL.

7.80. Having concluded that USDOC's decision to rely entirely on facts available was inconsistent with its obligations under the AD Agreement, we do not consider it necessary to address India's alternative claims."

xlv. With regard to the submission of First Solar Inc, USA in regard to exclusion of sales to USA party through its related party in Germany for the purpose of determination of normal value, it is noted that First Solar Inc, USA has made sales in USA market through three modes i.e. direct sales to affiliated parties in USA, direct sales to unaffiliated parties in USA and sales in USA to affiliated/unaffiliated parties through its affiliated party in Germany. It may be stated that First Solar, USA has not explained clearly why it was invoicing the goods to USA party through its related party in Germany, even though it was having its invoicing department in USA. This shows that there is some unexplained cause behind such transactions. It is also not clear how the sales made to an affiliated party in Germany by raising invoice in Euro currency could be treated as domestic sales even though such German related company had further sold the goods to a party in USA. Further, First Solar, USA and First Solar, Germany are two different legal entities operating in different countries and it is not clear how sales made by one entity in one country to another entity in another country can be considered as home market sale. In view of the above, the sales made by First Solar, Germany to a party in USA, by procuring the goods from First Solar, USA cannot be treated as domestic sales made by First Solar, USA in USA. The Authority further notes that the practice of invoicing some local sales through a foreign entity involving realisation of sale proceeds in foreign exchange cannot be considered as domestic sale for the purpose of determination of normal value.

xlvi. The Authority notes from the WTO Panel decision cited by First Solar, Malaysia that the facts and circumstances of the present case are different from the facts of the case decided by WTO. In the present case, First Solar Malaysia SDN BHD had exported more than ***% of the exports through third parties and such third parties haven't filed exporter questionnaire response. In the absence of the export price for the majority of the exports made by First Solar, Malaysia, the Authority has not determined individual dumping margin. It is noted that determination of export price is crucial for determination of individual dumping margin and therefore in the absence of export price, determination of normal value becomes irrelevant. In view of the above, determination of normal value for First Solar Malaysia SDN BHD based on their data has

not been made. On the contrary, in the case cited by First Solar, Malaysia, no individual dumping margin was granted even when the export price was available on the plea that data for determination of normal value was not available. Thus, it may be seen that the SAIL case as cited by First Solar Malaysia SDN BHD is not appropriate in the circumstances involving First Solar Malaysia SDN BHD in the present investigation.

xlvii. With regard to the reference made to past decision by DGAD in respect of recent case involving imports of Pthalic Anhydride, it is observed that the decision to deny individual margin in the present case is different from the facts and circumstances of the above stated case. It may be noted that while the individual margin for First Solar Malaysia SDN BHD has been denied in the present case as ***% of the exports made by the company are not before the Authority for determining the export price, whereas the position was not so in the case concerning Pthalic Anhydride. In fact in the present investigation, First Solar, USA has been granted individual dumping margin as they had exported an insignificant volume of less than 10% of subject goods through third parties which is not before the Authority.

xlviii. With regard to the contention of Solar Power Developers Association that domestic industry has catered to only about 1.25% of the domestic demand during the POI and therefore there is no need to impose any antidumping duty, the Authority notes that the domestic industry (constituted by Indosolar Ltd, Websol Energy Systems Ltd and Jupiter Solar Power Limited), had capacity to cater to 30% of domestic demand. However, due to dumped imports, they could not increase their share in the domestic market. Further, besides the domestic industry, there are 39 other domestic producers, who have created adequate capacity to cater to the domestic demand. However, due to dumped imports, these producers had resorted to imports and trading.

S. Offers for Price undertaking

161. Pot disclosure the Chinese exporters namely Changzhou Trina Solar Energy Co Ltd, Renesola Jiangsu Ltd, Jinko Solar, Perlight Solar Co Ltd, Hengdian Group DMEGC Magnetics Co Ltd etc including CCCME offered to provide price undertaking with respect to the export of the PUC from

China PR to India. However, the Authority does not accept the said price undertaking offers considering them as impractical to monitor.

