Monenco Iran
Consulting Engineers





Annual Report 2011

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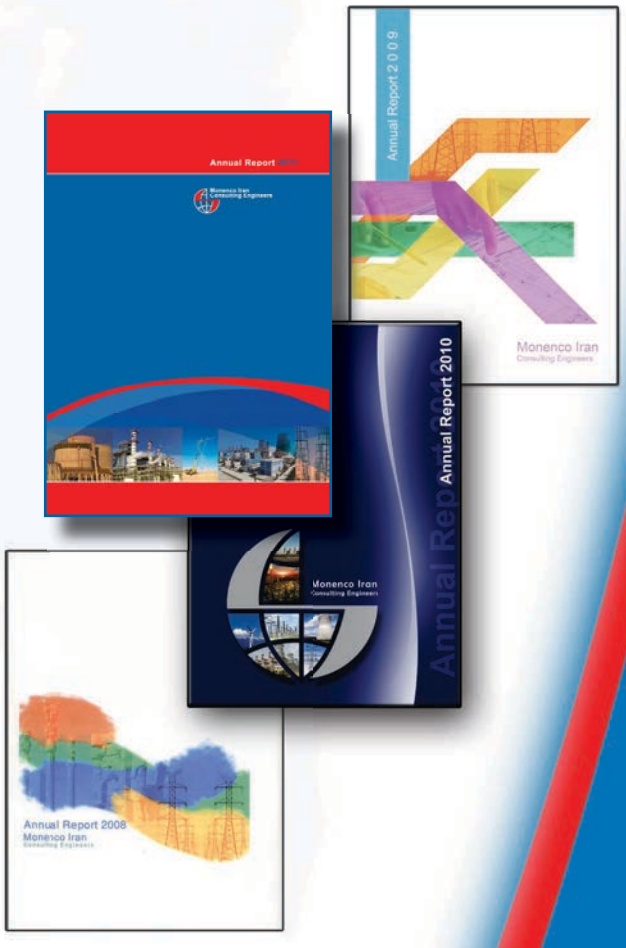

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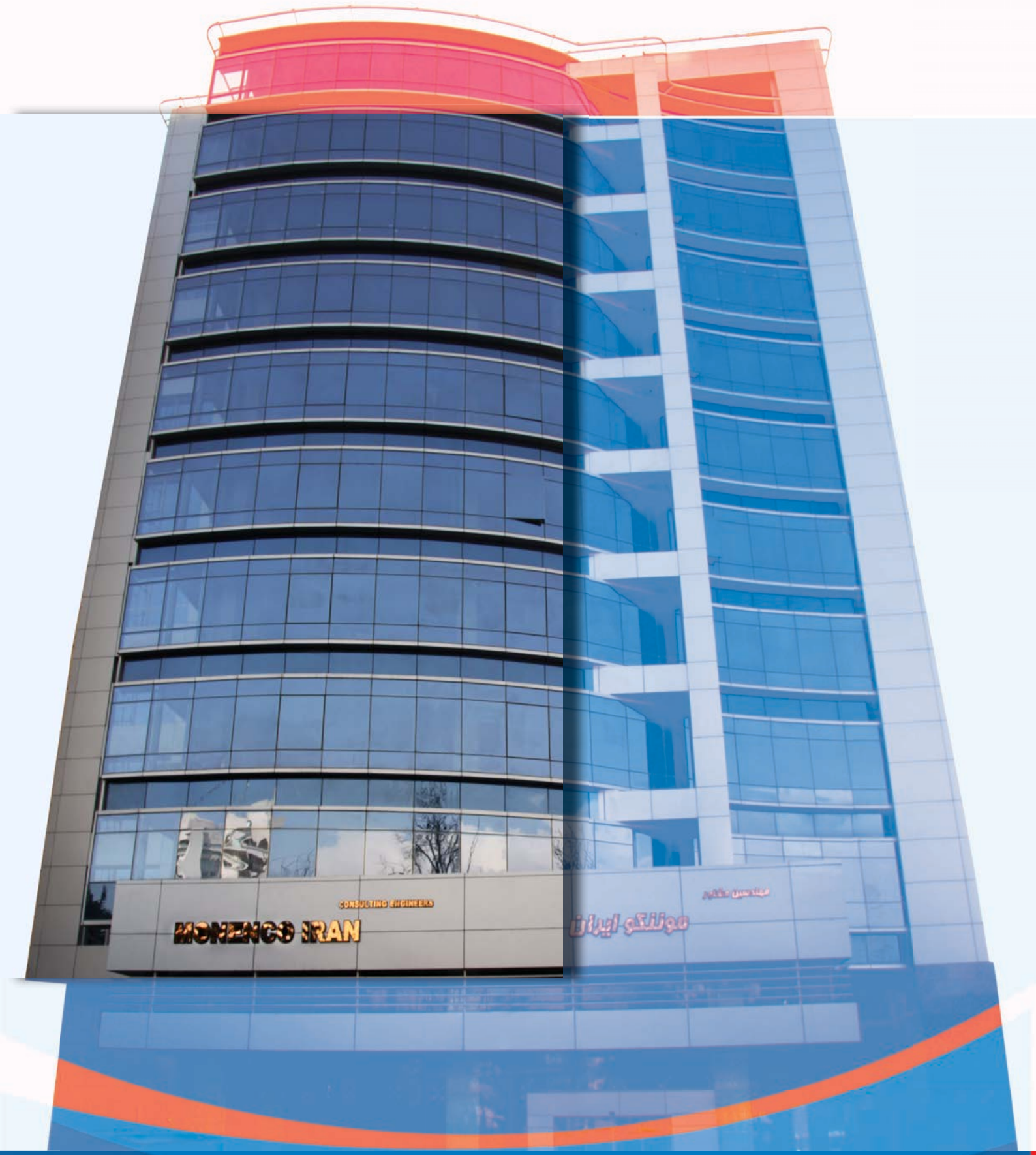


No.12, Attar St., Vali e Asr Ave., North Vanak Sq., Tehran, Iran
Tel:+98 - 21 – 81 96 6055 | Fax:+98 - 21 - 88 77 12 06

info@monenco.com | www.monenco.com

Introduction

Monenco Iran Consulting Engineering Company, a leading consulting engineering company in Iran was founded in 1973 as a joint venture between the private sector of Iran and Montreal Engineering Company of Canada.

