



**Government of Pakistan
Ministry of Water Resources
O/o Chief Engineering Advisor & Chairman
Federal Flood Commission**



ANNUAL REPORT 2024

OF

OFFICE OF THE CHIEF ENGINEERING ADVISOR



**6-ATATURK AVENUE, SECTOR G-5/1,
ISLAMABAD, PAKISTAN**

www.ffc.gov.pk

EXECUTIVE SUMMARY

The Government of Pakistan established the Central Engineering Authority under the Chief Engineering Adviser, as the leading engineering agency as soon as the nation (Pakistan) was founded. It was re-designated as '*Chief Engineering Advisor's Office*' after establishment of Water and Power Development Authority (WAPDA) in 1959. The then Office of Chief Engineering Adviser (O/o CEA) was mandated to mainly deal with the issues related to water, irrigation & power sector. Subsequently, two wings i.e. Civil Engineering Wing and Power Engineering Wing were established in the Office of Chief Engineering Adviser.

Later in 1977, Federal Flood Commission (FFC) was established for the purpose of Integrated Flood Management at National level and it was decided that O/o CEA will provide Secretariat services of FFC. In 1981, Dam Safety Council was also added to the O/o CEA to review plans for new dams & barrages and to carry out inspections of existing dams with DSO WAPDA. Administration and Accounts Section provides logistic support to O/o CEA.

Chief Engineering Adviser is ex-officio member of IRSA as well as member of the Advisory Committee of IRSA under IRSA Act 1992. Being Chairman of Pakistan National Committee on Irrigation & Drainage (PANCID) and Pakistan National Committee on Large Dams (PANCOLD) as ex-officio Office of Chief Engineering Adviser has a very important coordinating role with organizations working on the water resources management. The office has following three technical wings: -

- (i) Civil Engineering Wing
- (ii) Power Wing
- (iii) Dam Safety Council

Civil Engineering Wing

The Civil Engineering Wing mainly deals with the matters pertaining to water, hydropower and allied engineering issues at national level. During the year 2024, a total of 18 No PC-Is/ PC-IIs/ Technical Reports were examined and input was provided to MoWR. Additionally, assistance was provided to Ministry of Water Resources for collaboration on MOUs with Government of Hungary & IHE Delft in field of water management. Civil Engineering Wing also acts as Secretariat of Pakistan National Committee on Irrigation & Drainage (PANCID). A total of 04 Irrigation & Drainage Journals and calls for various webinars were circulated among all PANCID members for getting benefit from latest research activities of ICID. Annual meeting of PANCID was also organized on 22nd July 2024.

Power Wing

Power Wing was established in fifties and is discharging the functions related to evaluation of power sector projects prepared by WAPDA, NTDC, GENCOs, DISCOs, PPIB & AEDB and render expert technical advice to Ministry of Energy (Power Division) on Hydel, Thermal & non-conventional sources of energy (like; solar, wind, biomass etc.) besides on projects of transmission lines & grid stations, power distribution, rural electrification. Power Wing also deals with relevant assignment including investigation/ inquiries related to WAPDA's hydro-power project as well as transmission and distribution schemes and other technical matters as and when referred.

Dams Safety Council

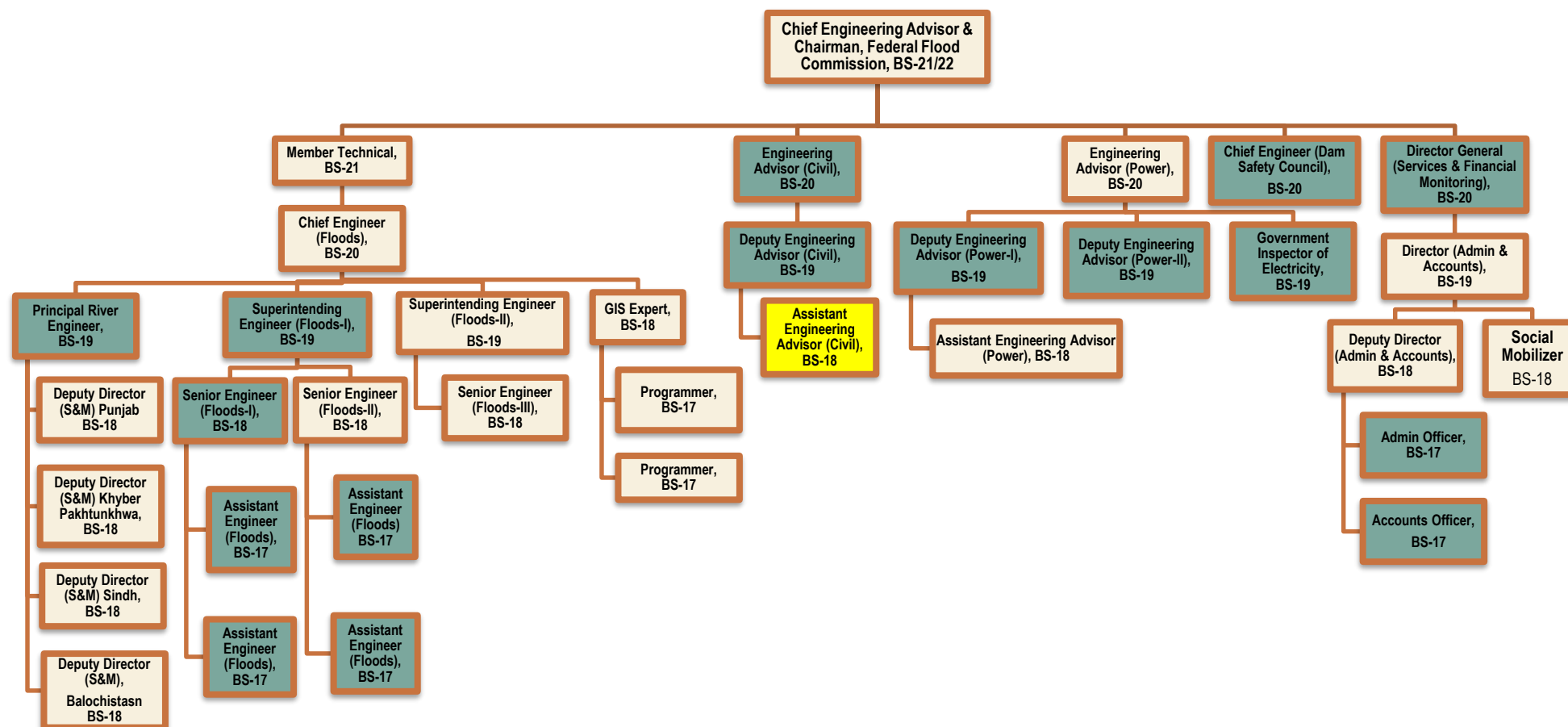
The Dams Safety Council (DSC) oversees the annual and periodic inspection of dams to ensure their safety. It reviews new projects (PC-Is, PC-IIs, and related documents) and provides expert technical advice on dam projects and engineering matters at the national level. Additionally, DSC serves as the Secretariat for the Pakistan National Committee on Large Dams (PANCOLD).

In addition to three technical wings, Administration & Accounts Section manages general services, annual budgeting, fund utilization, and audits for office and development projects. It handles officer/official training (domestic and international), project account maintenance, internal inspections, financial monitoring, consultancy service payments, and matters related to DAC/PAC, appropriation accounts, and audit reports.

