

## STATUS OF HYDRO ELECTRIC POTENTIAL DEVELOPMENT

( In terms of Installed capacity - Above 25 MW)

As on 31.08.2017

| Region/ State        | Identified Capacity as per reassessment study |               | Capacity Under Operation |              | Capacity Under Construction |             | Capacity Under Operation + Under Construction |              | Capacity yet to be taken up under construction |              |
|----------------------|-----------------------------------------------|---------------|--------------------------|--------------|-----------------------------|-------------|-----------------------------------------------|--------------|------------------------------------------------|--------------|
|                      | Total                                         | Above 25 MW   |                          |              |                             |             |                                               |              |                                                |              |
|                      | (MW)                                          | (MW)          | (MW)                     | %            | (MW)                        | (%)         | (MW)                                          | (%)          | (MW)                                           | %            |
| <b>NORTHERN</b>      |                                               |               |                          |              |                             |             |                                               |              |                                                |              |
| Jammu & Kashmir      | 14146                                         | 13543         | 3119.0                   | 23.03        | 1265.5                      | 9.34        | 4384.5                                        | 32.37        | 9158.5                                         | 67.63        |
| Himachal Pradesh     | 18820                                         | 18540         | 9643.0                   | 52.01        | 1997.0                      | 10.77       | 11640.0                                       | 62.78        | 6900.0                                         | 37.22        |
| Punjab               | 971                                           | 971           | 1096.3                   | 100          | 206.0                       | 21.22       | 1302.3                                        | 100.00       | 0.0                                            | 0.00         |
| Haryana#             | 64                                            | 64            | 0.0                      | 0            | 0.0                         | 0.00        | 0.0                                           | 0.00         | 0.0                                            | 0.00         |
| Rajasthan##          | 496                                           | 483           | 411.0                    | 85.09        | 0.0                         | 0.00        | 411.0                                         | 100.00       | 0.0                                            | 0.00         |
| Uttarakhand          | 18175                                         | 17998         | 3756.4                   | 20.87        | 1430.0                      | 7.95        | 5186.4                                        | 28.82        | 12811.7                                        | 71.18        |
| Uttar Pradesh*       | 723                                           | 664           | 501.6                    | 75.54        | 0.0                         | 0.00        | 501.6                                         | 75.54        | 39.0                                           | 5.87         |
| Sub Total (NR)       | 53395                                         | 52263         | 18527.3                  | 35.45        | 4898.5                      | 9.37        | 23425.8                                       | 44.82        | 28837.3                                        | 55.18        |
| <b>WESTERN</b>       |                                               |               |                          |              |                             |             |                                               |              |                                                |              |
| Madhya Pradesh.      | 2243                                          | 1970          | 2235.0                   | 100          | 400.0                       | 20.30       | 2635.0                                        | 100.00       | 0.0                                            | 0.00         |
| Chhattisgarh         | 2242                                          | 2202          | 120.0                    | 5.45         | 0.0                         | 0.00        | 120.0                                         | 5.45         | 2082.0                                         | 94.55        |
| Gujarat###           | 619                                           | 590           | 550.0                    | 100          | 0.0                         | 0.00        | 550.0                                         | 100.00       | 0.0                                            | 0.00         |
| Maharashtra          | 3769                                          | 3314          | 2647.0                   | 79.87        | 0.0                         | 0.00        | 2647.0                                        | 79.87        | 667.0                                          | 20.13        |
| Goa                  | 55                                            | 55            | 0.0                      | 0.00         | 0.0                         | 0.00        | 0.0                                           | 0.00         | 55.0                                           | 100.00       |
| Sub total (WR)       | 8928                                          | 8131          | 5552.0                   | 68.28        | 400.0                       | 4.92        | 5952.0                                        | 73.20        | 2179.0                                         | 26.80        |
| <b>SOUTHERN</b>      |                                               |               |                          |              |                             |             |                                               |              |                                                |              |
| Andhra Pradesh       | 2366                                          | 2341          | 1610.0                   | 68.77        | 960.0                       | 41.01       | 2570.0                                        | 109.78       | 0.0                                            | 0.00         |