Monenco Iran a pioneer in energy industries has experience of engineering, design and consulting on;

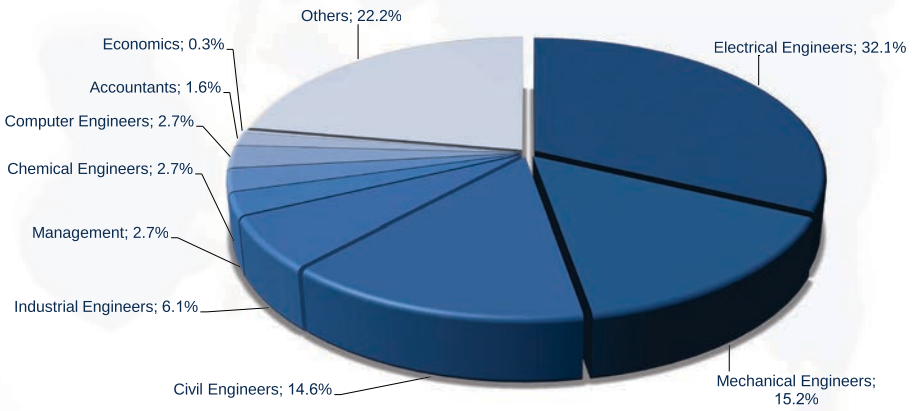
- around 45 000 MW of Power Generation capacity,
- 12 Oil & Gas complexes,
- more than 20 000 KM Transmission Lines,
- around 13000 MVA Substations,
- 40 National and Regional Dispatching Centers,
- 30 Telecommunication Systems & Master Plans,
- 24 Mining and Geology Projects,
- 29 Economical and Technical Feasibility Studies,
- 3 Electrical Railway Projects,
- 10 Heat Recovery and Energy Optimization Projects,
- 14 Renewable Energy and Dispersed Generation Projects.

Thermal Power Plants, Renewable, Cogeneration & Dispersed Generation, Rehabilitation & Retrofitting, Oil & Gas infrastructure, System & Energy Studies, Electrical Power Transmission, Communication, Dispatching and Mining are Monenco Iran main fields of activities. Competence and proficiency are the cornerstones of the Monenco Iran success.

Services

- Feasibility studies (Technical, economical, environmental and social)
- Conceptual, Basic & Detailed Design
- Overall & Interface Engineering
- Design review and endorsement
- Tender & material requisition preparation and bid evaluation
- Execution and Implementation management of projects/plans
- Construction, Maintenance and Operation Supervision
- Factory & Site test Supervision
- Retrofitting, rehabilitation & Repowering Investigation
- Energy Systems & Integrated Networks studies
- Master Plan Development
- Providing Technical Standards and Guidelines Definition
- Engineering Processes Control and Optimization
- Technical Training and knowledge Transfer

Composition of Experts in 2011



1. International market penetration

Monenco Iran was recognized as a qualified consulting engineering company by European Bank for Reconstruction & Development (EBRD) and the World Bank (WB) as well as the African Development Bank and the Islamic Development Bank, in line with the top 20 companies in the world, in countries such as Oman, Kazakhstan, Armenia, Tajikistan, Kenya, Tanzania, Nigeria, South Africa and Rwanda.

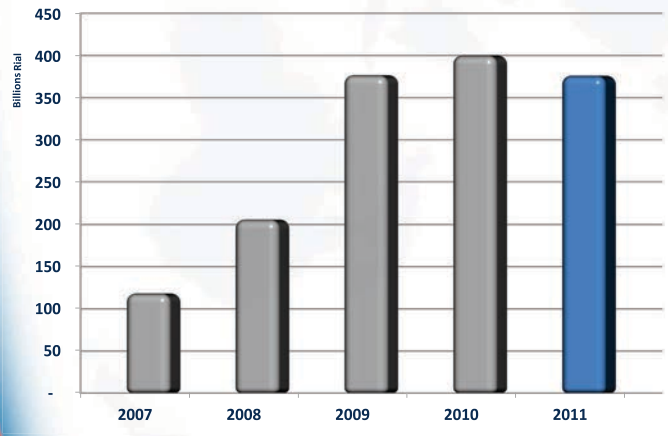
2. Expansion of services

- Peat to Power plants
- Gas to Power plants (Processing Methane from deep water of lake and producing power)
- Liquefied petroleum gas (LPG)
- Sea Water Intake Plant
- Gas Master Plan Study
- Desalination Master Plan Study
- Concentrated Solar Plant (CSP) on a EPCM formation
- Subcritical steam boiler (300 – 350 MW)
- Concrete skeleton structure of Air Cooled Condensers (ACC)
- Design of structure and hydraulic system of Once Through cooling systems
- Using laser scan technology for preparation of As Built documents of plants
- Intelligent routing, on air laser scan and light detection and ranging (LIDAR) mapping of power transmission lines
- Technical and Economical feasibility study of renewable energy and thermal power plants
- Geothermal Power plants
- Incineration and Bio Mass plants
- Power Quality Study and improvement of industries such as steel plants by providing remedial plans and solutions
- Custody Metering of Oil & Gas industry
- Pump Storage Hydro Plants
- Coal mines and Iron ore exploration
- Electrical Railway
- Biomass Gassification

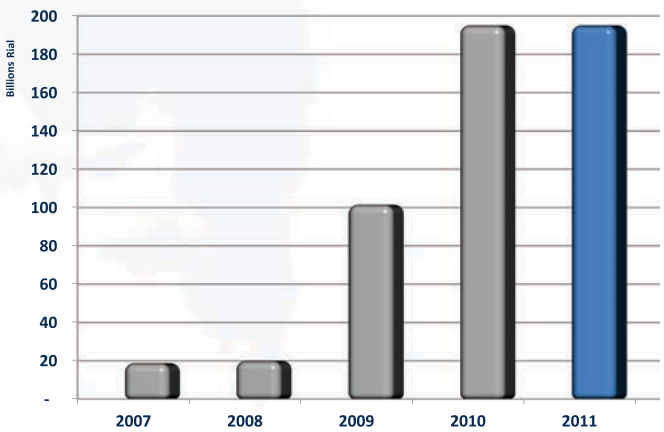
3. Geographical expansion

Successful geographical expansion of Monenco Iran is due to the in-depth knowledge and know-how in several key areas – the regulatory environment, political climate, business opportunities, potential risks, and prospective customer base, among others. Monenco Iran has selected channel partners and established distribution networks that will provide rapid access to the right markets internationally. In this regard, we could name the Middle East, Africa and CIS countries as the markets with Monenco Iran presence.

REVENUE



CAPITAL



4. Certificates and awards

- The best consulting engineering company in the power industry in the 26th *Iran international power and electricity conference*
- First economical giant of the Consulting Engineering Companies in Iran by Industrial Management Institute of Iran
-Technical and Economical Feasibility Study grade in the field of Energy, Industry, Mining, Civil and Urbanism from the *Banking & Credit Investment Consultant Centre* of Iran.
- Iran *President Deputy Strategic Planning and Control* grade in;
    - Petrochemical, Oil & Gas Complexes,
    - Oil & Gas Transmission lines,
    - Energy Optimization
    - Water and wastewater plants
- Obtaining the Integrated Management System certificate IMS from *Bureau Veritas* (BV):
    - Quality Management System certificate ISO9001
    - Environmental Management System certificates ISO 14001
    - Occupational Health & Safety Assessment Services OHSAS 18001
- Quality Management Systems for the Petroleum, petrochemical and natural gas industries ISO/TS 29001 from BV

5. Publications and Presence in the conferences

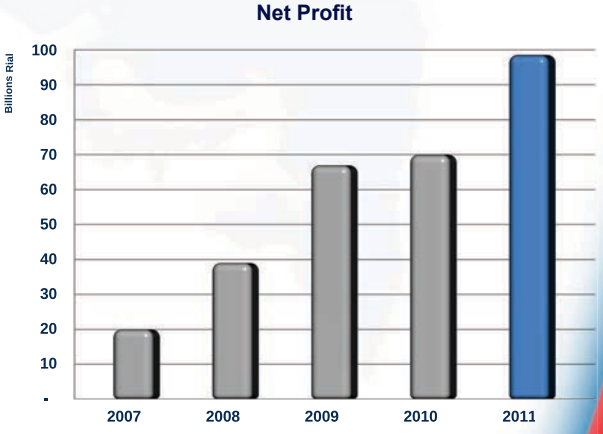
After unexpected demands and appreciations from engineers and students for the first volume, the second volume of the “Introduction on design of Thermal Power Plants” was published by Monenco outstanding experts in 2011. On the other hand, about 25 research and technical papers & several technical reports was submitted to and got accepted by prestigious international and national conferences and journals.