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ORGANOGRAM -OFFICE OF THE CEA & CFFC



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On deputation in MoWR



ABBREVIATIONS

ADB	Asian Development Bank
AJ&K	Azad Jammu & Kashmir
Cusec	Cubic Feet per Second
CEA	Chief Engineering Advisor
CFFC	Chairman Federal Flood Commission
DEM	Digital Elevation Model
DMPs	Drought Management Plans
FFC	Federal Flood Commission
GFAS	Global Flood Analysis System
GIS	Geographic Information System
GPS	Geographical Positioning System
GB	Gilgit Baltistan
HEC-RAS	Hydrological Engineering Center River Analysis System
IRSA	Indus River System Authority
IT	Information Technology
IFAS	Integrated Flood Analysis System
JICA	Japan International Cooperation Agency
KP	Khyber Pakhtunkhwa
Km	Kilometer
Km ²	Square Kilometer
MoWR	Ministry of Water Resources
mm	Millimeter
NESPAK	National Engineering Services of Pakistan
NDMA	National Disaster Management Authority
NWC	National Water Council
NWP	National Water Policy
O/o CEA/CFFC	Office of Chief Engineering Adviser/ Chairman Federal Flood Commission
O&M	Operation and Maintenance
PCC	Plain Cement Concrete
PMD	Pakistan Meteorological Department
PMU	Project Management Unit
PARC	Pakistan Agricultural Research Council
PCIW	Pakistan Commissioner for Indus Waters
PWD	Public Works Department
RDA	Rawalpindi Development Authority
SCARP	Salinity Control and Reclamation Programme
WAPDA	Water and Power Development Authority
WASA	Water and Sanitation Agency
US\$	United States Dollar

CIVIL ENGINEERING WING



1 SECTION – 1: CIVIL ENGINEERING WING

1.1 Historic Perspective

After creation of Pakistan in August 1947, a Central Engineering Authority was established with the objective of performing advisory role in various sectors of development at Federal Level. After the establishment of WAPDA in 1959, Government of Pakistan decided to substitute the existing authority with a compact engineering organization to be known as “Office of Chief Engineering Advisor”. The then Professional Engineers and technical staff of office of the Chief Engineering Advisor laid the foundation of Civil Engineering Wing. It is now one of the oldest and most important technical organs of office of the CEA/CFFC.

1.2 Main Functions

The Civil Engineering Wing mainly deals with the matters pertaining to water, hydropower and allied engineering issues at national level. The main functions of the Civil Engineering Wing are enlisted below:

- i. Technical evaluation of Water Sector Projects (WAPDA, PIDs, other agencies);
- ii. Expert advice is rendered on any engineering matter as and when referred by the MoWR and concerned agencies;
- iii. Render advice/comments (as and when asked) on related International disputes arising out of the water works constructed trans-border; or likely to be constructed in neighboring countries having repercussions on the river flows of Pakistan
- iv. General liaison with international organizations on matters related to water resources, irrigation, drainage, flood control, etc.
- v. Pakistan is a member of the International Commission on Irrigation & Drainage (ICID) since 1953. This Wing works as the Secretariat of Pakistan National Committee on Irrigation and Drainage (PANCID) of ICID.
- vi. Inter-departmental and inter provincial coordination for implementation of NWP guidelines;

1.3 Activities Performed During 2024

During the calendar Year 2024, Civil Engineering Wing performed following functions/activities;

1.3.1 Technical Scrutiny of PC-Is/PC-IIs, Technical Reports and Concept Notes of Water Sector Projects

The following PC-Is/PC-IIs, Technical Reports and Concept Notes were examined, on which technical views/comments were forwarded to Ministry of Water Resources (MoWR):

Table-1.1: Technical Scrutiny of Projects/Documents

Name of Project	Date
Revised PC-I of Indus Basin Irrigation System (IBIS) – Automation of 25 Key Sites for Discharge Monitoring, (Estimated Cost Rs 22,833.878 Million)	January 01& 03, 2024
PC-II Proforma for Water Monitoring and Evaluation of Indus Plain in respect of Scarps Monitoring Organization for the Period 2024-28 (Estimated cost Rs 1491 Million)	January 11, 2024
Green Climate Fund (GCF) Concept note under Water Sector Investment Plan for EAD	January 23, 2024

Name of Project	Date
PC-I Proforma of Thar Canal Project (Estimated Cost Rs 212.708 Billion)	February 02& 07, 2024
PC-I Proforma Rainee Canal Project (PHASE-II)-(Estimated Cost Rs 53,310.428 Million)	February 06, 2024
PC-I for Establishment of Project Coordination & Management Unit (PCMU) of FFC for Implementation of Updated Umbrella PC-I of FPSP-III (Estimated Cost Rs. 1,384.00 Million)	February 07, 2024 & March 22, 2024
Lower Indus Right Bank Canal Irrigation and Drainage Project (LIRBP) Stage-I, Priority Works-RBOD-I: 3 rd Revised PC-I- (Estimated Cost Rs 18,277.434 Million)	February 20, 2024, June 07 & September 13, 2024
Water Monitoring and Evaluation of Indus Plain in Respect of Scraps Monitoring Organization (SMO) for the Period 2024-28 (Estimated Cost Rs 1491 Million)	February 20, March 01 & 11, 2024.
Balochistan Effluent Disposal into RBOD (RBOD-III) 2 nd Revised PC-I (Estimated Cost Rs 11,065.426 Million)	February 20, June 07, & July 31, 2024
PC-II Proforma for Feasibility Study of Integrated Development of Chitral Swat and Kabul River	March 29, 2024
Report of Inter Provincial Dialogue Platform (IPDP)- Institutional Review	May 24, 2024
Project Concept Note “Water Resources Management & Development, Ground Water Recharge and Digital Monitoring Mechanism”(Estimated Cost USD5.6 Million)	May 24, 2024
Rehabilitation and Improvement of Left Bank outfall Drainage System (LBOD) (Estimated Cost Rs 115,463.500 Million)	June 12, 2024
PC-I for Sindh Flood Emergency Rehabilitation Project (SFERP) (Irrigation Component) (Additional Financing) (Estimated Cost Rs. 69,749.750 Million)	June 24 & July 31, 2024
Revised PC-II Proforma preparation of Feasibility Study of Thar Canal Project(Estimated Cost Rs 415.827 Million)	July 29& August 21, 2024
Issuance of NOC on Project “Climate Adaptive Livelihoods in Sindh: Locally LED Pathways for Inclusive Transformation: CLIM/ 2022/136”	August 13, 2024
Working Paper-Recovery of Outstanding dues and Revision of Unit Water Rate for Khanpur Dam Project”	September 06, 2024
Greater Karachi Bulk Water Supply Scheme (K-IV) 260 MGD (Phase-I) (2 nd Revised)(Estimated Cost Rs 175,189.813 Million)	November 11 & December 10, 2024

1.3.2 National Water sharing issues dealt/Expert Advice rendered and Issues of NWP

Ministry of Water Resources sought the professional support of O/o CEA/CFFC on different issues including collaboration with different countries. Accordingly, feedback in form of views/ comments/ brief was provided for following meetings/ matters:

- Ministerial Meeting of the 10th World Water Forum (May 20-21, 2024)
- Inaugural Session of Pak-Indonesia Joint Ministerial Commission (JMC).
- First session of Governing of Comprehensive Management of Watershed and Biodiversity in Dry Lands and Semi-Arid Lands (24th April 2024 in Tehran Iran).
- Implementation Matrix of 5Es Framework and Manifesto of Incumbent Government.
- CAREC Institution (CI) Country Need Assessment (CAN) Framework.

- vi. 14th Round of Foreign Secretary Level Pakistan- JAPAN Bilateral Political Consultations.
- vii. Senior Officials Meeting (SOM) Preparatory to the 50th Session of the OIC Council of Foreign Ministers (CFM) (10-13 July 2024, Jeddah, KSA).
- viii. 9th Session of Iraq-Pakistan Joint Commission in Baghdad, Iraq.
- ix. International Soil and Water forum 2024 (9-11 December 2024 Bangkok, Thailand).

