

Annual Report 2009

**by Engr Z. M. Peracha, Registrar PEC
for presentation at 22nd AGM on April 17, 2010
at Garrison Club Peshawar**



**PAKISTAN ENGINEERING COUNCIL
2009**

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Chairperson, Pakistan Engineering Council, Engr Senator (R) Rukhsana Zuberi
Vice Chairman, Pakistan Engineering Council, Engr Syed Abdul Qadir Shah
Convener AGM 2009 Engr Zahid Arif
Respected Senior Engineers, Fellows, Ladies and Gentlemen!
Assalam-o-Alekum!

On this august occasion of 22nd – Annual General Meeting of Pakistan Engineering Council, I feel greatly privileged to welcome you all, sincerely, on behalf of the Governing Body and myself. It is for the third time that the AGM is being held in this historic city of Peshawar. I wish to express my gratitude to you all, for participation despite your commitments elsewhere.

Ever since its establishment in 1976, the Council has been continuously nurturing the engineering profession, inspite of some legal turmoils since November 2002, when the Council was superseded by the Government under the authority vested vide Ordinance CXXIX of 2002. This suppression dragged the Council into consequent litigations till 2008. However, inspite of all such constraints, the Council continued its professional activities and it has become an influential voice, which speaks for the engineering profession as a whole, in the country.

Recently, the Parliament of Pakistan has passed PEC Act Amendment Bill 2010, wherein the autonomy of the Council will be restored, by allowing the Engineering Community itself, to elect its representatives, besides retaining the additional functions that were considered beneficial for the Engineering profession.

The Council regularly interacts with the Government organizations, engineering institutions and professional bodies, both at the Federal and Provincial levels through representatives on its Governing Body, and also by participating in Commissions, Committees and Advisory Boards. PEC is therefore a fully representative body of the engineering community in the country. The Council has also been providing support to the Government in conducting technical enquiries and recommending remedial measures on the subjects referred to it.

Following's are the achievements in performance of major functions of the Council during last few years:

a. Regulation of Engineering Education

Promotion and regulation of engineering education is one of the most important function of the Council carried out through Engineering Accreditation and Qualification Equivalence Committee (EA&QEC). In the recent past, EA&QEC has developed and implemented a comprehensive "Accreditation Manual", using internationally comparable criteria, to ensure international acceptance of degrees and mobility of engineering graduates in the global market.

Another worth sharing initiative of the Council is acceptance of PEC's application for the Provisional Memberships of Washington Accord (WA) & Engineers Mobility Forum (EMF) in their meeting of International Engineering Accord (IEA) at Kyoto Japan in June 2009. Consequent to which the Council's WA Subcommittee coordinated the entire activity with Board of Engineers Malaysia (BEM), Institution of Engineers Malaysia (IEM) and Institute of Engineers Singapore (IES).

Delegation of these organizations visited PEC in February/ March 2010, and after being satisfied that PEC had a credible and well developed accreditation, registration and CPD mechanism, they have nominated PEC for provisional membership of WA and EMF. The Council is pleading its application in the forthcoming meeting of IEA in June 2010 at Canada.

We would like to thank BEM, IEM and IES for helping PEC to join this International Forum. We are confident that this opportunity will strengthen the engineering educational base, by mutual recognition at international level, and help the mobility of our engineers across the world.

The present status shows that accredited engineering programs within Pakistan are 192, being conducted at 74 public & private institutions/colleges/universities in 23 disciplines.