6.Transmission & Distribution achievements:

- Electricity master plan in metal and mining industries around the Persian Gulf
- Inaugurating fiber optic and camera systems in Tehran for traffic control
- Design of towers for the pipeline telecommunication networks
- Rehabilitation of SCADA systems
- Master Plan of Tehran power distribution network for the next 15 years
- Completion and implementation of the transmission line between Karkheh and Alemareh Iraq by LIDAR mapping (80 KM) During 7 months

7. Power Generation achievements

- Power Plants energy optimization
- Execution of 3D design projects based on laser scan technology
- Design of Steam Power Block



Alireza Shirani
Alireza.Shirani@monenco.com

Obtained his B.Sc. in Electrical Engineering from Sharif University of Technology in 1988. He has passed two years in Ministry of Energy as a System Engineer in Energy Division. From 1990 to 1997, he has worked in Niroo Research Institute and from 1994 he worked there as the Head of Electric Department. Since 1997, he has been Vice President of Research in Niroo Research Institute. Finally in 2007, he was appointed as the Managing Director of Monenco Iran.

"Monenco Iran is the only consultant engineering company among 400 economic giants" a very prosperous phrase, the only consultant engineers company in Iranian economy, which itself has the 18th place in the world economy based on the World Bank report 2009.

When less than two years ago Monenco decided to expand its services to all countries around the world, there were only a few that were optimistic about it, mainly because of the world political situation as well as economical recession all around the world.

It was a decision which was approved in the board as well as general assembly of Monenco Iran, so there was no choice, and actually it was a change from willingness to compulsion.

Now, not only Monenco Iran is responsible for the major key projects in Iran power & infrastructure industries, but also has so many projects in more than 20 other countries.

Geographic diversification isn't the only part of the story.
Monenco Iran is one of very few engineering companies capable of handling almost every kind of project; from energy to mining, electrical railway to roads and airports engineering, to name just a few.

Why this has happened in an environment like what we have faced in the past two years, what was in Monenco Iran that not only slowed it down, but also speeded it up, the answer is simple, willingness.

As a rule all clients are interested in receiving cost effective, top quality services. Monenco Iran presented both at the same time, and by introducing itself, it's talented engineers, and its fantastic infrastructure got their support and satisfaction which is going to expand all around the world like a domino.

As the managing director of Monenco Iran, I really appreciate all the efforts that were made by all my colleagues, in the board as well as the various departments, and I am sure that this success will continue, faster in the upcoming years.

I highly appreciate the support of Monenco Iran share holders, especially MAPNA Co. that believed in Monenco Management and did their best to fulfill Monenco Iran investment requirements.

Transmission & Distribution

Faramarz Ghelichi:
Ghelichi.Faramarz@monenco.com

Obtained his B.Sc. in Electrical Engineering from ferdowsi University. He is specialist in H.V. Transmission Lines. From 1992 to 1997, he has worked in Moshanir Consulting Engineers Company as Project Engineer, Site Manager and Project Manager. In 1997, he started in Monenco Iran Consulting Engineers Company and since 2007, he has been appointed as the Transmission and Dispatching Deputy.

The division of Power Transmission & Distribution handles projects in Networks, Substations, Transmission Lines, Distribution, Dispatching Centers and System Automation, Telecommunication Networks in all voltage levels. This Division has designed more than 20000 KM transmission line up to 765 kV and more including Hot Line OPGW with the length of more than 5000 km than 13000 MVA substations from 33kV up to 400 kV including power transformers and more than 10 distribution network loss reduction projects and up to 36 dispatching and SCADA control centers projects..

Transmission Lines and Distribution Networks

Transmission lines and distribution networks department have been responsible for design and provide engineering services in all stages of projects in the fields of network system studies, power transmission lines designs and supervision, OPGW & engineering of network distribution. In addition, using the latest version of software such as PLSCADD and ETAP and the latest methods like intelligent GIS system for selecting the best route and surveying via (LiDAR) system enable us to reach the optimum design in our projects.

Substations

The High Voltage Substations department is equipped to deal with all necessary aspects of engineering and construction supervision as well as asset management of HV substations. Substation engineering covers the design of the HV and LV parts, as well as control systems, auxiliary services, and civil and structural design; these designs are fully accomplished based on structural 3D design software. Consultancy of the projects also falls within our area of expertise. We also deal with control systems for equipment designed for energy production (hydroelectric and thermal plants) and petrochemical plant.

Dispatching & Automation

Dispatching and automation group has been serving consultancy services in various stages of the automation field plans and SCADA plans of electricity industry including generation, transmission and distribution, oil & gas and water distribution industries. In this regard this group has been taking advantages of up to date technologies in projects like WAMS systems and Smart Grids.

Telecommunication

The Telecommunication group covers major telecommunication technologies and systems to provide utilities and industry with robust and reliable communication infrastructure and access networks. This group provides engineering services in all fields, such as comprehensive information and communication technology solutions, optical fiber networks and systems, Power Line Carrier (PLC), radio networks (Microwave, trunked and conventional radio), smart grids and Advanced Metering Infrastructures (AMI).

Civil & Structures

Gaining experience in different fields of design and consultancy, Monenco Iran also offers civil services for industrial facilities. This group provides consultancy and engineering services for industrial, commercial, residential buildings and civil parts of the transmission lines, high voltage substation, dispatching centers and railway transportation projects and other unusual structures, also ergonomic construction and green buildings are in the scope of Monenco Iran.

Important topics of ongoing projects:

- 765 KV Asalooyeh – Esfahan Transmission line engineering and supervision with the length of 710 km
- +/- 500kV HVDC Transmission line engineering and supervision with the length of 600 km
- Engineering and supervision of about 1400 km, 400kV Transmission lines
- Engineering and supervision of 20,63,132,230kV Transmission lines in all over Iran about 9075 km
- Engineering and supervision of 9725 km OPGW installation on transmission line project (Hot Line & Cold line)
- Distribution Master plan of Tehran
- Distribution Master plan of Yazd province
- Al Kahdra and Madinat Barka 132/33 kV DCS Substations (Sultanate of Oman)
- Al Khuwair 33 kV Substation (Sultanate of Oman)
- Airport 04 33 kV Substation (Sultanate of Oman)
- Shahre Kord and Lordegan 400/63 kV DCS Substation
- 500 MVAr Capacitor Banks for Iran National Power Industry
- 230 kV Substation of Mahshahr Power Plant
- 400 kV Substation of Behbahan Power Plant
- Iranian National Main and Backup SCADA/EMS Centers
- RDC SCADA Control Centers in Qazvin and Zanjan
- Dispatching Control Centers in ARDEBIL,OROUMIEH, Fars
- SCADA Control Center for North part of Iran Operating Center
- Design & document preparation of Distribution Automation for TEHRAN
- TEHRAN Dispatching Control Centers
- AOC & RDC Control Centers in Tabriz
- Supervision of WAOC SCADA Control Center
- Telecommunication system for Iran's seventh Gas pipeline
- Tehran Traffic Control's CCTV and telecommunication network
- Telecommunication system for Tehran Gas company
- Iran power grid fiber optic network
- Design of Iran Advanced Metering Infrastructure and preparing national smart meter specification
- National Dispatching Centers
- Mapna Complex Building
- Khuzestan Dispatching Center
- Shiraz Urban Railway stations No. 4 and 9.