In addition, project proposals for various meetings/ loans/ grants were shared with Ministry of Water Resources. Details of projects shared are as under:

- i. Proposals titled (a) Studies for urban flood management; (b) Flood Protection Projects out of FPSP-III; (c) urban flood management through rainwater harvesting; and (d) formulation of national watershed management plan were shared on April 23, 2024 for “Economic Development Cooperation Fund (EDCF) Loan Korea.”
- ii. Proposal for improving the existing storm drainage system of urban areas in major cities of Pakistan was shared on April 29, 2024 for consideration during “First Inter Ministerial meeting to Firm up Agenda/Working Paper for 4th Session of Pak-Malaysia Joint Ministerial Commission (JMC) (10-11th June 2024).”
- iii. Proposals titled (a) Profiling of waste water in urban areas, (b) Upgradation & Modernization of IRI Lahore, (c) Studies for urban flood management and (d) Flood Protection Projects out of FPSP-III were shared on May 10, 2024 for consideration during “3rd Session of Pak-Hungary Joint Commission (JC).”
- iv. Proposals titled (a) Upgradation & Modernization of IRI Lahore, (b) Replacement of inefficient machinery of WASA Lahore, (c) Construction of Flood works in D.I. Khan and (d) Ashkan Dam Mastung were shared on May 24, 2024 for consideration during “16th Session of Pak-China Joint Committee on Economic, Trade, Scientific and Technical Cooperation.”
- v. Proposals titled (a) Dam Break Studies, (b) Study for Hydrological River Modeling for flood management, (c) Study for watershed management works upstream Tarbela, and (d) Studies for urban flood management were shared on May 30, 2024 for consideration during “8th Japan-Pakistan High Level Economic Policy Dialogue (JPHLEPD).”

Following actions were taken in respect of **National Water Policy**:

- i. Briefs on National Water Policy & National Water Conservation Strategy were shared with MoWR on 7th June 2024 for consideration during “3rd High Level International Conference on the International Decade for Action “Water for Sustainable development” 2018-2028 (DUSHANBE: 10-13 June 2024)”.
- ii. August 22, 2024: Feedback/comments on “Workshop on National Water Policy being organized by Pakistan Academy of Sciences (PAS)” were shared with MoWR.
- iii. August 26, 2024: Presentation on National Water Policy 2018 was shared with MoWR for “Meeting of Senate Standing Committee on Water Resources”.
- iv. September 04, 2024: All concerned departments were requested to share updated status of “Implementation of the National Water Policy”.
- v. September 16, 2024: Agriculture Departments of Punjab, Sindh, KP & Balochistan and D.G Federal Water Management Cell, National Food Security & Research, Islamabad were requested to share details of actions taken for ensuring food security of country.
- vi. September 16, 2024: Chairman CDA, Chief Secretary, Punjab, Sindh, KP, & Balochistan were requested to share actions taken for achieving the objectives of NWP.
- vii. October 02, 2024: Irrigation Departments Government of Punjab, Sindh, Balochistan & WAPDA were requested to share updated status of “Implementation of National Water Policy 2018”.
- viii. October 09, 2024: Position Paper on Implementation of National Water Policy was shared with MoWR in compliance of decisions of “Meeting of SIFC Sectoral Executive Committee”.

- ix. October 21, 2024: Irrigation Departments Government of Punjab & Sindh, were requested to share updated status of “Implementation of National Water Policy 2018”.
- x. November 14, 2024: MoWR was requested to share “Status of Allocation and Releases of Water Sector under PSDP” after the approval of National Water Policy, for consolidating the data.

1.3.3 Bilateral International Collaborations Dealt during 2024

Following cases relating to bilateral international consultations and MoU’s were dealt during 2024:

a. Memorandum of Understanding (MoU) between Pakistan and Hungary on Water Management

Minutes of Meeting of 5th Virtual Conference of Joint Expert Group (JEG) regarding Implementation of Pak-Hungary MoU on Water Management were shared with all concerned Departments on 25th January 2024. As a follow up of the meeting, all concerned departments were requested to review the Work Program & share details of potential collaboration activities for inclusion in Work Program 2024-26.

The Work program finalized from Pakistan side was shared with Focal Person Hungary Side on 21st May 2024 for organizing next Virtual Conference of Joint Expert Group (JEG) so that formal approval of the Work Program could be obtained. However, the meeting could not be organized due to shifting of Ministry of Water of Hungary from Ministry of Interior to Ministry of Energy.

b. Memorandum of Understanding (MoU) between MoWR and IHE Delft

A MoU between IHE Delft Institute for Water Education and Ministry of Water Resources is in process of finalization. Under the MoU trainings, degree & non-degree programs and placement of Dutch experts in Pakistani institutes will be carried out. The MoU has been finalized by both sides and is under process of approval by the Prime Minister.

An online meeting was held on 16th December 2024 between Pakistan Side and relevant officers from IHE Delft. During the meeting it was agreed that MoU may be approved at the earliest and another meeting may be organized in end of January/ 1st week of February 2025 to discuss the funding options and work program under the MoU.

1.3.4 PANCID Secretariat

Civil Engineering Wing acts as Secretariat of Pakistan National Committee on Irrigation and Drainage (PANCID). The purpose of PANCID is to promote the aims and objectives of International Commission on Irrigation and Drainage (ICID) in Pakistan and act as the liaison body for ICID activities by exchanging technical information with ICID and its member countries on irrigation, drainage and flood control.

The PANCID is mandated to organize specialized and regional ICID conferences on matters relating to irrigation, drainage and flood control, either independently or in association with other organizations. The Committee encourages the submission of papers for presentation at ICID congresses, conferences, symposia and workshops.

Pakistan joined membership of International Commission on Irrigation and Drainage (ICID) in 1953. ICID Congress meeting is usually held after every three years for discussions on Technical matters and International Executive Council meeting is normally held each year for discussion on the Administrative issues of ICID. Presently, ICID has twenty-three (23) different work bodies (Committees/ Groups) and members from PANCID members represent in Eighteen (18) Working Groups. Following actions were taken as PANCID Secretariat:

a. Circulation of ICID Irrigation and Drainage-Journals among PANCID members.

- Irrigation and Drainage-Journal (Volume-72, Number-5 December 2023).

- Irrigation and Drainage-Journals (Volume 73, Number 1, February 2024)
- Irrigation and Drainage-Journal (Volume-73 Number-2 April 2024)
- Irrigation and Drainage-Journals (Volume 73, Number 3, July 2024).

b. PANCID Annual meeting.

- July 11, 2024: Notice of “53rd Annual Meeting of Pakistan National Committee on Irrigation and Drainage (PANCID)” scheduled for July 22, 2024 was issued.
- July 31, 2024: Minutes of the meeting were shared with all concerned for taking action at their end.
- July 26, 2024: As a follow up of the meeting, IWMI & Pakistan Engineering Council (PEC) were requested to provide funding for 2-3 slots for attending “75th International Executive Council (IEC) meeting of ICID and 9th Asian Regional Conference Scheduled to be held in Sydney Australia from 1st – 7th September 2024”.