T. CONCLUSIONS:

162. After examining the issues raised and submissions made by the interested parties and facts made available before the Authority, as recorded in this finding, the Authority concludes that:
 - a. The product under consideration has been exported to India from subject countries below its normal value, thus resulting in dumping of the product.
 - b. The domestic industry has suffered material injury due to dumping of the product under consideration.
 - c. The material injury has been caused by the dumped imports of the subject goods originating in or exported from the subject countries.

U. INDIAN INDUSTRY'S INTEREST & OTHER ISSUES

163. The Authority notes that the purpose of anti-dumping duties, in general, is to eliminate injury caused to the domestic industry by the unfair trade practices of dumping so as to re-establish a situation of open and fair competition in the Indian market, which is in the general interest of the Country. Imposition of anti-dumping measures would not restrict imports from the subject countries in any way, and, therefore, would not affect the availability of the products to the consumers.
164. The Authority also notes that solar power generation has the potential to cater to the larger energy requirements of the country and the Government has been formulating policies and programmes to support the developers of large scale solar power projects in India through various schemes such as JNNSM under the MNRE. Information available in the public domain shows that the global manufacturing capacity of subject goods is several times higher than that of India and India has a rapidly growing domestic demand for the subject goods. Imposition of anti-dumping duties would not deprive the Indian buyers of subject goods who would need access to subject goods manufactured in India and also global market to take the maximum benefits of continued technological and cost effective innovations. Ensuring a competitive market for producers of subject goods in India will help India to develop a strong and effective

domestic manufacturing base for subject goods in India so that Indian consumers can benefit both from the domestic as well as global market of the subject goods.

165. It is recognized that the imposition of anti-dumping duties might affect the cost of the solar power projects using the imported subject goods from the subject countries. However, fair competition in the Indian market will not be reduced by the anti-dumping measures, particularly if the levy of the anti-dumping duty is restricted to an amount necessary to redress the injury to the domestic industry. On the contrary, imposition of anti-dumping measures would remove the unfair advantages gained by dumping practices, would prevent the decline of the domestic industry and help maintain availability of wider choice to the consumers of the subject goods.

V. RECOMMENDATIONS

166. The Authority notes that the investigation was initiated and notified to all interested parties and adequate opportunity was given to the exporters, importers and other interested parties to provide positive information on the aspect of dumping, injury and causal links. Having initiated and conducted investigation into dumping, injury and causal links in terms of the Anti-dumping Rules laid down and having established positive dumping margin as well as material injury to the domestic industry caused by such dumped imports, the Authority is of the view that imposition of definitive anti-dumping duty is required to offset dumping and injury. Therefore, the Authority considers it necessary to recommend imposition of definitive anti-dumping duties on the imports of the subject goods from the subject countries in the form and manner described hereunder.
167. Having regard to the lesser duty rule followed by the Authority, the Authority recommends imposition of anti-dumping duty equal to the lesser of margin of dumping and the margin of injury, so as to remove the injury to the domestic industry. Accordingly, the definitive anti-dumping duty equal to the amount mentioned in Col 8 of the duty table below is recommended to be imposed from the date of notification to be issued in this regard by the Central Government, on all imports of the subject goods, originating in or exported from the subject countries.

Duty Table

Sl. No.	Heading / Subheading*	Description of goods	Country of origin	Country of export	Producer	Exporter	Duty amount	Unit	Currency
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	85414011	Solar Cells whether or not assembled partially or fully in Modules or Panels or on glass or some other suitable substrates	USA	USA	First Solar Inc, USA	First Solar GmbH Mainz, Germany	0.11	Watt	US\$
2	do	do	USA	USA	Any combination other than mentioned in Sl No-1 above		0.48	Watt	US\$
3	do	do	USA	Any country other than those subject to Anti-dumping duty	Any	Any	0.48	Watt	US\$
4	do	do	Any country other than those subject to Anti-dumping duty	USA	Any	Any	0.48	Watt	US\$
5	do	do	China PR	China PR	Canadian Solar Manufacturing (Changhsu) Inc, China PR	Canadian Solar International Ltd, Hong Kong	0.64	Watt	US\$