| Telangana            | 2058                                          | 2019          | 710.0                    | 35.17        | 90.0                        | 4.46        | 800.0                                         | 39.62        | 1219.0                                         | 60.38        |
| Karnataka            | 6602                                          | 6459          | 3657.4                   | 56.62        | 0.0                         | 0.00        | 3657.4                                        | 56.62        | 2801.6                                         | 43.38        |
| Kerala               | 3514                                          | 3378          | 1881.5                   | 55.70        | 100.0                       | 2.96        | 1981.5                                        | 58.66        | 1396.5                                         | 41.34        |
| Tamilnadu            | 1918                                          | 1693          | 1803.2                   | 100          | 0.0                         | 0.00        | 1803.2                                        | 100.00       | 0.0                                            | 0.00         |
| Sub Total (SR)       | 16458                                         | 15890         | 9662.1                   | 60.81        | 1150.0                      | 7.24        | 10812.1                                       | 68.04        | 5077.9                                         | 31.96        |
| <b>EASTERN</b>       |                                               |               |                          |              |                             |             |                                               |              |                                                |              |
| Jharkhand            | 753                                           | 582           | 170.0                    | 29.21        | 0.0                         | 0.00        | 170.0                                         | 29.21        | 412.0                                          | 70.79        |
| Bihar####            | 70                                            | 40            | 0.0                      | 0.00         | 0.0                         | 0.00        | 0.0                                           | 0.00         | 0.0                                            | 0.00         |
| Odisha               | 2999                                          | 2981          | 2142.3                   | 71.86        | 0.0                         | 0.00        | 2142.3                                        | 71.86        | 838.8                                          | 28.14        |
| West Bengal          | 2841                                          | 2829          | 441.2                    | 15.60        | 120.0                       | 4.24        | 561.2                                         | 19.84        | 2267.8                                         | 80.16        |
| Sikkim               | 4286                                          | 4248          | 2061.0                   | 48.52        | 1230.0                      | 28.95       | 3291.0                                        | 77.47        | 957.0                                          | 22.53        |
| Sub Total (ER)       | 10949                                         | 10680         | 4814.5                   | 45.08        | 1350.0                      | 12.64       | 6164.5                                        | 57.72        | 4515.6                                         | 42.28        |
| <b>NORTH EASTERN</b> |                                               |               |                          |              |                             |             |                                               |              |                                                |              |
| Meghalaya            | 2394                                          | 2298          | 322.0                    | 14.01        | 0.0                         | 0.00        | 322.0                                         | 14.01        | 1976.0                                         | 85.99        |
| Tripura              | 15                                            | 0             | 0.0                      | 0.00         | 0.0                         | 0.00        | 0.0                                           | 0.00         | 0.0                                            | 0.00         |
| Manipur              | 1784                                          | 1761          | 105.0                    | 5.96         | 0.0                         | 0.00        | 105.0                                         | 5.96         | 1656.0                                         | 94.04        |
| Assam                | 680                                           | 650           | 375.0                    | 57.69        | 0.0                         | 0.00        | 375.0                                         | 57.69        | 275.0                                          | 42.31        |
| Nagaland             | 1574                                          | 1452          | 75.0                     | 5.17         | 0.0                         | 0.00        | 75.0                                          | 5.17         | 1377.0                                         | 94.83        |
| Arunachal Pd         | 50328                                         | 50064         | 405.0                    | 0.81         | 2854.0                      | 5.70        | 3259.0                                        | 6.51         | 46805.0                                        | 93.49        |
| Mizoram              | 2196                                          | 2131          | 30.0                     | 1.41         | 30.0                        | 1.41        | 60.0                                          | 2.82         | 2071.0                                         | 97.18        |
| Sub Total (NER)      | 58971                                         | 58356         | 1312.0                   | 2.25         | 2884.0                      | 4.94        | 4196.0                                        | 7.19         | 54160.0                                        | 92.81        |
| <b>ALL INDIA</b>     | <b>148701</b>                                 | <b>145320</b> | <b>39867.8</b>           | <b>27.43</b> | <b>10682.5</b>              | <b>7.35</b> | <b>50550.3</b>                                | <b>34.79</b> | <b>94769.7</b>                                 | <b>65.21</b> |