c. Call of ICID Webinars/ abstract of papers among all PANCID members

- February 16, 2024: All PANCID members were requested to share abstract of papers for “International Workshop of Working Group –Water Energy Food –Nexus in September 2024 at Sydney, Australia”.
- June 10, 2024: “Call for Papers for 4th World Irrigation Forum, 7-13 September 2025 Kuala Lumpur Malaysia” was shared with all PANCID members for dissemination among all concerned and share the abstract of paper online.
- June 24, 2024: All PANCID Members were requested to attend “Webinar on Adaptive Flood Management: Inundation Forecast and Mitigation; 1st July 2024” to benefit from the latest research activities of ICID.
- August 19, 2024: All PANCID members were requested to share abstract of papers for “International Workshop of the Working Group -Climate, Sydney Australia in September 2024”.
- September 12 & December 20, 2024: All concerned departments were requested to share the abstract of paper for “4th World Irrigation Forum, 7-13 September 2025, Kuala Lumpur, Malaysia”

d. Annual ICID Event

- June 07, 2024: “Invitation for Participation in the 75th IEC & 9th Asian Regional Conference, Sydney, Australia, 1-7 September 2024” was shared with all PANCID members with the request to proceed for online registration for anticipated participation.
- August 02, 2024: U.O. Note alongwith draft summary for CEA/CFFC/Chairman PANCID for approval of the Honorable Prime Minister was sent to MoWR for “Attending 75th International Executive Council (IEC) meeting & 9th Asian Regional Conference to be held from September 01-07, 2024, Sydney Australia”.
- August 02, 2024: All PANCID Members were requested to share views/comments on “Agenda of the 75th IEC and Workbody Meeting, 1-7 September 2024, Sydney, Australia” with PANCID Secretariat for taking further necessary action.
- November 13, 2024: View point of PANCID Secretariat on draft minutes of 75th IEC meeting held in Sydney Australia was shared with ICID.

e. Other communications made with PANCID members

- January 03 & 30, 2024: Follow up letters were issued to all PANCID members to review and share suggestions on the “*Technical Report of Asia Regional Working Group (ASRWG) on Irrigation and Drainage for Asia Food Security-Pakistan*”.
- January 16, 2024: All PANCID members were requested to share “Nomination for the Watsave Awards & Recognition of World Heritage Irrigation Structures (WHIS) 2024”.
- February 14, 2024: All PANCID members were requested to share nomination of suitable officers with PANCID Secretariat for “Election of Vice Presidents of ICID for the Term 2024-27”.

- July 11, 2024: All PANCID Members were informed regarding “Restructuring of the ICID Working Groups, 2024”.
- August 09 & September 09, 2024: All concerned departments were requested to share details of Irrigation and Drainage Projects under their jurisdiction for inclusion in ICID’s “Register for World Irrigation and Drainage Schemes”.
- October 31, 2024: Details of new Chairman PANCID were shared with ICID.
- December 20, 2024: PIDs Punjab, Sindh & Balochistan were requested to share details of Irrigation and Drainage Projects under their Jurisdiction for inclusion in “Register for World Irrigation and Drainage Schemes” being prepared by ICID.

1.3.5 Key Events (Meetings/Seminars/Workshops)

The important/ high level meetings attended/ organized are given below in Table-1.2.

Table-1.2: Details of Meetings/Seminars/Workshops Attended

Description (Meeting/ Workshop Title)	Date of Meeting
Meeting to Discuss Scope of Dash Board for FFC, Planning and NDMA	January 2, February 01, 14 & 21, 2024
5 th Virtual Meeting of Joint Working Group Pakistan Hungary Water Management MoU	January 11, 2024
Pre-CDWP Project Appraisal Workshop on Indus Basin Irrigation System IBIS Automation of 25 Key Sites for Discharge Monitoring	January 16, 2024
19 th Unified Technical Advisory Committee Meeting	January 30, 2024
Parliamentary Affairs on Senate Motion related to Flood/ Water Resources	February 19, 2024
Inland Waterways Transboundary in Pakistan	April 1, 2024
IRSA Advisory Committee Meetings	April 2, 2024 & Oct 02, 2024
Inter-Ministerial Meeting to discuss matters related to Chinese Grant-in-Aid Project	April 15, 2024
3 rd Session of Pakistan-Hungary Joint Commission	May 7, 2024
16 th Session of Pak-China Joint Committee on Economic Trade Scientific and Technical Cooperation (JEC).	May 20, 2024
Inquiry Meeting of Neelum Jhelum HPP	May 23, 2024
Online meeting of Asian Regional Working Group (ASRWG)	June 26, 2024
53 rd Annual Meeting of PANCID	July 22, 2024
Meetings of the Standing Committee on Water Resources	July 24, Aug 02, Aug 30, & Sep 02, 2024
CIDA meeting to discuss matters related to Chinese Grant-in-Aid Project	July 30, 2024
Consultative Workshop on Water Resources Assessment in Pakistan under the Water Resources Accountability in Pakistan (WRAP) Project	Aug 30, 2024
MoU between the Delft Institute for Water Education Delft, the Netherlands and Ministry of Water Resources Govt. of Pakistan	Oct 25, 2024 & Dec 16, 2024
Invitation as Distinguished Guest for the Inaugural, Plenary, and Thematic Sessions – Pakistan Water Week 2024, International Conference on “Building a Climate-Resilient Future: Pathways for Water and Food Security in Pakistan”	Nov 04-07, 2024
GWO Alignment Workshop (Online)	Nov, 18, 2024
Visit to Lahore for meeting with IWMI officials regarding draft flood plain management acts	Nov, 20, 2024
Annual UNICEF WASH & CED Program Review with Government Partners	Dec 06, 2024

1.3.6 Miscellaneous Cases

In addition to above mentioned duties, following additional cases were also dealt by Civil Engineering Wing:

- January 23, 2024: Irrigation Department Government of Sindh was requested to share updated status on “Minutes of the meeting of Executive Committee of the Special Investment Facility Council (SIFC)”.
- January 24, 2024: Views/comments on “Monthly Progress Report of WAPDA-Water Wing Projects October 2023” were shared with General Manager (C&M), WAPDA.
- January 26, 2024: “Proposal on “Strengthening Flood Communication Cell of FFC with Consultancy Services, Flood Inundation modeling Dy-Functional FSMRS Application and IT Setup” was forwarded to NDRMF & World Bank for financial support.
- January 26, 2024: Irrigation Department Government of Khyber Pakhtunkhwa was requested to prepare and share Emergency Action Plan for all Dam more than 15m high with this Office in response to the “Minutes of the meeting of Executive Committee of the Special Investment Facility Council (SIFC)”.
- February 02, 2024: NDRMF & SUPARCO were requested to “Finalize Dash Board for FFC on NATCAT Model”.
- February 06, 2024: Views/comments on “Annual Work Plan 2024 of GLOF-II Project” were shared with Ministry of Climate Change & Environment.
- February 20, 2024: “Year Book of O/o CEA/CFFC for the Year 2021-22 & 2022-23” were shared with MoWR.
- March 03, 2024: Chief Executive Officer, National Information Technology Board (NITB) was requested to depute “Technical Expert” for getting technical opinion regarding establishing database system for tracking Implementation of NFPP-IV in FFC.
- April 16, 2024: Follow up with Provincial Irrigation Departments, Punjab, Sindh, Khyber Pakhtunkhwa & Balochistan regarding “Meeting of the Water Resources Committee on Defense Planning held on 14-09-2024”.
- April 24, 2024: Correspondence with Joint Secretary (China) Economic Affairs Division regarding “Meeting with Representative of CIDCA to Discuss Matters related to Chinese Grant-in-Aid-Projects”.
- May 03 & May 22, 2024: In compliance of decisions of “Meeting of the Water Resources Committee on Defense Planning held on 14-09-2024” follow up was carried out with Provincial Irrigation Departments, Punjab, Sindh, Khyber Pakhtunkhwa & Balochistan.
- May 13, 2024: DEA (C) nomination for Working Group on Land Degradation Neutrality was shared with Ministry of Climate Change & Environment.
- May 15, 2024: Deputy Secretary (IC) was requested to share information for consideration during “2nd Meeting of Pak-US Environment Working Group”.
- May 22, 2024: Information regarding measures for control and utilization of irrigation canals as Defense obstacles during war received from Punjab Irrigation Department, was shared with MoWR.
- June 14, 2024: Inputs provided to Principal Scientific Officer, Head-Agriculture & Coordination (GCISC) regarding “Survey on Constraints, GAPS and Related Financial, Technical and Capacity needs in tackling Climate Change”.
- July 09, 2024: Reply of “National Assembly Question No. 77 moved by Ms. Sharmila Sahiba Faruqi Hashaam, MNA” was shared with MoWR.
- August 08, 2024: All concerned departments were requested to share brief regarding “Meeting of GB Council Members with Honorable President of Pakistan”.
- August 26, 2024: Response regarding directions of Honorable President given during “Meeting of GB Council members with Honorable President of Pakistan” was shared with MoWR.
- October 02, 2024: Notice of meeting regarding PCRWR Proposals considered under RDPI Cell (scheduled to be held on 7th October 2024) was issued to all concerned.
- October 11, 2024: Status of “MoU on Cooperation in Field of Hydrology, Flood and Water Resources Management between the HOHAI University of Peoples of China and O/o

CEA/CFFC, MoWR, Islamic Republic of Pakistan”, shared with MoWR for “Upcoming Leadership Level Visit from China”.

