



Abstract

Mullai Periyar Dam - Providing a New Trash Rack arrangement at about 130m upstream of the Tunnel entry at Thekkady Head Sluice in the Leading Channel of Periyar Lake for maximum drawal of water from Mullai Periyar Dam to Vaigai Dam at an estimated cost of Rs.59,48,000/- – Sanction – Orders - Issued.

Public Works (P1) Department

G.O (Ms) No. 194

Dated 09.09.2009
Thiruvalluvar Aandu 2040
Aavani 24

Read:

1. From the Chief Engineer, Water Resources Department, Madurai Region, Letter No.OT2 / AE4 / C 1402, Dated 09.01.2008 and 07.01.2009.
2. From the Engineer in Chief, Water Resources Department and Chief Engineer (General), Public Works Department, Letter No. S7(4) / 50425 / T Cell / 2006, Dated 06.02.2008.
3. From the Chairman, TamilNadu Electricity Board, Letter No.CE / H / SE / H(E) / EH / AEE-2 / F. Periyar Dam / D.822 / 2008 Dated 01.09.2008.

Order:

In the letter first read above, the Chief Engineer, Madurai Region, has sent a proposal for providing a new Trash Rack arrangement, at about 130m upstream of the Tunnel entry at Thekkady Head Sluice in the Leading Channel of Periyar Lake for maximum drawal of water from Periyar Dam to Vaigam Dam, at an estimated cost of Rs.59.48 lakhs. The need and necessity of the above proposal and the details thereof are as follows:-

(i). The Mullai Periyar Dam is the life line of the people of Tamil Nadu living in the southern districts of Theni, Madurai, Dindigul, Sivagangai and Ramnad for agricultural (2,08,144 acres) and for drinking water needs. The FRL of Periyar Dam is 152 feet with a live storage of 10570 mcft. But, the storage is now restricted to 136 feet with a live storage of 6118 mcft and this causes considerable storage loss in the dam. But, the ayacut area (2,08,144 acres) remains the same. This situation warrants new ways and means to draw maximum water by overcoming the constraints and removing the bottlenecks. Thus, under these circumstances, it is of utmost importance to draw maximum water to the State and the System has to be improved without any delay.

(ii). In this regard, the Superintending Engineer, Periyar Vaigai Basin Circle, Madurai has held discussion with the concerned Engineers of Public Works Department

and Tamil Nadu Electricity Board to find ways and means to overcome all the bottlenecks involved for maximum drawal of water from Periyar Dam. One of the decision arrived, as an outcome of the discussion, is to provide a new Trash Rack arrangement.

(iii). A Trash Rack arrangement has already been provided by the Tamil Nadu Electricity Board at the entry point of the tunnel having an area of 152 Sq Feet (14 feet x 12.5 feet) formed with Steel Flats, Channels and 'I' Sections with a spacing of 8 cm c/c (center to centre). By this arrangement, the area of flow gets reduced to 132 sq feet, which results in reduction in quantity of flow by 13.15%. Hence, a maximum quantity of 2050 cusecs only could be drawn even though the level is more than 136 feet.

(iv). Besides, trash accumulates and stick onto the surface of the trash rack arrangement, due to the suction created at the entry of the tunnel, causing further reduction in drawal. Further, whenever trash accumulates and requires cleaning, the entire flow has to be stopped by closing the gates, otherwise the heavy suction will endanger the lives of the divers. The gates have to be closed for about 3 hours per day, thrice a week, for cleaning the accumulated trash. This frequent operation further reduces the average drawal of water to the tune of about 100 cusecs per day amounting to 1000 mcft per year.

(v). Hence it was decided to provide a new Trash Rack at 130m upstreamside of the tunnel entry, in the leading channel, wherein the velocity of the flow is normal. The openings in the proposed new Trash Rack will be of 8 cm c/c (center to centre) and to a level of 145 feet (44 feet height of water). By providing this new Trash Rack arrangement, it will be possible to draw maximum quantity of water through the irrigation tunnel. Further, providing a new trash rack at 130m upstream side of Thekkady head sluice will definitely facilitate maximum and consistent drawal of water and will minimise the surplus supplies to Kerala to a great extent.

2). The Chief Engineer, Madurai Region, has therefore proposed to provide a new Trash Rack arrangement, at an estimated cost of Rs.59.48 Lakh, at about 130m upstream of the Tunnel entry at Thekkady Head Sluice in the Leading Channel of Periyar Lake so as to draw maximum quantity of water to Tamil Nadu from Periyar Dam to Vaigai Dam.

3). In the letters second and third read above, the Engineer in Chief, Water Resources Department and Chief Engineer (General), Public Works Department, Chennai and the Chairman, TamilNadu Electricity Board have agreed to the above proposal.

4). The Government, after careful examination, have decided to accept the proposal of the Chief Engineer, Madurai Region. Accordingly, sanction is accorded for Rs.59,48,000/- (Rupees Fifty nine lakh and forty eight thousand only) towards provision of a New Trash Rack arrangement, at about 130m upstream of the Tunnel entry at Thekkady Head Sluice in the Leading Channel of Periyar Lake for maximum drawal of water from Periyar Dam to Vaigai Dam.

5). The expenditure sanctioned in para 4 above shall be debited to the following Head of account.

“4701 Capital Outlay on Major and Medium Irrigation – 01 Major Irrigation – Commercial – 201 Periyar Project – Eleventh Five Year Plan – II State Plan – JA Direction and Administration – 16. Major Works (DPC 4701 01 201JA 1605)”

6). Necessary funds will be provided in Revised Estimate / Final Modified Appropriation 2009 – 2010. However, it may be brought to the notice of the Legislature, by specific inclusion in the Supplementary Estimates 2009 – 2010. Pending provision of funds in Revised Estimate / Final Modified Appropriation 2009 - 2010, the Engineer in Chief, Water Resources Department and Chief Engineer (General), Public Works Department, is authorised to incur the expenditure sanctioned in para 4 above. The Engineer in Chief, Water Resources Department and Chief Engineer (General), Public Works Department is directed to include the above item of expenditure, in the Supplementary Estimates 2009 – 2010 to the Government in Finance (B.G. I) Department.

7). This Order issues with the concurrence of Finance Department vide its U.O. No. 49142/PW II/09 dated 01.09.2009 and Additional Sanction Ledger No. 641(Six hundred and forty one).

(By Order of the Governor)

S. Ramasundaram
Principal Secretary to Government.

To

The Engineer in Chief, Water Resources Department and Chief Engineer (General),
Public Works Department, Chepauk, Chennai-5

The Chief Engineer, Water Resources Department, Madurai Region, Madurai – 2.

The Pay and Accounts Officer, Chennai – 5.

The Pay and Accounts Officer, Madurai.

The Principal Accountant General (A & E), Chennai – 18.

The Principal Accountant General (Audit –I), Chennai – 18

Copy to

The Principal Secretary and Chairman, Tamil Nadu Electricity Board, 144, Anna Salai,
Chennai – 2.

The Finance (PW II / BG I / II) Department, Chennai – 9.

(Forwarded By Order)

Section Officer