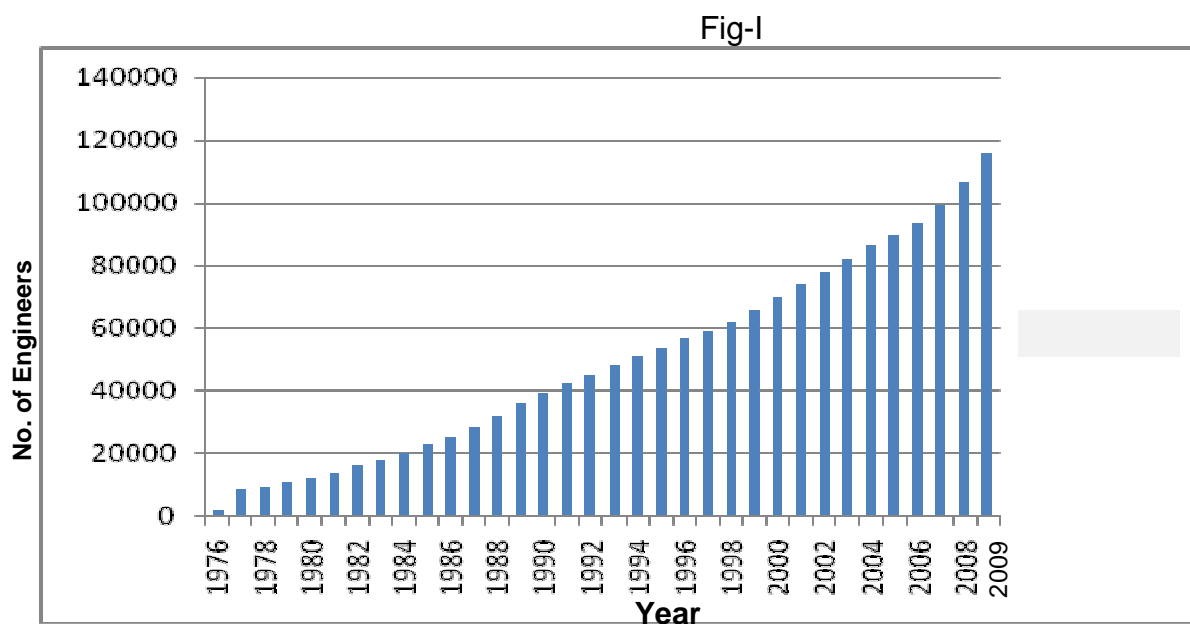
During 2009 alone, EA&QEC disposed off 172 cases as stated in Table I.

Table-I
Accreditation Decisions Regarding Engineering Programs in Pakistan
(Year 2009)

Year	Meeting	1 Year	2 Years	3 Years	Under Conditions			Deferre d	Not Recom m- ended	Grand Total
					1 Year	2 Years	3 Years			
2009	55th EA&QEC	29	19	18	1	0	0	0	5	72
2009	55th EA&QEC (Additional)	12	9	6	1	1	0	0	2	31
2009	56th Meeting	14	16	15	2	1	0	0	3	51
2009	57th Meeting	9	9	0	0	0	0	0	0	18
	Grand Total	64	53	39	4	2	0	0	10	172

b. Registration of Engineering Professionals and Entities

Increase in the registration of Engineers is progressing on a hyperbolic pattern as given in Fig.I.



Accumulated Registration of Engineers

Up to year 2009, the strength of registered engineers, professional engineers, consulting engineers, and constructors/ operators, is as stated in Table-II:

Table-II

Description	In 2009	Upto Dec 2009
No. of Registered Engineers (RE)	9,660	27,555
No. of Professional Engineers (PE)	217	88,905
Total	9,877	116,460
No. of Registered Consulting Engineers :	77	1,343
No. of Registered Constructors	6,309	46,264
No. of Registered Operators	145	348

To cater for the increased workload, the council, besides strengthening the infrastructure, is in process of establishing an “**online**” registration process, expected to be in place by the end of this year.

During this year, the Council has also offered an attractive renewal package to those professional engineers, who obtained registration prior to April 1, 2005, but could not renew their registration thereafter. They have been offered to subscribe for life, by paying Rs. 1500/- only. This offer is valid upto 31st December 2010, it is recommended that the same be extended to December 2011.

c. Continuing Professional Development (CPD)

The main objective of CPD activities is to provide a means whereby an engineer can keep abreast of on-going changes, broaden his skills and becomes more effective on his professional work. CPD compels them to enhance competence and professional abilities for evolving innovative solutions, and fulfilling the engineer’s obligation to society. For accomplishing these objectives, the Council enforced the PEC Professional Development of Engineers Byelaws 2008, and started the professional development activity with a tri-partite strategy viz:

- (i) By conducting CPD activities itself at HQ & all Branch Offices at provincial capitals. PEC has conducted so far 32 short courses & 13 workshops/seminars.
- (ii) By encouraging professional engineering bodies such as IEP, Pakistan Engineering Congress, Institute of Mining Engineers, Institute of Electrical and Electronics Engineers, Institute of Material Engineers, etc.

and

- (iii) By encouraging the universities to establish Professional Development Academies, for example at:
 - National University of Sciences and Technology (NUST), Islamabad
 - NED University of Engineering and Technology, Karachi
 - NWFP University of Engineering and Technology, Peshawar
 - Mehran University of Engineering and Technology, Jamshoro
 - University of Engineering and Technology, Lahore

d. Establishing Standards for Engineering Services:

- (i) This is another important & focal area of engineering practice. Over rupees one trillion are spent every year in Pakistan for procurement of Engineering goods, works and services in various development projects, both in private & public sectors. Effective Project planning, transparent award and execution of contracts are the prime requirements to prevent malpractices and corruption in such expenditures.

To cater for such regulation of Engineering practices, the Act & Byelaws Committee has developed Standards Bidding and Contract documents, guidelines, rules etc. inline with international standards and in compliance with local laws viz:

1. Standard Form of Bidding Documents (Civil Works).
2. Standard Form of Bidding Documents for Procurement of Works (E & M).
3. Standard Form of Bidding Documents for Procurement of Works (For Smaller Contracts).
4. Standard Form of Contracts for Engineering Consultancy Services (For Large Projects) - Time Based Assignments.
5. Standard Form of Contracts for Engineering Consultancy Services (For Large Projects)-For Lump Sum Assignments
6. Standard Form of Contracts for Engineering Consultancy Services (For Smaller Projects).
7. Standard Procedure for Pre-qualification of Constructors.
8. Standard Procedure for evaluation of Bids for Procurement of works.
9. Standard Procedure for Pre-qualification of Consultants.
10. Standard Procedure for evaluation proposals for Procurement of Engineering Services
11. Standard procedure for price adjustments
12. PEC Rules of Conciliation and Arbitration

Use of these documents will not only facilitate timely project execution, but will increase the productivity of the executing authorities, minimize contractual disputes, malpractices and save losses to national exchequers.

- (ii) Moreover, during various workshops & interactive sessions, with the Planning Commission, Ministry of Housing & Works, Engineering Directorate of Armed Forces, Constructors, consultants, it was felt that an independent source of authentic cost data for all types of construction inputs was a dire need of the country. Therefore, to prepare a unified Schedule of Rates (SOR), for all construction materials, an independent research base subsidiary of PEC under the name of "Pakistan Institute of Cost & Contracts" has been established, comprising of a team of professionals such as engineers, cost & contract specialists, cost analysis, quality surveyors, IT experts etc.

In a short span of time, district wise SOR on monthly basis is available on the website www.picc.org.pk.

The documents are also available at PEC website (www.pec.org.pk)

- (iii) Besides above, the following regulatory Byelaws pertaining to the construction industry and procurement of engineering services have been updated viz:

- - PEC Construction & Operation of Engineering Works Bye-Laws 1987 (updated in 2008)
- - PEC Conduct & Practice of Consulting Engineers Bye-Laws 1986 (updated in 2010).
- - Building Codes of Pakistan – Seismic Code (up-dated in 2007)
- - Further work on fire safety, energy efficiency and implementation mechanism is in progress, expected to be completed by June this year.

e. Mining Resources of Pakistan:

Pakistan is one of the leading countries in mineral resources. PEC is conscious of its responsibilities to attract investment in the mineral sector. Reports on the mineral potential of Punjab and Khyber Pakhtoon-Khwa have been prepared and submitted by the Convener (Engr. Muhammad Khalid Pervaiz) of PEC mineral development committee. Reports on other regions are in the offering.

f. Assistance to the Federal Government as Think Tank:

The assistance to the Federal Government as a Think Tank is another major function of the Council, for which the Council formed a Think Tank Committee comprising eminent engineers, allied professionals, academicians, policy makers, and researchers.