- December 03, 2024: PCRWR & UNICEF Pakistan were requested to share Progress on Wash & Climate Change, Environment & DRR Rolling Work Plan for the period January 2023-December 2024.
- December 05, 2024: PIDs Sindh, Khyber Pakhtunkhwa & Balochistan were requested to provide views/comments, if any on FFC draft Bill.
- December 13, 2024: Views/comments on “Follow-up on the Implementation of the Joint Action Plan under the Green Framework Engagement between Pakistan and Denmark for a Green and Sustainable future” were shared with MoWR.
- December 20, 2024: Views/comments of O/o CEA/CFFC on the “Agreement under the United National Convention of the Law of Sea (UNCLOS) on the Conservation and Sustainable use of Marine Biological Diversity of area beyond National Jurisdiction (BBNJ Agreement)” were shared with MoWR.
- December 27, 2024: Brief/Power Point Presentation related to WRAP Project, was requested from Team Leader, (WRAP) in order to examine “Meeting request for Collaboration for National Consultative Session on Nature based Solutions”.

DAMS SAFETY COUNCIL



SECTION – 2: DAMS SAFETY COUNCIL

2.1 Creation of Dams Safety Council

Dams Safety Council (DSC) was established in 1987 within the office of CEA/ CFFC with the aim to review comprehensive plans of new dams and monitoring their implementation including annual and periodic inspections for effective repairs and efficient operation of existing dams etc. In the backdrop of 2004 repair issues with Sukkur Barrage, the issue of Barrage safety was further added to the functions of Council.

Recognizing the need for full-fledged monitoring and inspection of dams and reservoirs, a proposal for creation of a Dams Safety Council was agreed by the Establishment Division in 1981 on the suggestion of international agencies for the purpose of ensuring safety of dams in Pakistan. In the absence of such regulatory organization, officials concerned even with the most important dams/barrages are often negligent towards their safe operation and maintenance. In order to have an independent system of dam safety monitoring by third party, Dams Safety Council is extremely important.

2.2 Dams in Pakistan

Large Dams are being operated and maintained by WAPDA which play a very critical role in Pakistan's economy. Other dams medium & small are owned, operated & maintained by respective Provincial Governments and these dams have also brought prominent change in the economic condition of villages and abadies at Divisional/District level. It will not be out of place to mention here that in Pakistan there exist 374 large dams (including reservoirs & barrages as per ICOLD definition) as well as hundreds of medium and small dams. Summary of dams in Pakistan is given in **Table 2.1**.

Table 2.1: Summary of Dams in Pakistan*

Territory	Completed						On-going (No.)	Proposed (No.)	Total (No.)
	Large Dams^		Small/ Medium Dams		Total				
	No.	Gross Capacity (MAF)	No.	Gross Capacity (MAF)	No.	Gross Capacity (MAF)			
Punjab	71	0.663	3	0.0048	74	0.667	05	02	07
Sindh	-	-	164	0.291	164	0.291	18	15	33
KP	29	0.467	02	0.002	31	0.384	15	12	27
Balochistan	05	0.512	860	1.049	865	1.684	157	18	175
Merged Areas (FATA)	25	0.033	-	-	25	0.033	10	2	12
AJ&K	-		-				-	34	34
Sub-Total	130	1.674	1029	1.347	1159	3.021	205	83	288
WAPDA’s Mega Dams	9	23.631	-	-	9	23.631	4	12	16
Grand Total	139	25.305	1029	1.347	1168	26.652	209	95	314

Foot Note: -

* It includes total number of completed, ongoing and proposed dams in Pakistan upto year 2024.

[^] As per criteria given in World Register of Large Dams-2003 published by the ICOLD (Central office in Paris, France).

Table 2.2: Dams Classification Criteria as per ICOLD

Sr. No.	Dam Height	Crest Length	Impoundment Storage/ Dam Capacity	Maximum Flood Discharge	Other Factors
1.	> 15 meters (49.20 feet)	-	-	-	-
2.	< 15 meters (49.20 feet) to ≥ 5 meters (16.4 feet)	> 500 meters (1640 feet)	> 3 million cubic meters (810 Acre Feet/0.000810 MAF) MAF: Million Acre Feet	> 200 cumecs (7,056 cusecs) 1 Cumecs = 35.314 Cusecs	<ul style="list-style-type: none"> • Difficult foundation problems • Unusual design

2.3 Main Functions

Dams Safety Council mainly deals with the matters pertaining to Dams projects and allied engineering issues at national level. The key function of the DSC is to assist the CEA/CFFC in discharge of his duties relating to Dams & Barrages (review of design, repair issues, PC-I/PC-II, Inquiries) and their safety aspects (based on annual & periodic inspections). The other main activities performed by the Council are given as under:

- Participate in the annual and periodic inspection of dams & barrages organized by DSO-WAPDA and Provinces in accordance with SOPs of ICOLD.
- Ensure implementation of follow-up actions, relating to O&M, dams/barrages safety measures required as a consequence of annual/periodic inspections.
- Advise WAPDA & concerned authorities regarding (i) repairs and maintenance of dams and reservoirs & (ii) regulation of reservoirs as per their SOPs.
- Review PC-I, PC-II and other studies/ reports/ plans of new dams, barrages received from the executing agencies (WAPDA and PIDs etc.)
- Review plans and specifications for enlargement, modifications, major repairs, revival or otherwise of dams & barrages (as the need arises)
- Pakistan is a member of the International Commission on Large Dams (ICOLD) since 1952. The Dams Safety Council acts as the Secretariat of Pakistan National Committee on Large Dams (PANCOLD). PANCOLD shares technical data relating to large dams including general liaison with all concerned national and international organizations in particular with ICOLD.
- Liaison with WAPDA, IRSA, PCIW, PMD and Provincial Irrigation Departments (PIDs) regarding dams safety toward: i) water distribution, ii) safety of structures in the event of any disaster, iii) contingency plan to meet/respond to any disaster and (iv) observations brought out by the annual and periodic inspections.

2.4 Activities performed during 2024

During the year 2024, Dams Safety Council performed following functions:

2.4.1 General Technical Activities

- CE (DSC) participated in the “36th Annual Inspection of Chashma Barrage” held from January 08-10, 2024.