Note:- 1. Does not include pumped storage schemes

2. In some states the total of the capacity developed and balance capacity is different from the potential assessed . This is due to change in capacity of the schemes, addition/ deletion of the schemes and merger of two schemes into one etc.

\*Eastern Yamuna Canal project (35 MW) has been developed in 2 stages each having Installed Capacity below 25 MW

#Western Yamuna Canal project (64 MW) has been developed in 4 stages each having Installed Capacity below 25 MW

## Two schemes namely Mahi Bajaj Sagar I & II were identified for I.C. of 97 MW has been developed with I.C of 140 MW. Gandhi Sagar (115 MW) scheme was identified in Rajasthan but has been developed in Madhya Pradesh with same capacity.

###Two schemes namely Ukai Dam and Sardar Sarovar were identified for an I.C. of 590 MW. However as per actual, the I.C. is 550 MW.

####Identified project namely East Gandak Canal has been developed with installed capacity below 25 MW

3. In addition to above 9 PSS ( 4785.6 MW) are under operation, 2 PSS (1080 MW) are under construction, DPR of 1 PSS (500 MW) returned to project developer and 1 PSS (1000 MW) is Concurred by CEA And 1 PSS of I.C. 660 MW is under Heldup list.

**STATUS OF HYDRO ELECTRIC POTENTIAL UNDER DEVELOPMENT**

( In terms of Installed capacity - Above 25 MW)

As on 31.08.2017

| Region/ State        | H.E. Schemes concurred by CEA and yet to be taken up for construction |             | H.E. Schemes under Examination in CEA |             | H.E. Schemes returned to project authorities |             | H.E.Schemes under Survey & Investigation |             | H.E. Schemes allotted for dev on which S&I is held up/ yet to be taken up |             | H.E. Schemes allotted by states for development |              | Capacity yet to be allotted for development |               |
|----------------------|-----------------------------------------------------------------------|-------------|---------------------------------------|-------------|----------------------------------------------|-------------|------------------------------------------|-------------|---------------------------------------------------------------------------|-------------|-------------------------------------------------|--------------|---------------------------------------------|---------------|
|                      | (MW)                                                                  | %           | (MW)                                  | %           | (MW)                                         | %           | (MW)                                     | %           | (MW)                                                                      | %           | (MW)                                            | (%)          | (MW)                                        | (%)           |
| <b>NORTHERN</b>      |                                                                       |             |                                       |             |                                              |             |                                          |             |                                                                           |             |                                                 |              |                                             |               |
| Jammu & Kashmir      | 5043                                                                  | 37.24       | 390                                   | 2.88        | 0                                            | 0.00        | 0                                        | 0.00        | 370                                                                       | 2.73        | 5803                                            | 42.8%        | 3355.5                                      | 24.78%        |
| Himachal Pradesh     | 1782                                                                  | 9.612       | 210                                   | 1.13        | 788                                          | 4.25        | 1669                                     | 9.00        | 1313                                                                      | 7.08        | 5762                                            | 31.1%        | 1138.0                                      | 6.14%         |
| Punjab               | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 0                                           | 0%            |
| Haryana              | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 0                                           | 0%            |
| Rajasthan            | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 0                                           | 0.00%         |
| Uttarakhand          | 1858                                                                  | 10.32       | 408                                   | 2.27        | 762                                          | 4.23        | 663                                      | 3.68        | 2537                                                                      | 14.10       | 6228                                            | 34.6%        | 6583.7                                      | 36.58%        |
| Uttar Pradesh        | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 39                                          | 5.87%         |
| Sub Total (NR)       | 8683                                                                  | 16.61       | 1008                                  | 1.93        | 1550                                         | 2.97        | 2332                                     | 4.46        | 4220                                                                      | 8.07        | 17793                                           | 34.0%        | 11044.25                                    | 21.13%        |
| <b>WESTERN</b>       |                                                                       |             |                                       |             |                                              |             |                                          |             |                                                                           |             |                                                 |              |                                             |               |
| Madhya Pradesh.      | 0                                                                     | 0           | 0                                     | 0.00        | 100                                          | 5.08        | 0                                        | 0.00        | 0                                                                         | 0.00        | 100                                             | 5.1%         | 0                                           | 0%            |
| Chhattisgarh         | 60                                                                    | 2.725       | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 60                                              | 2.7%         | 2022                                        | 91.83%        |
| Gujarat              | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 0                                           | 0.00%         |
| Maharashtra          | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 667                                         | 20.13%        |
| Goa                  | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 55                                          | 100%          |
| Sub total (WR)       | 60                                                                    | 0.738       | 0                                     | 0.00        | 100                                          | 1.23        | 0                                        | 0.00        | 0                                                                         | 0.00        | 160                                             | 2.0%         | 2019                                        | 24.83%        |
| <b>SOUTHERN</b>      |                                                                       |             |                                       |             |                                              |             |                                          |             |                                                                           |             |                                                 |              |                                             |               |
| Andhra Pradesh       | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 0.0                                         | 0.00%         |
| Telangana            | 0                                                                     | 0           | 0                                     | 0.00        | 320                                          | 15.85       | 0                                        | 0.00        | 0                                                                         | 0.00        | 320                                             | 15.8%        | 899                                         | 44.53%        |
