

BUREAU OF INDIAN STANDARDS
(WATER RESOURCES DEPARTMENT)

MINUTES

Hydraulic Structures Instrumentation Sectional Committee, WRD 16	27th Meeting
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Day, Date & Time	Venue	Contact details
30-August-2024 11:00 AM	Virtual	wrд@bis.gov.in

CHAIRPERSON: Dr. R. Chitra, Director, Central Soil and Materials Research Station, New Delhi	MEMBER SECRETARY: Shri Vaibhav Yadav, Sc-B/Assistant Director, WRD
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PARTICIPANTS:

Sl. No.	Name	Email
1.	Dr. R. Chitra, Director, CSMRS	director-csmrs@nic.in
2.	Shri Heman Manchanda, Deputy General Manager, AIMIL	hemanmanchanda@aimil.com
3.	Ms. Madhu Malini, Senior Design Engineer, BBMB	yadav.madhmalini@gmail.com
4.	Shri Abhay Kumar Singh, Principal Scientist, CSIR - CIMFR	singhak.cimfr@gmail.com
5.	Ms. Pallabi Das, AM, CSIR - CIMFR	pallabidas@cimfr.nic.in
6.	Ms. N. Anandavalli, Director, CSIR - SERC	director@serc.res.in
7.	Shri R. S. Sehra, Sc-D, CSMRS	rs.sehra@nic.in
8.	Shri Hari Dev, Sc-E, CSMRS	haridev@nic.in
9.	Shri Ashish Kumar, Director (Instrumentation), CWC	ashishkumar-cwc@nic.in
10.	Shri Somesh Kumar, Director, Emb. (N&W), CWC	someshkumar-cwc@nic.in
11.	Shri M S Hanumanthappa, Sc-D, CWPRS	hanu.cwprs@gmail.com
12.	Shri M. S. Bist, Sc-D, CWPRS	msbist1974@cwprs.gov.in
13.	Shri Sachin Khupat, Sc-C, CWPRS	sachinkhupat@cwprs.gov.in

14.	Prof. Eldho T.I., IIT Bombay	eldho@civil.iitb.ac.in
15.	Shri Ajay Kumar, SE (Design), IDO/ IRI Uttarakhand Irrigation Deptt.	sedesignrke@gmail.com
16.	Shri Thota Venugopal, Group Senior Manager (Civil), NHPC	tvenugopal@nhpc.nic.in
17.	Ms. Shalu Srivastava, Progressive Machine Tools, Jaunpur	shalu@pmtpl.com
18.	Superintending Engineer Design, WRO, PWD, WRD	sedesignstnpwdwr@gmail.com
19.	Ms. Sudha Devi, Geologist, SJVNL	sudhapathania.24@gmail.com
20.	Shri Shyam Veer Singh, Director, SOI	sv.singh.soi@gov.in
21.	Shri Vibhash Pathania, Manager, THDC India Limited	vibhash_pathania@yahoo.com
22.	Shri Sitangshu Dhar, Chief General Manager (Technical), NEEPCO	sitangshu29@yahoo.co.in
23.	Shri D. Ilanchezhiyan, Chief Engineer, NCA	dichezhiyan@gmail.com
24.	Shri Nayan Sharma, Professor, In Personal Capacity	nayanfwt@gmail.com
25.	Dr. A. K. Dhawan, Consultant, In Personal Capacity	akd847@gmail.com

ITEM 0 WELCOME AND INTRODUCTORY REMARKS

The Chairperson welcomed all the members to the 27th meeting of the WRD 16 Sectional Committee. The Chairperson requested all the members for their continued contributions and regular participation in the meeting so that long pending documents in the Committee can be finalized.

ITEM 1 CONFIRMATION OF THE MINUTES OF THE PREVIOUS MEETING

The Committee NOTED that no comments had been received on the circulated minutes of 26th meeting of the Committee. The Committee, therefore, CONFIRMED the minutes of the previous meeting as circulated.