- A field visit to the Mangi Dam Project, Balochistan was conducted on January 25-26, 2024, by the CE (DSC) as the Convener of the Inquiry Committee formed by the Ministry of Water Resources.
- January 15, 2024: Letter issued to the Project Director, Mangi Dam Project, Quetta regarding the Inquiry on the First Revision of the PC-I of Mangi Dam and Water Conveyance System.
- January 19, 2024: Letter issued to the Chief Engineer (Hydel), Warsak Dam Project concerning the 31st Annual Inspection – Principal Findings and Recommendations.
- January 19, 2024: Letter issued to the Chief Engineer/Project Director, Ghazi Barotha Hydropower Project, WAPDA, regarding the Principal Findings and Recommendations of the 8th Annual Inspection.
- February 14, 2024: Letter issued to the Financial Management Specialist (PPDU) Members, Ministry of Water Resources, regarding the Inquiry on the First Revision of the PC-I of Mangi Dam and Water Conveyance System.
- February 16, 2024: Letter issued to the Assistant Chief (Dev), Ministry of Water Resources, regarding the Inquiry on the First Revision of the PC-I of Mangi Dam and Water Conveyance System.
- March 6, 2024: Letter issued to all Committee Members inviting them to attend the meeting on the 1st Revised PC-I of Construction of 100 Dams in Balochistan – Package-III (20 Dams).
- March 19, 2024: Letter issued to all PANCLOD Members regarding the International Conference on Dam Safety-2024.
- March 20, 2024: Letter issued to the Chief Secretary, AJ&K & GM (MDO), WAPDA Mangla, regarding the Inquiry on the 2nd Revised PC-I of the Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land).
- March 20, 2024: Letter issued to the GM (MDO), WAPDA Mangla & Secretary, Irrigation Department Punjab, regarding the Inquiry on the 2nd Revised PC-I of the Mangla Dam Raising Project (Encroachment of Barakas Nullah).
- March 26, 2024: Follow-up letter issued to the PID, Punjab, regarding the Inquiry on the 2nd Revised PC-I of the Mangla Dam Raising Project (Encroachment of Barakas Nullah).
- March 2024: Meeting of the Committee on the 1st Revised PC-I of Construction of 100 Dams in Balochistan – Package-III (20 Dams) was held.
- April 22-24, 2024: 38th Annual Inspection of Hub Dam Project was attended by CE (DSC), organized by DSO WAPDA.
- May 20-25, 2024: Chief Engineer (DSC) visited representative sub-projects of the 100 Dams Project – Package-III (20 Dams), Balochistan, as part of the 2nd Revision of the PC-I.
- July 23, 2024: Chief Engineer (DSC) represented the Office of CEA/CFFC in the Standing Committee of MoWR to examine Inquiry Reports in compliance with PAC.
- March 27, 2024: Letter issued to Assistant Director (Tech), Ministry of Water Resources regarding the Issuance of Notification for the Green Building Code of Pakistan-2023 and amendments in PEC Bye-Laws.
- April 15, 2024: Letter issued to Executive Engineer, Khanpur Dam Project, Khanpur, regarding Principal Findings and Recommendations of the 30th Annual Inspection – 2024.
- April 23, 2024: Notice of meeting issued to Commissioner Mirpur AJ&K regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land).
- April 23, 2024: Notice of meeting issued to GM, Mangla Dam Organization (WAPDA) & Project Director, Small Dams Organization Circle-II (Punjab Irrigation Department) regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Encroachment of Barakas Nullah).

- May 2, 2024: Letter issued to Deputy Secretary (Budget), Ministry of Water Resources, regarding the Audit Para No. 3.4.29 (PDP No. 1726) of AR 2017-18 – Irregular Extension beyond the BOQ Provision (DiamerBasha Dam Project – Rs. 583.54 Million).
- May 9, 2024: Comments shared with Assistant Chief (Dev), Ministry of Water Resources, on the Construction of Murunj Dam Project on Kaha Hill Torrent, Near Rajanpur District.
- May 20, 2024: Original copy of the Inquiry Committee Report, duly signed by the Convener and Committee Members, shared with Assistant Chief (Dev), MoWR, regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Encroachment of Barakas Nullah).
- June 11, 2024: Letter issued to Project Director, Hub Dam Project, WAPDA, requesting the latest status on follow-up actions regarding the 2024 Annual Inspection Report – Hub Dam Project.
- July 8, 2024: Letter issued to MoWR regarding the 2nd Revision of the PC-I for the Construction of 100 Dams in Balochistan – Package-III (20 Dams) Revised.
- July 12, 2024: Letter issued to Assistant Chief (Dev.), MoWR, Islamabad, regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land).
- July 25, 2024: Letter issued to Resident Engineer, Simly Dam Project, regarding Principal Findings of the 32nd Annual Inspection – 2024 of Simly Dam.
- August 8, 2024: Letter issued to Chief Engineer (DSO), WAPDA, Lahore, suggesting that DSO WAPDA plan a schedule for a baseline inspection of the 720 MW Karot Hydropower Project.
- August 19, 2024: Views and comments on the following research proposals were shared with Deputy Engineering Advisor (Civil)/Chief Engineer (Floods), CEA/CFFC Islamabad:
 - Enhancing the technical capabilities of PCRWR for testing persistent organic pollutants/pesticides.
 - National Surface Water Quality Monitoring Program of Pakistan under the RDPI Cell – FY 2024-25.
- April 1, 2024: Notice of meeting issued to all concerned departments regarding:
 - Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land).
 - Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Encroachment of Barakas Nullah).
- April 9, 2024: Minutes of Meeting issued to all concerned departments regarding:
 - 2nd Revised PC-I of Mangla Dam Raising Project (Encroachment of Barakas Nullah).
 - 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land).
- April 30, 2024: Minutes of Meeting issued regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land) held on April 29, 2024.
- May 10, 2024: Notice of meeting issued to all concerned departments regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land).
- May 17, 2024: Minutes of Meeting issued to all concerned organizations regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land) held on May 16, 2024.
- June 7, 2024: Notice of meeting issued to all concerned departments regarding the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land).
- June 14, 2024: Minutes of the 4th Meeting of the Inquiry on the 2nd Revised PC-I of Mangla Dam Raising Project (Reconciliation of Funds/Disposal of Surplus Land) held on June 12, 2024, were issued to all concerned organizations.

- March 6, 2024: Letter issued to the Provincial Irrigation Departments (PIDs) regarding views and comments on the Working Paper – Recovery of Outstanding Dues and Revision of Unit Water Rate for Khanpur Dam Project. These comments were later shared with the Ministry of Water Resources on September 6, 2024.
- November 5, 2024: Letter issued to the Ministry of Water Resources regarding National Assembly Starred Question No. 310, moved by Mr. Muhammad Javed Hanif Khan, MNA.
- November 25, 2024: Letter issued to the General Manager (TDP), WAPDA, Tarbela Dam Project regarding Principal Findings & Recommendations of the 30th Annual Inspection of the Tarbela Dam Project, including T-4 and T-5 HPPS (2024).
- December 4, 2024: Letter issued to the General Manager (MDO), Mangla Dam Project regarding Principal Findings & Recommendations of the 35th Annual Inspection of the Mangla Dam Project.
- December 13, 2024: Chief Engineer (DSC) represented the Office of CEA/CFFC in the Standing Committee of MoWR to examine Inquiry Reports related to Audit Paras.

2.4.2 Technical Review of PC-Is of Dam Projects

Several PC-Is were evaluated during the year 2024 and technical views/comments on them were forwarded to Ministry of Water Resources, Provincial Governments & other stakeholder organizations. Details are given in **Table 2.3**.