T & D published more than 20 articles, papers and technical reports in international, technical and professional societies in the year 2011 to introduce new technologies & systems to its clients. Bellow is the selected list in this regard;

Leakage detection system for oil, gas, and water transmission systems
Upgrading cyberspace security of SCADA systems
Recognizing the remaining life time of transmission system equipment
Analysis of Iran and UAE electricity networks interconnection
Multi Storey high voltage substations in urban areas
Sulfur concrete and its application in power industry
Smart Grids, The Next Revolution in power industry
Risk management in Electrical Power Transmission projects
Transmission line networks development in smart grid
Refurbishment of high voltage substation
Engineering, Procurement, and Construction Contracts in power industry integration/segmentation

These reports were highly welcomed by Monenco Iran clients and encouraged them to adapt their systems by these new technologies & systems.

Project: Engineering and Construction of Al Kamil & Al Wafi 132/33 kV Grid Station & Associated Transmission Line.
Owner: Oman Electricity Transmission Company (OETC) - Oman
Project Type: GIS Substation
Duration: 18 months
Capacity: 132/33 kV, 2 * 125 MVA
Area: 100*100 m2
Scope: Conceptual Study, Basic Design, Preparation of Tender Documents, Tendering and Bid Evaluation, Design Review, and Construction Supervision

Description: The project consists of Construction of Al Kamil & Al Wafi 132/33 kV Grid Station, Extension of 132/33/11 kV JBBA Grid Station, and Construction of 132 kV Transmission Line. All the related works required for connecting 132 kV feeder at new 132 / 33 kV GS are included in new 132/33 Al Kamil & Al Wafi Grid Station project. The design and the arrangement of the substations shall generally conform to relevant OES standards and fully comply with Oman Grid Code where applicable. All equipment shall be designed for tropical conditions, heavily polluted salt laden air as well as sand pollution.
The Project has started since April 2011.

Project: Engineering and Construction of Madinat Barka and Al Khadra 132/33 kV Grid Station & Associated LILO Works.
Owner: Oman Electricity Transmission Company (OETC) - Oman
Project Type: GIS Substation
Duration: 24 months
Capacity: 132/33 kV, 2 * 125 MVA
Area: 100*100 m2
Scope: Conceptual Study, Basic Design, Preparation of Tender Documents, Tendering and Bid Evaluation, Design Review, and Construction Supervision

Description: The project consists of Construction of Madinat Barka and Al Khadra132/33 kV Grid Station and associated 132kV Line Input Line Output (LILO) works. All the related works required for connecting 132 kV feeder at new 132 / 33 kV GS are included in new 132/33 Madinat Barka and Al Khadra Grid Station project. The design and the arrangement of the substations shall generally conform to relevant OES standards as well as BS & IEC and fully comply with Oman Grid Code where applicable. All equipment shall be designed for tropical conditions, heavily polluted salt laden air as well as sand pollution.
The Project has started since April. 2011.

Project: Engineering and Construction of Madinat Nizwa 132/33 kV Grid Station & Associated Transmission Line.
Owner: Oman Electricity Transmission Company (OETC)
Project Type: GIS Substation
Duration: 24 months
Capacity: 132/33 kV, 2 * 125 MVA
Area: 100*100 m2
Scope: Conceptual Study, Basic Design, Preparation of Tender Documents, Tendering and Bid Evaluation, Design Review, and Construction Supervision

Description: The project consists of Construction of Al Madinat Nizwa 132/33 kV Grid Station, Extension of 132/33kV Nizwa Grid Station, and Construction of 132 kV Nizwa-Madinat Nizwa Transmission Line. All the related works required for connecting 132 kV feeder at new 132 / 33 kV GS are included in new 132/33 Madinat Nizwa Grid Station project. The design and the arrangement of the substations shall generally conform to relevant OES standards as well as BS & IEC and fully comply with Oman Grid Code where applicable. All equipment shall be designed for tropical conditions, heavily polluted salt laden air as well as sand pollution.
The Project has started since April 2011.

Project Name:
Consulting service for construction of National Dispatching Centers
Start date: 2010
Finish date: 2013
Status: Ongoing
Client: MAPNA Company - Iran
Main Client:
Iran Grid Management Company- IGMC
Location:
Main Center: Tehran
Back Up Center: Zanjan

Description:
Consulting services for construction of two dispatching centers, namely main (located in Tehran) and backup (located in Zanjan) centers, are provided which includes engineering and supervisory services regarding basic and detail design, tender document provision, equipment procurement, construction, erection and commissioning. Three major disciplines, i.e. Dispatching, Telecommunication and Civil, are engaged and this project is being done in collaboration with a famous foreign company, SNC-Lavaline

Mohammad Dana Manavi:
Manavi.Mohammad@monenco.com

Obtained his B.Sc. in Civil Engineering from Sharif University of technology. From 1992 to 1996 he has worked for Bonyad Sazeh consulting engineers. He joined Monenco Iran in 1996 as structural designer. He continued his work till 2003 in power generation department. From 2003 to 2006 he worked as a project coordinator. From 2006 to 2008 he worked in the company as a project manager. From 2008 to 2011 he acted as the manager of gas turbine power plant and utilities section. In 2011 he appointed to be the Power Generation Deputy.

In this department Monenco Iran has covered the engineering and consultancy of more than 34000 MW power generation projects, including more than 15000 MW Gas Turbine, and more than 19000 MW Combined Cycle Power Plants. Feasibility Studies of more than 3000 MW Thermal Power Plant projects have been accomplished by Monenco Iran. In the year 2011 alone, Monenco Iran has been involved in 8500 MW power generation projects around the world.

Gas Turbine Power Plants

Currently a significant fraction of electrical power in Iran is generated through gas turbine power plants and this is growing rapidly. Monenco Iran has long experience of offering engineering, design and consultancy services for gas turbine power plants.

Combined Cycle Power Plants

Due to the economical and environmental concerns, there is general tendency towards constructing combined cycle power plants or converting gas turbine power plants into combined cycle power plants, to increase efficiency. Monenco Iran is a pioneer company in offering engineering and consultancy services for different modules of combined cycle power plants.