All the members work on honorary/ voluntary basis. The Council over the past several years has given the professional advices to the Government of Pakistan. Some are enlisted below:-

- Measure for rehabilitation of Sukkur Barrage 2005
- Mitigation of line losses 2006
- Chashma RBC 2006
- Draft National Water Policy 2007
- Aujo escape 2008
- Storage and Conservation of water 2010

g. PEC Acts as bridge between various engineering forums & Federal Government:

- i. PEC provides advice/ expert opinion to various Government departments and private organizations on engineering procurements, services and Bidding Documents. The number of services provided to various public and private organizations and individuals during the year 2008 and 2009 are as follows:

Service provided during 2008 and 2009

Year	Queries of Govt. Departments	Queries of Private Organizations	Total
2008	32	30	62
2009	27	17	44

Some of the Government Departments include: NHA, PakPWD, ERRRA, NESPAK, and Universities. Similarly, private organizations include APCA and APEC members and others.

- ii. Similarly, PEC also Conducted Technical inquiries received from various Government Departments during year 2008-09:
- Kharo Shah Dam – FATA Secretariat
 - Shadi Kaur Dam - Irrigation Department Balochistan
 - Sher Shah Bridge – inquiry against ECIL – under process
 - Inquiry on five more dams in Balochistan- under progress
- (iii) PEC helps and provides technical expertise to various organizations in developing industrial and educational standards e.g. PSQCA, HEC, Ministry of Education, Ministry of Housing and Works etc.

h. Coordination

For coordination of Federal and Provincial organizations and facilitation of the engineering community, PEC maintains its Head office at Islamabad and branch offices in all the provincial capitals Lahore, Quetta, Peshawar, Karachi and Gilgit, and Liaison Offices at Hyderabad, Sukkur

and Multan. PEC is in process of opening its office at Muzaffarabad to facilitate the professionals from Azad Jammu and Kashmir (AJ&K).

I am also glad to inform that the government of AJK has also offered to give plot to PEC in centre of the newly built District Headquarter Complex at Muzaffarabad, where the Council will construct its own office.

At present PEC has its own building at Islamabad, Karachi, Quetta and Multan. We have acquired a plot No. 46-A, Sector-B, Phase-V, Hayatabad, Peshawar and I am pleased to inform that in the coming financial year, PEC will Inshallah construct its own state-of-the-art, Energy Efficient building at Peshawar. In this context, the Council appreciates the sincere efforts of Engr Zahid Arif for acquisition of the plot. We also would like to thank the Governor and Chief Minister of NWFP, CEO PESCO & his staff for their contributions.

i. Public Relation Activities

PEC has started building strong two way communication ties with member engineers, universities, engineering firms and other stakeholders. Public Relation Cell has been strengthened to ensure continuous publication and distribution of Quarterly Newsletter. E-Newsletter has been started with the vision to access around 88,000 registered engineers and several other stakeholders. Moreover, an online information sharing group has been established to communicate interventions & activities of PEC, emerging trends, information about trainings and job opportunities, as occur, directly to engineering community. These efforts shall help in better participation of our engineers in realizing the vision of PEC through joint & coordinated exertion.

j. Academia-Industry Linkages

In order to strengthen academia-industry linkages, PEC established Academia-Industry Linkages Committee under the convenership of Engr. Zahid Arif, which has developed a draft mechanism / road map to strengthen this relationship. As a result, a joint workshop of Academia-Industry Government Roundtable (AIGR) was organized in May, 2009 at Peshawar in the leading role of Ministry of Science & Technology. It was a very successful workshop where all stakeholders from academia, Government & Chamber of Commerce and Industry were present.

Chairperson PEC had been kind enough to place considerable emphasis on taking care of the PEC employees, as they are a precious resource of the Council. Through institutional arrangements, the Council has made concerted efforts for improvement of their careers, provision of better health care facilities, quality food, work conducive environment etc.

In the end, I express my gratitude to all of you, who despite your busy schedules, made it convenient to attend. We highly appreciate Engr Zahid Arif, local members of the Governing Body and all local engineers and team members who have spent days & nights, to accomplish the marvelous job of arranging all the functions in a befitting manner. We also acknowledge the devoted efforts of Deputy Registrar, PEC Branch Office Peshawar and his staff.

Thank you all

PEC Zindabad
Pakistan Paindabad