Table 2.3: PC-Is reviewed by Dam Safety Council in Year 2024

Name of Project	Date
Construction of Murunj Dam Project on Kaha Hill Torrent near Rajanpur District (Estimated Cost: Rs. 172.964 Billion)	March 19, 2024
Construction of Murunj Dam Project on Kaha Hill Torrent near Rajanpur District	June 10, 2024
PC-II for Feasibility Study, Detailed Engineering Design, Tender Documents, and PC-I for Raising of Hub Dam	August 29, 2024
PC-II for Feasibility Study, Detailed Engineering Design, Tender Documents, and PC-I for Raising of Hub Dam	September 06, 2024
Revised PC-I for Construction of 100 Dams in Balochistan Package-III (20 Dams)	January 12, 2024
3 rd Revised PC-I for Construction of Toiwari Batozai Storage Dam Project (Estimated Cost: Rs. 6,998.993 Million)	February 28, 2024
2 nd Revised PC-I for Construction of 100 Dams in Balochistan Package-III (20 Dams)	May 14, 2024
Construction of Halak Storage Dam, Water Conveyance System, Pumping Stations, and Filtration Plant for Water Supply to Quetta City	March 06, 2024
Revised PC-I for Construction of 100 Dams in Balochistan Package-III (20 Dams)	June 24, 2024
Construction of Sari Kalag Delay Action Dam in U/C Raskoh, District Kharan (Estimated Cost: Rs. 796.180 Million)	August 22, 2024
Construction of Toiwari Batozai Storage Dam Project (Estimated Cost: Rs. 6,998.993 Million)	December 04, 2024
Construction of Small Storage/Delay Dams in District Khuzdar (Estimated Cost: Rs. 6,000.000 Million)	November 05 & November 19, 2024

Name of Project	Date
Diamer Basha Dam Project- Dam part.	December 20, 2024
3 rd Revised PC-I for Construction of Toiwari Batozai Storage Dam Project (Estimated Cost: Rs. 6,998.993 Million)	December 04, 2024
3 rd Revised PC-I for Sabakazi Dam Project, Balochistan (Estimated Cost: Rs. 2,193.32 Million)	December 05, 2024
Diamer Basha Dam Project – Dam Part	December 20, 2024
Revised PC-I for Construction of 5 Dams in District Loralai (Estimated Cost: Rs. 848.577 Million)	December 27, 2024
Construction of Basol Dam Project, Omara, District Gwadar (Estimated Cost: Rs. 25,427.030 Million)	December 27, 2024

2.4.3 Activities Performed as PANCOLD Secretariat

- April 19, 2024: Letters issued to all PANCOLD members regarding:
 - “International Conference – Dam Safety 2024.”
 - “Invitation to Recommend the International Milestone High Concrete Dam Project.”
- April 22, 2024: Letter issued to all PANCOLD members regarding “ICOLD (International Commission on Large Dams) – Technical Reports.”
- May 19, 2024: Letter issued to all concerned departments regarding “Minutes of the 49th Meeting of the Pakistan National Committee on Large Dams (PANCOLD) held on March 01, 2023,” requesting an update on the progress of the ICOLD Sub-Committee for inclusion in the working paper of the 50th PANCOLD Annual Meeting.
- May 27, 2024: Letter issued to the Secretary General, ICOLD Central Office, regarding a paper for the 92nd ICOLD Annual Meeting & International Symposium on Dams for People, Water, Environment, and Development.
- June 07, 2024: Minutes of the 50th PANCOLD Annual Meeting (held on May 31, 2024) issued to all PANCOLD members.
- June 14, 2024: Letter issued to the Chairman, ICOLD Technical Committee D – Concrete Dams, regarding “AECH Dam Design – Structural Analysis Methodologies and Criteria.”
- June 25, 2024: Letter issued to all PANCOLD members regarding “Circular – Important Dates for ICOLD 2025 in Chengdu, China (May 2025).”
- June 28, 2024: Letters issued regarding the 92nd ICOLD Annual Meeting (September 27 – October 3, 2024, New Delhi, India):
 - To all PANCOLD members.
 - To the Irrigation Departments of Punjab, Sindh, KP, and Balochistan, IRSA, PCIW and Pakistan Engineering Council.
 - To the Secretary General, ICOLD Central Office, regarding “Nominations for ICOLD Committees.”
- July 01, 2024: D.O letters issued to Chairman, WAPDA, Lahore and Chief Secretaries of Punjab, Sindh, Khyber Pakhtunkhwa, and Balochistan.
- July 15, 2024: Letters issued to all PANCOLD members regarding the 92nd ICOLD Annual Meeting in New Delhi, India and Provincial Irrigation Secretaries, IRAS, PCIW and Pakistan Engineering Council.

- July 19, 2024: Letter issued to Assistant Chief (WR), Planning, Development, and Special Initiatives Division, Islamabad, regarding “Minutes of the 50th PANCOLD Meeting (May 31, 2024).”
- July 22, 2024: Reminder-II letters issued to all PANCOLD members regarding the 92nd ICOLD Annual Meeting in New Delhi, India and Provincial Irrigation Secretaries, Chairman IRSA, PCIW, and Pakistan Engineering Council.
- August 02, 2024: Follow-up letter issued to all PANCOLD members, Punjab, Sindh & Quetta Irrigation Departments, and Chief Water (PD&SI), requesting nominations for suitable professionals to attend the 92nd ICOLD Annual Meeting.
- August 16, 2024: Letters issued to ICOLD, requesting official invitation letters for visa facilitation and necessary approvals as well as Registrar, Pakistan Engineering Council (PEC), Islamabad, requesting fund allocation for the delegation attending the 92nd ICOLD Annual Meeting.
- December 04, 2024: Letter issued to all ICOLD members regarding “ICOLD Bulletins Approved in New Delhi (October 3, 2024),” informing them that Bulletins 199 to 206 have been uploaded as preprint versions on the ICOLD website (Publication section).
- December 10, 2024: Letter issued to all ICOLD members regarding “ICOLD Circular Letter (2036) 2024/2025 – ICOLD Activities & Important Dates,” requesting submission of Reports, Applications, and Nominations.

POWER WING



SECTION – 3: POWER WING

3.1 Establishment and Functions

Power Wing was established in fifties. Power Wing of the Office of Chief Engineering Adviser/ Chairman, Federal Flood Commission (CEA/CFFC) offers advice on power engineering matters referred by the Ministry of Energy (Power Division) & Ministry of Water Resources such as hydropower schemes of WAPDA and their power dispersal besides dealing with other relevant assignments including investigations/ inquiries related to WAPDA as well as transmission and distribution schemes and other technical matters as and when referred. The main work areas include the following: -

Generation, Transmission and Distributions Projects

Technical and professionally viable opinion/ advice on various feasibility reports/ studies and power project related schemes (including hydropower), PC-IIs, PC-Is related to generation, transmission and distribution projects including hydropower schemes of WAPDA and other relevant entities as and when referred.

Policy and Regulatory Matters

Provide Comments/Advice on policy and regulatory related matters.

Inquiries/ Investigations

Inquiries / investigations on operational and technical matters of WAPDA including Audit Para inquiries referred to the office of CEA/CFFC by the Ministry of Water Resources.

Power Dispersal from Hydropower Projects

Evaluation and examination of PC-IIs, PC-Is for power dispersal from upcoming hydropower projects. The broader aim of expert technical advice is to help the Ministry in taking better decisions by improving in technical deficiencies of project PC-Is, PC-IIs etc. thus leading to their optimal implementation and better operation after commissioning.

3.2 Functions Performed during the Calendar Year 2024

During the period from January to December, 2024, the Power Wing, Office of the CEA/CFFC, Ministry of Water Resources (MoWR) performed the following major activities:

1. Hydropower Project Technical Oversight and Evaluation

- Evaluate PC-I forms and documents for technical feasibility, environmental sustainability, and alignment with energy goals.
- Schedule and conduct routine site inspections to identify operational issues and ensure compliance with standards.
- Address technical and financial risks in coordination with executing agencies, regulators, and financiers.

2. Project Monitoring and Reporting Framework

- Compilation of Database for Hydropower Projects.
- Submit quarterly and annual reports on operational status, performance metrics, and compliance with standards.

3. Policy Advisory and Coordination

- Provide technical expertise for developing hydropower policies, operational standards, and compliance requirements.