Desalination

The desalination plants for supplying potable and industrial water, are frequently constructed as integrated part of power generation and sea water desalination plants. In this context it is very important to choose and optimise the most appropriate plant configuration and technology for the desalination process. This applies in particular to privately financed projects in public-private partnership models.
That is why Monenco always designs such facilities individually, to best meet the specific project requirements. This includes both processes for sea water desalination as well as raw water treatment and also post-treatment and/or conditioning of product water according to the relevant requirements.

Feasibility Studies

To start a business, there is a need for insight and vision in terms of the viability of the proposed project concept. Most rational decisions, taken either by existing or aspiring entrepreneurs to make a business investment, is preceded by an investigation of the feasibility of the project.
The analysis of the project involves a certain number of stages during which some parameters and elements are analyzed, in order to make decisions about the viability and direction of the business. In Monenco Iran, we an expert team for the technical and economical feasibility studies of the projects in all fields.

Renewable/Green Energies & Distributed Generation

Monenco Iran actively participates in eco-friendly and clean energy projects such as new, renewable energy generation from water, wind and sunlight and distributed generation with use of combine heat and power generation (CHP) . We are well aware that protecting and preserving the environment is both a social responsibility and a crucial element to sustainable development.
The renewable energy generation and distributed generation in Iran is increasing with a significant rate and this can be seen as an emerging market for Monenco Iran. In year 2009, Monenco Iran started participating in this market.

Supervision on Implementation of the Barka III & Sohar II Independent Power Projects

Owner: Oman Power and Water Procurement Company SAOC (OPWP) - in Oman
Project Type: Combined Cycle Power Plant
Duration: 22 Months
Capacity: 750 MW (2 GTG * 250 + 1 STG * 250) for each power plant

Scope: Monenco Iran jointly with Monenco Consulting Engineers (MCE) were awarded an advisory consultancy services to supervise projects for achieving the goals of the project and fulfillment of obligations based on Power Purchase Agreement (PPA) that was made by OPWP. Monenco Iran is in charge of coordination and monitoring of all beneficiaries and supervision on important tests.

Description: Barka III IPP is located 30Km from Muscat and Sohar II IPP is located 200Km from Muscat. OPWP has entered into contract with two EPC contractors for construction of these power plants. In case of increasing demand of power in Oman, these power plants will have crucial role for responding to the demands of power grid in near future.
Since both plants are located in coastal area, their cooling systems have been foreseen to be “Once Through”. These projects will be connected to the 220kV GIS grid substations and the HV transmission lines that are owned and operated by Oman Transmission Electricity Company (“OETC”).

Qheshm Power and Desalination Plant

Owner: Mapna Qheshm Water & Power Co. - Iran
Client: Mapna Special Projects Construction & Development Co. (MD-3)
Project Type: Power and Desalination Plant
Duration: 17 Months
Capacity: 4 set of Desalination Plant (MED type) 4500 M3/d
2 set of Heat Recovery Steam Generator (HRSG) 50 Ton/h
2 set of GTG 25 MW

Scope: Monenco Iran has been assigned to prepare basic design, civil detail design, vendor design review and procurement services and tender documents.

Description: The plant is located in Qheshm Island, a free zone in the south of Iran and is performed under B.O.O Scheme by investment of private section. In the plant, HRSG converts the thermal wasted energy by two sets of gas turbine each one with capacity of 25MW into steam, which is being used in the process of generating potable water from the sea water in MED type desalination units. Since, different industries and also tourism industry are going to be prospered in the zone; this plant could provide the future demanded power and desalted water for more industry needs.

Sub-Consultancy services for Master Plan of Desalination process in the coast line strip of Persian Gulf and Oman Sea

Client: ILF Consulting Engineers - Austria
Project Type: Desalination Plant
Duration: 3 Months

Scope: Monenco Iran was awarded a Sub-Consultancy Services in connection with Master Plan for Evaluation of Utilization of Desalination process in the Coast line strip of Persian Gulf and Oman Sea.
Monenco Iran is responsible for preparation of a report about Desalination plants in Iranian Coast regions that covers following topics:

- Desalination configuration comparison between centralized versus distributed unit.
- Desalination plant coupled with power plants.

Feasibility Studies and Engineering Services for Construction of Bafgh Combined Cycle Power Plant

Owner: MAHAN Power Development Co. - Iran
Project Type: Combined Cycle Power Plant
Duration: 8 Months
Capacity: 500 MW

Scope: Monenco Iran provides technical, environmental and economical feasibility studies and engineering services for construction of Bafgh combined cycle power plant. Also Monenco Iran is in charge of offering possible alternatives based on all related documents that should be presented in final report.

Description: The plant is going to be constructed in the Yazd province, near Bafgh City - in center of Iran, under B.O.O Scheme by investment of private section and produced power will be sold to the national power grid.

Feasibility Studies and Engineering Services for Construction of Makoo Combined Cycle Power Plant

Owner: MAHAN Power Development Co. - Iran
Project Type: Combined Cycle Power Plant
Duration: 7 Months
Capacity: 500 MW

Scope: Monenco Iran provides technical, environmental and economical feasibility studies and engineering services for construction of Makoo combined cycle power plant. Also Monenco Iran is in charge of offering possible alternatives based on all related documents that should be presented in the final report.

Description: The plant is going to be constructed in the Azarbayejan province, near Makoo - city in northwest of Iran, under B.O.O Scheme by investment of private section and generated power will be sold to the national power grid.

Feasibility Evaluation and EPC Contractor Selection of Control System for Besat and Montazer-Ghaem Power Plant

Client: SABA - Iran
Project Type: Feasibility Evaluation, Preparation of Tender Documents, EPC Contractor Selection
Duration: 8 Months

Scope: Monenco Iran reviews the existing documents of control system and provides suggestion for the modern and up to date control system as well as preparation of tender documents in order to select EPC contractor.

Description: As Be-sat and Montazer-Ghaem power plants were manufactured over 40 years ago, the control and protection system is old. This project considers changing the control system in order to provide up to date capabilities for control and monitoring of the system in order to provide an optimum power generation.

Feasibility Studies of Combined Heat & Power Generation System on small scale in MAPNA's Manufacturing Plants

Client: MAPNA Engineering &Manufacturing Division - Iran
Project Type: Combined Heat & Power Generation System
Duration: 4 Months
Capacity: 25 MW and 40 ton steam per hour

Scope: Monenco Iran studied the consumed energy & thermal load in MAPNA's manufacturing plants, and provides feasibility study of combined heat & power generation system in MAPNA's manufacturing plants.

Description: Mapna's factories which located in Alborz province consist of five factories that manufacture main equipments of power plant. Since electrical and thermal demand level is high in these factories, use of combined heat and power (CHP) plant is an appropriate option for them based on Heat Recovery Steam Generator (HRSG) with almost 48 ton per hour steam generation.
In the final report the generation by simple gas turbine generator and combined cycle power plant were compared and a feasibility report was issued.

Consultancy services for feasibility study, engineering, design and preparation of tender documents

Client: Nigeria Federal Ministry of Power - Nigeria
Project Type: Hydro power plant
Duration: 2 Months
Capacity: Small hydro power plant

Scope: Consultancy services for feasibility study, engineering, design and preparation of tender documents

Description: Consultancy services on feasibility studies, engineering designs and preparation of tender documents for small hydro power plant in Dadinkowa Dam in Nigeria was awarded to Monenco Iran. In this project, a report was prepared for existing site condition . Then, a feasibility study and engineering design was conducted.Alsotenderdocumentsforprocurementandconstructionofpowerplantequipmentshavebeenprepared.

