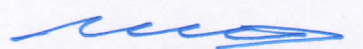
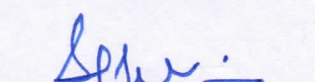


**Detail of Cost for 2 x 21 MW (42 MW) Baggi Hydro Electric Power Project**

| Name of Project                                       | Baggi Power House  |                                      |
|---|--|--------------------------------------|
| Capacity  | 21x2=42 MW   | Details as per Annexure 'B' enclosed |
| Design Energy   | 135.6 MUs per annum  |                                      |
| Project Cost  | Rs 256.65 Cr<br>(Electrical component = Rs 139.00 Cr<br>Civil component = Rs 117.65 Cr)  |                                      |
| IDC @ 10.20%  | Rs. 24.01 Cr (Calculation Sheet attached)  |                                      |
| Project cost including IDC                            | Rs 280.66 Cr   |                                      |
| Total Project cost including IDC & LADF @ 1.5 %       | Rs. 284.87 Cr  |                                      |
| Debt (70% of Project Cost including LADF plus IDC)    | Rs 206.61 Cr   |                                      |
| Equity (30% of Project Cost including LADF)           | Rs 78.26 Cr  |                                      |
| ROE   | @10%   |                                      |
| Loan repayment period                                 | 12 years   |                                      |
| Interest on loan                                      | @10.20% per Annum  |                                      |
| O&M   | @1.5% of Total Project Cost  |                                      |
| O & M Escalation                                      | @ 4.77% per annum of O&M   |                                      |
| Depreciation  | @ 4.39 % i.e. Weighted Average of <u>Civil Part @ 3.34%</u> & Electrical Part @ 5.28% (linear for 12 years and balance Depreciable amount equally divided over the remaining useful life). |                                      |
| Auxiliary Consumption including Transformation losses | @ 1%   |                                      |
| Working capital                                       | i) O & M expenses for one month<br>ii) Receivable equivalent to 45 days of Annual Fixed Charges<br>iii) Maintenance spares @ 15 % of O & M expenses  |                                      |
| Interest on Working Capital                           | @ 11.20%   |                                      |
| Cost of generation (With Free Power and LADF)         | Rs 3.69 /unit  |                                      |

  
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| PROJECT HARD COST (CIVIL) FOR BAGGI HEP (42 MW) |   |  |
|---|---|--|
| Sr. No.   | Description   | Total Cost (Lakh)<br>Base Price Dec-2020 |
| <b>I</b>  | <b>Works</b>  |  |
|   | A- Preliminary  | 106                                      |
|   | B- Land & Rehabilitation  | 318                                      |
|   | <b>Cost of C works &amp; J-Power plant and Hydro mechanical Works</b>       |  |
| 1   | Surge Shaft   | 950                                      |
| 2   | Valve House   | 53                                       |
| 3   | Powerhouse  | 3160                                     |
| 4   | TRC   | 1080                                     |
| <b>II</b>                                       | <b>Hydro Mechanical works</b>   |  |
|   | (i) Pressure Shaft /Penstock ( ASTM-537 (Grade-II) Steel Liner(Civil Works) | 1610                                     |
|   | (ii) Drain Pipes  | 1080                                     |
|   | (iii) Gates & Hoisting arrangement  | 650                                      |
|   | <b>Sub Total</b>  | 9007                                     |
|   | K- Buildings  | 540.3                                    |
|   | M--Plantation   | 53                                       |
|   | O- Misscellaneouss \P-Maintenance   | 339.2                                    |
|   | P-Maiintenance  | 92.1                                     |
|   | Q-Special Tools & Plants  | 71                                       |
|   | R-Communicatrion  | 318                                      |
|   | X-Enviironment& Ecology   | 296.8                                    |
|   | Y-Looses on Stock@0.25%   | 22.8                                     |
|   | <b>Total of I &amp; II -Works</b>   | <b>10740.5</b>                           |
| <b>II</b>                                       | <b>Establishment Cost</b>   | <b>763</b>                               |
| <b>III</b>                                      | <b>Tools and plants</b>   | <b>71</b>                                |
| <b>IV</b>                                       | <b>Receipts and Recoveries</b>  | <b>0</b>                                 |
|   | <b>Total Direct Cost</b>  | <b>11574.5</b>                           |
| <b>V</b>  | <b>Audit and Account Charges</b>  | <b>53.0</b>                              |
| <b>VI</b>                                       | <b>Capitalization of Abatement of Land Revenue</b>                          | <b>31.80</b>                             |
|   | <b>Total Indirect Cost</b>  | <b>106.0</b>                             |
|   | <b>Total Cost (Direct &amp; Indirect Cost ) (Rs. in Lakh)</b>               | <b>11765.0</b>                           |

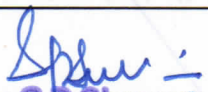
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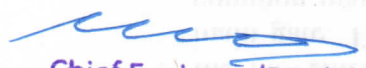
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Sr. Xen,  
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**Baggi Hydro Electric Project (2X21 MW)****(Cost Estimates of Electro Mechanical Portion)**

| Sr. No. | Item Particulars   | Cost of Equipments, Services and Taxes (Rs.) |
|---------|--|--|
| 1       | <b>Preliminary Works</b>   | ₹ 3,08,05,575                                |
|         | GST @18% (as applicable)   | ₹55,45,004                                   |
|         | <b>Sub-Total (Preliminary works)</b>   | <b>₹ 3,63,50,579</b>                         |
| 2       | <b>Generating Plant and Auxiliaries</b>  |  |
|         | a) Generating Units and Associated Accessories   | ₹ 84,90,42,650                               |
|         | b) Auxiliary electrical equipment for power station                                    | ₹ 8,58,46,376                                |
|         | c) Auxiliary mechanical equipment and services for power station                       | ₹ 4,78,10,521                                |
|         | d) Erection and commissioning charges @ 2.5% of 2(a),(b),(c)                           | ₹ 2,99,53,202                                |
|         | e) GST @18% on 2 (a), (b), (c) &(d)  | ₹ 18,22,77,495                               |
|         | f) Transportation, handling and Insurance charges @6% of 2 (a), (b), (c)               | Included in 2(a),2(b) & 2(c)                 |
|         | <b>Sub-Total (Generating Plant and Equipment)</b>                                      | <b>₹ 1,19,49,30,244</b>                      |
| 3       | <b>Switchyard and Pothead Yard Equipment &amp; Services</b>                            |  |
|         | a) Sub-station equipment, auxiliary equipment and service of switchyard                | ₹ 2,43,38,285                                |
|         | b) GST @18% on 3(a)  | ₹ 43,80,891                                  |
|         | d) Transportation, handling and insurance charges @6% of 3(a)                          | Included in 3 (a)                            |
|         | e) Erection and commissioning charges @ 8% of 3(a)                                     | Included in 2 (d)                            |
|         | <b>Sub-Total (Substation Equipment, Auxiliary Equipment and Service of Switchyard)</b> | <b>₹ 2,87,19,176</b>                         |
| 4       | <b>Synchronous By-Pass Valve Cost (Including GST) for 2 Nos. Valves</b>                | <b>₹ 8,00,00,000</b>                         |
| 5       | <b>Power Transmission Cost for evacuation of Baggi Power (L/s)</b>                     | <b>₹ 5,00,00,000</b>                         |
|         | <b>GRAND TOTAL (1) + (2) + (3) + (4) + (5) (Rs. in Lakh)</b>                           | <b>₹ 139,00,00,000</b>                       |

  
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