ITEM 2 COMPOSITION OF THE SECTIONAL COMMITTEE

2.1 The Committee NOTED the present composition of the committee as given in ANNEX 1 of the agenda.

2.2 The Committee NOTED item 2.2 of the agenda and decided to pursue the following organizations once again and contact the higher authorities for their active participation/fresh nominations in the work of the sectional committee.

Sl. No.	Organization
1.	Indian Institute of Technology Roorkee, Roorkee
2.	Survey of India, Geodetic and Research Branch, Dehradun
3.	Uttarakhand Jal Vidyut Nigam Limited, Govt. of Uttarakhand, Dehradun
4.	Damodar Valley Corporation, Jharkhand
5.	NTPC Limited, Noida
6.	CRRRI, New Delhi

2.3 The Committee NOTED item 2.3 of the agenda and decided to pursue the following organizations once again and contact to the higher authorities of the organizations for co-option in the Sectional Committee.

Sl. No.	Organization
1.	Prof. Suresh Bhalla, IIT Delhi
2.	IIT Madras
3.	IIT Kharagpur
4.	Karnataka Neeravari Nigam limited
5.	Sardar Sarovar Narmada Nigam Limited, Gandhinagar
6.	WRD Meghalaya
7.	Jindal Steel Works
8.	Greenko Group
9.	Narmada Control Authority
10.	North Eastern Electric Power Corporation Limited

During the meeting, NEEPCO and NCA informed to the committee that they will send nominations from their organization.

ITEM 3 PROGRAMME OF WORK

3.1 The Committee NOTED present programme of work as given at Annex 2 of the agenda.

3.2 The Committee NOTED item 3.2 of the agenda and decided to request inputs from the committee members. If any comments received will be discussed in the next meeting.

Sl. No.	IS No.	Title of Standard	Last Reaffirm
1.	IS 10334: 1982	Code of practice for selection, splicing, installation and providing protection to the open ends of cables used for connecting resistance type measuring devices in concrete and masonry dams	March, 2020
2.	IS 10434 (Part 2): 1996	Guidelines for installation, maintenance and observation of preformation measuring devices in concrete and mas - Orry dams: Part 2 vibrating, wire type joint meter	March, 2020
3.	IS 13073 (Part 2): 2000	Code of practice for installation, maintenance and observation of displacement measuring devices for concrete and masonry dams: Part 2 geodetic observation - Crest collimation	March, 2020
4.	IS 14248: 1995	Guidelines for instrumentation of barrages and weirs	March, 2020
5.	IS 14278: 1995	Stress measuring devices In concrete and masonry dams - Installation, commissioning and observations - Code of practice	March, 2020
6.	IS 14750: 2014	Code of practice for installation, maintenance and observation of seepage measuring devices for concrete/masonry and earth/ rockfill dams (First Revision)	March, 2020
7.	IS 6532: 1972	Code of practice for design, installation, observation and maintenance of uplift pressure pipes for hydraulic structures on permeable foundations	March, 2020
8.	IS 7500: 2000	Code of practice for installation and observation of cross arms for measurement of internal vertical movement in earth dams (First Revision)	March, 2020
9.	IS 8282 (Part 2): 1996	Installation, maintenance and observations of pore pressure measuring devices in concrete and masonry dams - Code of practice: Part 2 vibrating wire type cell	March, 2020
10.	IS 17158: 2019	Guide for type of measurement, choice of location and type of instruments for underground power house	2024

11.	IS 7436 (Part 2): 2019	Guide for types of measurements for structures in river valley projects and criteria for choice and location of measuring instrument: Part 2 concrete and masonry dams (Second Revision)	2024
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3.3 The Committee NOTED item 3.3 of the agenda and the following decision were taken up given below:

Sl. No	IS No.	Title of Standard	Committee Decision
1.	IS 10334: 1982	Code of practice for selection, splicing, installation and providing protection to the open ends of cables used for connecting resistance type measuring devices in concrete and masonry dams	After deliberation, the Committee requested the committee members to review the document and submit their comments to BIS.
2.	IS 6532: 1972	Code of practice for design, installation, observation and maintenance of uplift pressure pipes for hydraulic structures on permeable foundations	After deliberation, the Committee requested AIMIL to review the document and submit their comments to BIS.
3.	IS 8282 (Part 1): 1976	Code of practice for installation, maintenance and observations of pore pressure measuring devices in concrete and masonry dams: Part 1 electrical resistance type cell	After deliberation, the Committee requested CWC to review the document and submit their comments to BIS.
4.	IS 6524: 1972	Code of practice for installation and observation of instruments for temperature measurements inside dams: resistance type thermometers	After deliberation, the Committee requested CWPRS to review the document and submit their comments to BIS.
5.	IS 10434 (Part 2): 1996	Guidelines for installation, maintenance and observation of preformation measuring devices in concrete and mas - Orry dams: Part 2 vibrating, wire type joint meter	
6.	IS 14248: 1995	Guidelines for instrumentation of barrages and weirs	
7.	IS 14278: 1995	Stress measuring devices In concrete and masonry dams - Installation, commissioning and observations - Code of practice	

8.	IS 8282 (Part 2): 1996	Installation, maintenance and observations of pore pressure measuring devices in concrete and masonry dams - Code of practice: Part 2 vibrating wire type cell	
9.	IS 13232: 1992	Installation, maintenance and observations of electrical strain measuring devices in concrete dams - Code of practice	
10.	IS 7436 (Part 1): 1993	Guide for types of measurements for structures in river valley projects and criteria for choice and location of measuring instruments: Part 1 for earth and rockfill dams (First Revision)	

3.4 The Committee NOTED item 3.4 of the agenda and the following decision were taken up given below:

Sl. No.	Subjects	Allotted to the member	Committee Decision
1.	Maintenance of instruments in existing dams	Mr. M. S. Hanumanthappa, CWPRS	During the meeting, after deliberation, CWPRS informed the Committee that they will submit the draft document to BIS before the next meeting.
2.	Guidelines for uplift pressure measurement in rock strata	Mr. M. S. Hanumanthappa, CWPRS	
3.	Automation of Plumb Line	Mr. M. S. Hanumanthappa, CWPRS	
4.	Canal Automation	A Working Group to be formed with the following Composition: 1. Dr. Nayan Sharma, Convenor 2. Mr. M. S. Bist, CWPRS 3. Water Resources Department, Tamil Nadu 4. Mr. Vivek Kapadia, SSNNL	During the meeting, the Member Secretary informed the Committee that the WRD 06 Sectional Committee is already working on this subject. Therefore, the Committee decided to drop the subject and dissolved the working group.
5.	Displacement and settlement measurement in dams	1. Mr. M S Hanumanthappa, CWPRS 2. CSMRS	During the meeting, after deliberation, CWPRS informed the Committee that they will submit the draft document to BIS

			before the next meeting.
6.	Measurement of cavitation	Mr. Heman Manchanda, AIMIL Limited	After deliberation, the Committee requested AIMIL to submit the draft document before the next meeting so that effective deliberation can be done.

ITEM 4 DRAFT STANDARDS FOR CONSIDERATION

4.1 Code of Practice for Installation, Maintenance, and Observation of Instruments for Tunnels

The Committee NOTED item 4.1 of the agenda and discussed the status of the draft document pending from SJVN Limited. The Committee requested Ms. Sudha Devi for a fresh nomination from SJVN Limited.

4.2 Guidelines for Performance, Monitoring, and Surveillance of Hydraulic Structures

The Committee NOTED item 4.2 of the agenda and deliberated on the status of the draft document pending from the working group. Dr. Nayan Sharma informed the Committee that he had prepared a draft and requested comments from other members.

The composition of the working group is as follows:

1. Prof. Nayan Sharma, Convenor
2. Shri. Brijesh Gupta, SJVNL
3. Shri. Sachin Khupat, Sc C CWPRS
4. Shri A. K. Nanda, National Manager AIMIL
5. Shri M. S. Verma, Director, Instrumentation CWC