Kabompo Gorge Hydro Power Plant

Client: SSI Engineers and Environmental Consultants Ltd. - South Africa

Description:
Monenco Iran was responsible for preparing technical specification and design and construction criteria on main hydro elctro-mechanical equipments of Hydro Power Plant as well as switchyard. The scope also included commissioning and testing procedures. Monenco Iran received a satisfaction letter from SSI that confirms quality of services and achieving the deadlines.

Yazd Integrated Solar Combined Cycle Power Plant

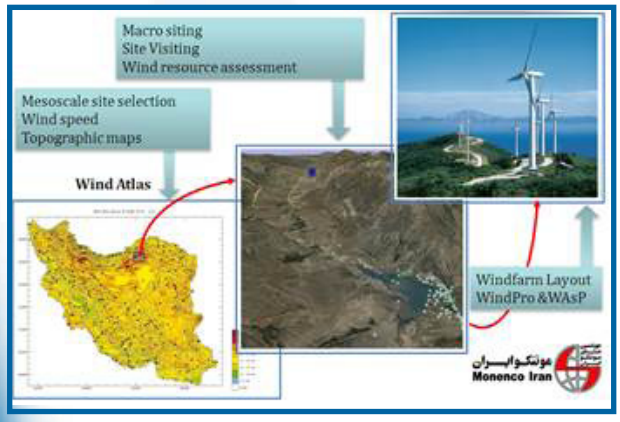
Owner: Iran Power Development Co (IPDC) - Iran
Client: MAPNA Combined Cycle Power Plant Construction and Development Co. (MD-2)
Project Type: Concentrated Solar Plant
Duration: 24 Months
Capacity: 17 MWel
Scope: In the formation of EPCM Monenco Iran and the Spainish partner provide engineering on Basic & Detail Design and Procurement & Construction Management.

Description: The plant is located near Yazd – in the middle of Iran - beside existing combined cycle power plant. The design of the power plant is based on the Integrated Solar Combined Cycle (ISCC) configuration. The plant has nominal capacity of 474 MWel, and consists of two gas turbines of 157 MWel each. The gas turbines are linked with two Heat Recovery Steam Generators (HRSG) supplying steam to a 160 MWel steam turbine. Additional steam is provided by the parabolic mirror field via solar heat exchangers. Hot heat transfer fluid (HTF), is pumped from the parabolic mirror field through two heat exchangers where saturated steam is generated. This “solar” steam is admitted to the HRSGs, and contributes through the thermodynamic cycle of the steam turbine – to an electrical power output of approximately 17 MWel.

Feasibility study, wind resource assessment and detail design for the development of 750MW wind farm in 11 sites in Iran

Client: MAPNA Group- Renewable Energy Generation Company - Iran
Project Type: Wind Power Plant
Duration: 18 Months
Capacity: 750 MW

Scope: Scope of this project includes supervision on wind turbine transportation and erection, road construction, grid connection and wind farm commissioning.
Description:
In this project, Monenco Iran experts investigate suitable sites for construction of 750 MW wind farm in different windy areas. Site visiting, primary site selection, evaluation and review of the modern wind turbine technologies in the world were the most important duties of Monenco Iran in this project. Also, engineers will supervise the construction phase of the project. This phase includes road construction, turbine transportation, foundation construction, turbine erection, wind farm commissioning. Our technical teams will collaborate with wind turbine manufacturer in order to obtain technical knowledge.



Oil & Gas

Mahmood Makhdoomi
Makhdoomi.Mahmood@monenco.com

He obtained his B.Sc. in 1992 and M.Sc. in 1995 in Electrical Engineering from Sharif University of Technology and University of Tehran respectively. From 1992 to 1996 he worked in Ghods Niroo Consulting Engineers as Head of MODEC Software and from 1997 to 2005, in Niroo Research Institute as Head of Control and Dispatching Department. He has been Managing Director of Ofogh Consulting Engineers and SURENA Company in 2006-2007 and 2007-2009 respectively. It was 2009 when he appointed as the Power Generation Deputy in Monenco Iran until 2011 when he was appointed as the Oil & Gas Deputy in Monenco Iran.

Oil & Gas and petrochemical consultants across the globe are looking for timely solutions to help them address the current challenges of a global economic downturn, decline in overall margins and increased emphasis in process safety compliance. Monenco offers innovative engineering solutions that provide unique answers to these challenges in areas of auditing, metering, upstream and process safety management consulting of petrochemical pants, oil & gas complexes and transmission lines.

Our technical team has delivered leading methodologies, best practices and robust software solutions that reflect oil & gas industry insights and vast experience in our core competencies. We are, and will continue to be, second to none in understanding our client's needs and being the most worthy steward of their resources.

Taking advantage of participation and cooperation of prominent International and regional Engineering consultancy companies in joint ventures in rendering consulting and engineering services abroad. At the same time this partnership provides broader opportunities for serving domestic clients with higher quality .
Monenco Iran, having the key major Oil and Gas projects in the work history has established an outstanding presence in this industry and have expanded the scope of services in order to spread presence in this market.

Oil & Gas featured projects of this year are as follow:

Furnishing Import & Export Stations of Iran Ministry of Petroleum with Custody Metering System
Owner: Iran Ministry of Petroleum / NEYRPERSE - Iran
The Custody metering system project will be installed at onshore and offshore facilities of Crude Oil and refined petroleum products, NGL and Gas Condensate Fields and main transmission lines, in Iran. The scope of the services includes sites visit, design and data gathering, endorsement of documents, basic and detail design.

TUGA Gas pressure reduction stations and transportation Pipeline
Owner: Mapna Turbine Engineering and manufacturing Co. (TUGA) - Iran
Project includes design and supervision on construction of gas pressure reduction stations with the following specifications:

Pressure reduction 1000 to 500 psi with 13000 Nm3/h capacity
Pressure reduction 500 to 60 psi with 3000 Nm3/h capacity

Electrical and Thermal Energy Auditing In Pars Special Economic Energy Zone (PSEEZ) and Optimization of Energy Consumption

Owner: Iranian Fuel Conservation Company (IFCO) - Iran

Scope: Thermal & Electrical Energy Auditing and providing solutions to enhance the energy consumption in supply & demand sectors of South Pars Special Zone.
The production system is audited to specify the existing energy conversion efficiency. In this stage some parameters like power, exhaust temperature, compressor discharge pressure and temperature and fuel flow is measured to monitor the performance. Such a method is applied to boilers, as well.

Middle East Gas Infrastructures Opportunity Screening

Owner: PÖYRY MANAGEMENT CONSULTING (FRANCE) SAS - France

Scope: This project is to select the most reliable countries for investment in the Gas Infrastructure and Distribution. LNG plants also were investigated as the alternative for export of Gas. This project is categorized into two phases, phase 1 itself has two parts. 5 countries have been studies and lead to selection of 2 countries. In phase 2 is conducting a detailed analysis of the 2 final countries including the detailed modeling of energy and gas demand as well as description of natural gas supply, demand, transmission, distribution, LNG and storage was conducted.