6	do	do	China PR	China PR	Non-Sampled Producer/ exporters as per list **	Non-Sampled Producer / exporters as per list **	0.64	Watt	US\$
7	do	do	China PR	China PR	Any combination other than mentioned in SI No-5 & 6 above		0.81	US\$	Watt
8	do	do	China PR	Any country other than those subject to Anti-dumping duty	Any	Any	0.81	Watt	US\$
9	do	do	Any country other than those subject to Anti-dumping duty	China PR	Any	Any	0.81	Watt	US\$
10	do	do	Malaysia	Malaysia	Any	Any	0.62	Watt	US\$
11	do	do	Malaysia	Any country other than those subject to Anti-dumping duty	Any	Any	0.62	Watt	US\$
12	do	do	Any country other than those subject to Anti-dumping	Malaysia	Any	Any	0.62	Watt	US\$

			ng duty						
13	do	do	Chine se Taipei	Chine se Taipei	Any	Any	0.59	Watt	US\$
14	do	do	Chine se Taipei	Any countr y other than those subjec t to Anti-dumpi ng duty	Any	Any	0.59	Watt	US\$
15	do	do	Any countr y other than those subjec t to Anti-dumpi ng duty	Chine se Taipei	Any	Any	0.59	Watt	US\$

* The subject goods are being imported under tariff headings No. 85414011. However, the customs classification is indicative only and in no way binding on the scope of this investigation.

**** List of Non-sampled exporters from China PR**

1. Hanwha Solar One (Qidong) Co Ltd, China PR (Producer and Exporter)
2. Chint Solar (Zhejiang), Co Ltd, China PR, (Producer and Exporter)
3. Jinko Solar Co Ltd, China PR (Producer), Jinko Solar Import & Export Co Ltd, China(Exporter)
4. Zhejiang Jinko Solar Co Ltd, China PR(Producer), Jinko Solar Import & Export Co Ltd, China PR(Exporter)
5. Del Solar (Wujiang) Ltd, China PR, (Producer and Exporter)
6. LDK Solar Hitech (Suzhou) Co Ltd, China PR, (Producer and Exporter)
7. Changzhou Trina Solar Energy Co Ltd, China PR, (Producer and Exporter)
8. Shangluo BYD Industrial Co Ltd, China PR, (Producer and Exporter)
9. Dongfang Electric (Yixing) Magi Solar Power Technology Co Ltd, China PR, (Producer and Exporter)
10. Jiangyin Hareon Power Co Ltd, China PR, (Producer and Exporter)

11. Hengdian Group DMEGC Magnetics Co Ltd, China PR, (Producer and Exporter)
12. HanzhouDahe Thermo Magnetics Co Ltd, China PR, (Producer and Exporter)
13. Zhejiang Jinko Solar Co Ltd, China PR (Producer) , Zhejiang Jinko Solar Trading Co Ltd, China PR (Exporter)
14. AnjiDaSol Solar Energy Science & Technology Co Ltd, China PR, (Producer and Exporter)
15. Yuhuan Sinosula Science & Technology Co Ltd, China PR, (Producer and Exporter)
16. Perlight Solar Co Ltd, China PR, (Producer and Exporter)
17. CNPV Dongying Solar Power Co Ltd, China PR, (Producer and Exporter)
18. Ningbo Qixin Solar Electricals Appliance Co Ltd, China PR, (Producer and Exporter)
19. Yingli Energy (China) Co Ltd, China PR, (Producer and Exporter)
20. Shanghai BYD Co Ltd, China PR, (Producer and Exporter)
21. Renesola Jingsu Ltd, China PR, (Producer and Exporter)
22. Shenzhen Topray Solar Co Ltd, China PR, (Producer and Exporter)

168. An appeal against the order of the Central Government arising out of this Final Findings Notification shall lie before the Customs, Excise and Service Tax Appellate Tribunal in accordance with the Customs Tariff Act.

J.S. Deepak
Designated Authority