| Karnataka            | 0                                                                     | 0           | 0                                     | 0.00        | 665                                          | 10.30       | 0                                        | 0.00        | 0                                                                         | 0.00        | 665                                             | 10.3%        | 2136.6                                      | 33.08%        |
| Kerala               | 163                                                                   | 4.825       | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 163                                             | 4.8%         | 1233.5                                      | 36.52%        |
| Tamilnadu            | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 0                                           | 0%            |
| Sub Total (SR)       | 163                                                                   | 1.026       | 0                                     | 0.00        | 985                                          | 6.20        | 0                                        | 0.00        | 0                                                                         | 0.00        | 1148                                            | 7.2%         | 3929.9                                      | 24.73%        |
| <b>EASTERN</b>       |                                                                       |             |                                       |             |                                              |             |                                          |             |                                                                           |             |                                                 |              |                                             |               |
| Jharkhand            | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 412                                         | 70.79%        |
| Bihar                | 0                                                                     | 0           | 130                                   | 100.00      | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 130                                             | 100%         | 0                                           | 0%            |
| Orissa               | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 838.75                                      | 28.14%        |
| West Bengal          | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 81                                                                        | 2.86        | 81                                              | 2.9%         | 2186.8                                      | 77.30%        |
| Sikkim               | 520                                                                   | 12.24       | 0                                     | 0.00        | 576                                          | 13.56       | 0                                        | 0.00        | 112                                                                       | 2.64        | 1208                                            | 28.4%        | 0                                           | 0%            |
| Sub Total (ER)       | 520                                                                   | 4.869       | 130                                   | 1.22        | 576                                          | 5.39        | 0                                        | 0.00        | 193                                                                       | 1.81        | 1419                                            | 13.3%        | 3096.55                                     | 28.99%        |
| <b>NORTH EASTERN</b> |                                                                       |             |                                       |             |                                              |             |                                          |             |                                                                           |             |                                                 |              |                                             |               |
| Meghalaya            | 270                                                                   | 11.75       | 295                                   | 12.84       | 0                                            | 0.00        | 299                                      | 13.01       | 620                                                                       | 26.98       | 1484                                            | 64.6%        | 492                                         | 21%           |
| Tripura              | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 0                                           | 0%            |
| Manipur              | 66                                                                    | 3.748       | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 66                                              | 3.7%         | 1590                                        | 90%           |
| Assam                | 120                                                                   | 18.46       | 0                                     | 0.00        | 60                                           | 9.23        | 0                                        | 0.00        | 0                                                                         | 0.00        | 180                                             | 27.7%        | 95                                          | 15%           |
| Nagaland             | 186                                                                   | 12.81       | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 186                                             | 12.8%        | 1191                                        | 82.02%        |
| Arunachal Pd         | 17972                                                                 | 35.9        | 2576                                  | 5.15        | 4433                                         | 8.85        | 3728                                     | 7.45        | 9462                                                                      | 18.90       | 38171                                           | 76.2%        | 8634                                        | 17.25%        |
| Mizoram              | 0                                                                     | 0           | 0                                     | 0.00        | 0                                            | 0.00        | 0                                        | 0.00        | 0                                                                         | 0.00        | 0                                               | 0.0%         | 2071                                        | 97.18%        |
| Sub Total (NER)      | 18614                                                                 | 31.9        | 2871                                  | 4.92        | 4493                                         | 7.70        | 4027                                     | 6.90        | 10082                                                                     | 17.28       | 40087                                           | 68.7%        | 14073                                       | 24.12%        |
| <b>ALL INDIA</b>     | <b>28040</b>                                                          | <b>19.3</b> | <b>4009</b>                           | <b>2.76</b> | <b>7704</b>                                  | <b>5.30</b> | <b>6359.0</b>                            | <b>4.38</b> | <b>14495.0</b>                                                            | <b>9.97</b> | <b>60607</b>                                    | <b>41.7%</b> | <b>34162.7</b>                              | <b>23.51%</b> |

Note:- 1. Does not include pumped storage schemes

2. In some states the total of the capacity developed and balance capacity is different from the potential assessed . This is due to change in capacity of the schemes, addition/ deletion of the schemes and merger of two schemes into one etc.

3.In addition to above 9 PSS ( 4785.6 MW) are under operation, 2 PSS (1080 MW) are under construction, DPR of 1 PSS (500 MW) returned to project developer and 1 PSS (1000 MW) is Concurred by CEA

4. Luhri H.E. Project (588 MW) is treated as returned since the same was withdrawn by the Developer due to conceiving the scheme in three stages instead of single stage. Luhri st-I is Under Examination and S&I of Luhri st-II & Sunni Dam (Luhri St-III) is Heldup.Shirwata PSS of I.C. 660 MW is under Heldup list.