Consultancy services and supervision of Golestan Gas Company

Owner: Golestan Gas Company - Iran
Scope: This project involves continuous supervision on installation, operation and commissioning of transmission line and the distribution networks as well as steel pipeline junctions, gas pressure reduction stations mechanical and foundation works, execution of tests and operation related to the electrical and the gas injection systems. Tasks are including;

1. Supervision on the gas transmission projects in the Golestan province
2. Supervision on the civil projects (residential and commercial)
3. Supervision on the gas transmission to the industrial, commercial and residential complexes in Golestan province

Mining & Geology

Monenco Iran, Mining & Geology department assist their clients to build value for the current and potential projects.Monenco Iran jointly with the international and domestic partners, give the service to the clients worldwide.

Our extensive and wide range of experience, place Monenco Iran at the prominent level in Iran mining consultancy market. Offering services in Geology, Exploration, Reserve Estimation, Mining Geology, Geochemistry, Computerized Geological Modeling, Grade Control Design and Monitoring, Feasibility Studies, Rock and Soil Mechanics, Hydrology, Mine Planning, Open Pit and Underground Mine Design, Mine Optimization, Mine Ventilation, Mineral Processing and Environmental Engineering. Monenco Iran is equipped with sophisticated professional software Gemcom Surpac, Downhole Explorer, dataminestudio, FLAC, Gems, UDEC, GEO matica. Monenco Iran is prepared to provide consultancy in exploration and extraction of mineral deposits in other countries, partnering with highly skilled international companies and modern equipments and machinery.

Featured projects in this field are as bellow;

Coal exploration and consultancy services in Sefid Riz Area in Mazandaran Province

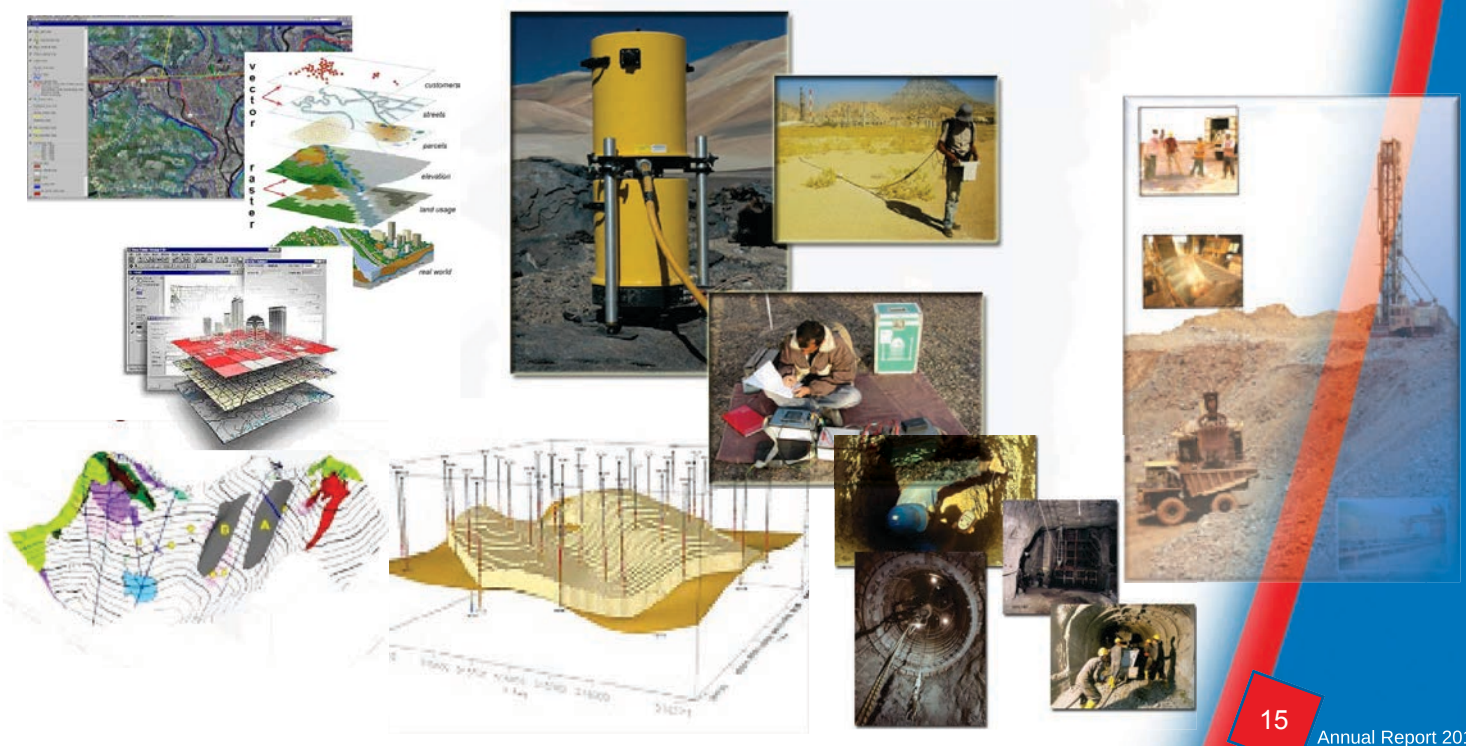
Scope: Client: Iran Minerals Production & Supply Co. (IMPASCO) - Iran
Description: In this project Monenco Iran evaluated the results of the exploratory excavations, deposit estimation and other data in order to determine the quality of the coal and provide a plan for exploration.

Detailed exploration of Galali Iron Deposit

Client: Saba Noor Steel Company - Iran
Description: Galali Iron Deposit is one of the largest iron deposits in Hamedan province in Iran. This project involves the supervision on drilling operation, capacity estimation of deposit, exploration and open pit mine design.

Coal exploration and consultancy services in Gardaneh Sar Area in Mazandaran Province

Client: Iran Minerals Production & Supply Co. (IMPASCO) - Iran
Description: The Company evaluated the results of the exploration, excavation, deposit estimation and other data to determine the quality of the coal and provide a plan for exploration.



Hassan Siahkali
Siahkali.Hassan@monenco.com

Received his Ph.D. from Sharif University of technology. his M.Sc from Amir Kabir University of technology and his B.Sc from Tabriz University in Electrical Engineering. From 1996 to 1999 he worked in Iranian Center of Energy Studies (ICES) as project manager. From 1999 to 2006 he worked in Niroo Research Institute (NRI) as project manager. Since 2009 he has been working in Monenco Iran. It was 2011 when he became the manager of Energy & System Studies Center in the company.