- Collaborate with stakeholders like WAPDA, Central Power Purchasing Agency (Guarantee)CPPA-G, and others for project approvals, tariff adjustments, and dispute resolution.

4. Environmental and Social Governance

- Ensure compliance with environmental and social safeguards by monitoring and recommending corrective measures.
- Develop climate adaptation strategies focusing on flood risk management and operational adaptability.

Details of above mentioned activities are given below:

Table 3.1: Summary of Annual Activities performed by Power Wing in Year 2024

1. PC-Is Evaluation & Technical Oversight of Hydropower Projects
Technical evaluation and submission of comments on revised PC-I of Tarbela 5 th Extension HP
Technical evaluation and submission of comments on PC-I titled “300MW floating solar photovoltaic (FPV) on water bodies of Tarbela & Ghazi-Barotha Hydropower Generation Complex.
Technical evaluation and submission of comments on PC-I titled “300MW Rehabilitation and Capacity Enhancement of Kurram-Garhi Hydel Power Station From 4 To 5.16 MW”
Performed technical evaluation of the TORs and submitted comments on the PC-II titled “Feasibility study for promoting Pumped Storage Hydropower (PSH) systems integrated with Solar PV”
Conducted technical visit of operational plants and submission of Post-Visit Report on performance evaluation and operational constraints of hydropower stations with recommendations.
Conducted an inquiry regarding Golen Gol Hydro Power Project.
Initiated Inquiry proceedings regarding Operational Issues during DLP w.r.t the Rehabilitation and enhancement of Jabban Hydro Power Plant
Conducting an Inquiry on 2 nd revised PC-I of Mangla Dam Raising Project (reconciliation of funds/disposal of surplus land).
Offered comments on revised PC-I regarding Dasu Hydropower Project (Stage-I).
Initiated an Inquiry regarding generation loss at Gomal Zam Dam & Power Station Project.
2. Project Monitoring and Reporting Framework
Compilation of data base & efficiency assessment of operational Hydro Power Plants (HPPS) of WAPDA
Prepared and submitted review reports on the monthly performance of all operational WAPDA hydropower projects.
Prepared and submitted evaluation reports on the progress of ongoing WAPDA hydropower projects
Prepared and submitted executive summaries of statistical data and energy balance sheets of hydropower stations.
Maintained accurate data sheets as a record to support informed decisions regarding resource allocation, maintenance schedules, capacity planning, and future energy needs.
3. Policy Advisory and Coordination
Reviewed and submitted comments to the SIFC regarding the FDI-based project Proposal titled “Establishment of Solar PV-based Green Hydrogen Plant” in Punjab Province by M/s Allied Green Ammonia Pvt. Ltd.
Submitted comments regarding the SIFC’s working group meeting on the “Solar Panel Local Manufacturing Policy”
Reviewed and submitted comments on Pakistan’s Integrated Energy Outlook Report 2023-35, prepared by the Ministry of Planning, Development & Special Initiatives (P,D&SI).

Prepared a detailed presentation reviewing the role and significance of the Power Wing in hydropower generation for the Cabinet Committee's Departmental Review meeting.
Reviewed proposal of Institutional Reforms Unit (IRU) and submitted comments regarding the capacity building and strengthening of the Power & Civil Wings.
Review and submission of comments regarding Project of RDPI cell of MoWR
Request for provision of Virtual Linux Server for Database Management
Reviewed and submitted comments on zero draft bill prepared by Institutional Reforms Unit (IRU) for the constitution of Federal Flood Commission
Clarification and input regarding purchase of I.T equipment
Notice of meeting/work plan of IRU Consultant
Briefing to the new Federal Minister for Water Resources
Preparation of Brief and Talking Points for 2024 Spring meeting of the Board of Governors of the World Bank Group and International Monetary Funds (IMF), Washington DC
Evaluation of the Proposal of Power Division and submission of comments w.r.t "establishment of Independent System Operator & Market Operator (ISMO)" under CTBCM
Review & Submission of comments regarding LEAP Model proposed in Pakistan's Integrated Energy Outlook Report 2023-35, prepared by Ministry of P,D&SI.
Operationalization of independent system and market operator of Pakistan (ISMO)
4. Environmental and Social Governance
Preparation and submission of following Proposals for climate financing in order to address climate challenges and enhance disaster resilience through innovative renewable energy solutions. <ul style="list-style-type: none"> i. Solarized Drinking Water Generation System from Air for Village ii. Drinking Water Generation System from Air for Community/family iii. Containerized fully furnished homes iv. Solar Small Home System with Li ION batteries, fan and LED lights v. Portable BTS for mobile phone service recovery in disaster areas vi. Deployment of Off Grid Solar System for villages with Li ION battery backup vii. Renewable Energy-Powered Flood Warning Systems: viii. Renewable Energy Micro-grids for Flood Resilient Infrastructure ix. Solar-Powered Flood Telemetry and Monitoring Stations: x. Renewable Energy-Powered Weather Radars xi. Renewable Energy-Powered Flood Resilient Infrastructure Renewable Energy-Powered Drainage and Water Management Systems
Preparation & Submission of proposal for the "Solarization of Office Building of the Office of CEA/CFFC" in the light of "Framework Guidelines for the Fast Track Implementation of Solar Initiatives, 2022".

ADMINISTRATION AND ACCOUNTS SECTION



SECTION – 4: ADMINISTRATION & ACCOUNTS SECTION

4.1 Main Functions

Administration and Accounts Section of office of CEA performs following main functions:

- i. General services management;
- ii. Administrative coordination of trainings relating to the organization;
- iii. Annual budgeting of office and development projects, utilization, control and audit;
- iv. Maintenance of project accounts, processing of consultancy services bills, internal inspection of accounts and financial monitoring of development projects.
- v. Keeping liaison with Ministry of Water Resources in accounting and administrative matters and performing its role in the following domains:
 - a. Financial Management
 - b. Human Resource Management
 - c. Procurement Management
 - d. Stocks & Inventory Management
 - e. Other functions

4.2 Activities Completed during 2024

Payment of Pension & other dues to Pensioner:

The following pension cases including all other dues whatsoever as admissible to the following pensioners have been successfully processed during the Year 2024-25.

- Pension case in respect of one officer of BS-21.
- Pension case in respect of one P.S. of BS-17.
- Pension case in respect of two Assistants of BS-16.
- Pension case in respect of Dispatch rider of BS-04

Recruitment Process:

- One officer of BS-19 has been recruited through the process of initial appointment.
- One official of BS-13 promoted to BS-16.
- One official of BS-12 promoted to BS-16.
- One official of BS-11 promoted to BS-13.

Promotion Cases:

Following cases are in process of promotion:

- Promotion to the post of Private Secretary, BS-17.
- Promotion to the post of Deputy Director (A&A), BS-18.
- Promotion to the post of Deputy Director (S&M)/Sr.Engr (F)/AEA (C), BS-18.

Leave Encashment Cases of officers/officials:

The cases of following officers of Office of CEA/CFFC likely to be retired forthcoming year and opted leave encashment in lieu of LPR have been scrutinized and allowed them leave encashment in lieu of LPR:

- Leave encashment of Assistant Engineer (BS-17).
- Leave encashment of Computer Operator (BS-17).
- Leave encashment of Administrative Officer (BS-17).

Budget and Accounts:

- Clearance of the pending claims from the office of AGPR, Islamabad.
- Enhancement of 12% (approximate) in the budget allocation from Rs. 275.879 million (Financial Year 2023-24) to Rs. 310.879 million (Financial Year 2024-25)

Procurement:

General Section has taken following initiatives during the Year-2024.

- 46 different kinds of items were auctions on 10-08-2024.
- 04 different procurement plans for different services as and when required were uploaded on the website of PPRA for this year.