" System and Energy Study Center have been involved in many projects relating to "Electrical Power System Studies" and "Energy System Planning". Many fields such as feasibility studies on interconnection of power plants to the grid, system study, market study, system planning and management consultancy are the expertise of this team. As well as the bellow featured projects, HVDC lines, Facts devices placement, EHVAC 765 kV transmission line, Island Simulator Design and Manufacturing is currently ongoing.
Bellow describes some of the featured projects in this sector;

Iran Power Industry Restructuring

Client: Iran Power Generation Transmission and Distribution Management Company - Iran
Duration:13 Months
Scope: Monenco Iran develops a new structure for Iranian electric power sector
Description: This study aims proposing a comprehensive structure for reorganizing Iran power sector. The purpose of this study is to strengthen Iran electricity supply industry to be able to satisfy future network needs regarding demand growth and enhance the efficiency and performance of the power infrastructure. Another driving force for this study is responding to Iran national policy of promoting the private sector participation in generation and distribution fields of electricity industry. In other words, realization of privatization is an important focus of this study.

Power Quality Improvement of Modern Steel Mills (MSM)

Client: Monenco Consulting Engineers (MCE) - Oman
Duration:6 Months
Scope: Several solutions in order to solve major power quality problems specially flicker
Description: Modern Steel Mills (MSM) is located in Rusayl Industrial Estate (RIE) in Muscat, Sultanate of Oman. The electrical utility company which provides the electricity for the MSM is the Muscat Electricity Distribution Company (MEDC).
There are some concerns regarding the MSM furnaces' operation on the power quality and their effects on the adjacent network such as load fluctuations leading to voltage drop on the connected busbars. Other than the effects of MSM furnaces' operation, the interconnectivity of the RIE electrical network, reliability of the supply to the MSM and dynamic stability of the RIE grid with due consideration of Rusayl power plant controls setting are also points of concerns.

SMP (Spot Market Pricing)

Client: Iran Grid Management Company (IGMC) - Iran
Duration: 1 year
Description: Detailed design of rules and tools for day-ahead spot market pricing
This project involves: Defining zones for location-based energy pricing, Proposing a settlement method to calculate Electricity Price, Proposing a new approach for producer payments in market which takes into account the current billing system and lead to least deviation to avoid market players resistance, Determination of Loss, Congestion, and Transmission Services Charge

Tehran Transmission Master Plan

Client: Tehran Regional Electric Company (TREC) - Iran
Duration: 16 months
Description: Development of a Master Plan for TREC Transmission Network (2014-2024)
The outcome of this project is the transmission system expansion plan with aim of increasing the reliability of the system and its operational conditions. In addition, the characteristics and the time of need for enhancing the system (including installation of new power plants, transmission lines, and substations) are determined with the purpose of maintaining the adequacy of system in a least-cost manner.

Ramin Khoshkho
Khoshkho.Ramin@monenco.com

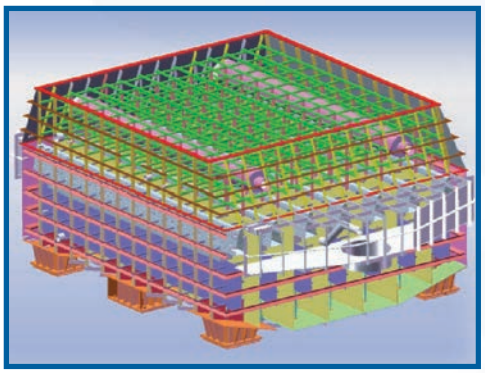
Received his Ph.D. from University of Joseph Fourier of France, M.Sc. and B.Sc. from University of Tehran all in Mechanical Engineering. From 1990 to 1998, he worked in MATN Co. (Electric Power Research Institute) as Senior Mechanical Engineer and Manager of Mechanical Department. From 1998 for two years, he has been Vice President of Power Generation Research Center, and in year 2007 he was appointed as R&D Manager of Monenco Iran.

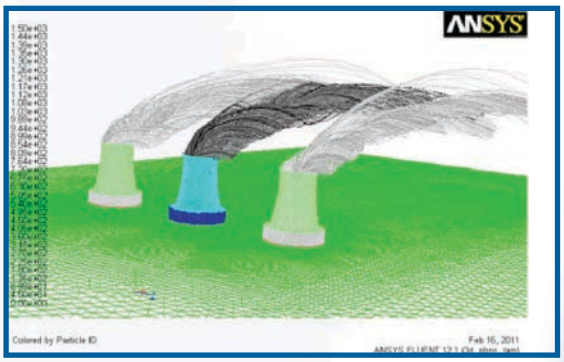
The work is devoted on new or existing technologies to meet the demands and expectations of our customers, to reduce the environmental impact of our operations, to improve the efficiency of our operations and to contribute to develop environmentally sustainable energy solutions.
Monenco Iran is committed to investing in R&D to create innovative products in a timely way with leading-edge technologies. With a strong multicultural tradition, we have attracted well-trained engineers and experts from across the world to deliver solutions that meet our customers' needs. Our world-class innovation capabilities is recognized globally.

The main goals of R&D division are as follow:

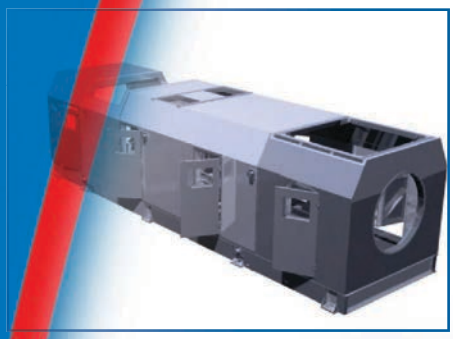
- Exploring research capabilities and capacities in different sections of Monenco Iran
- Developing technical and scientific knowledge in new areas
- Know-how transfer of the new technologies to the design disciplines of Monenco Iran
- Communication with academic and research centers in order to define and execute necessary research projects

Moreover, some of the main ongoing R&D projects are as follow:



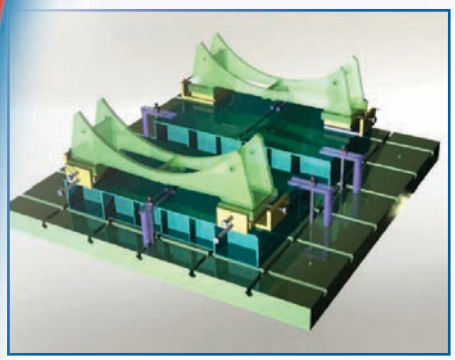


In-house Design of Heller Cooling System
This project was done in four sections which are sizing and performance evaluation of main cooling system, hydraulic calculation of main cooling system, thermo fluid and structural design of D.C. jet condenser and structural design of cooling tower. After completion of these sections, R&D office has transferred the know-how to design disciplines.



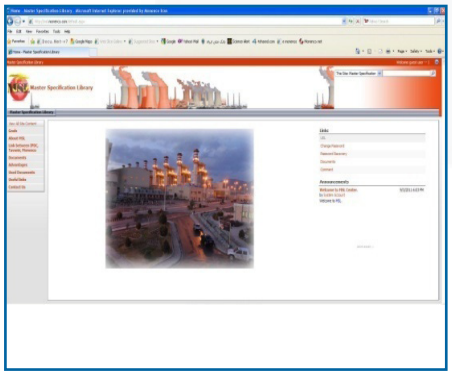
Designing test rig for 25 MW Gas turbine

Client: MAPNA Turbine Engineering & Manufacturing Co. (TUGA)
TUGA is in the process of manufacturing a 25 MW industrial gas turbines in cooperation with Zorya-Mashproket (Ukrain). The complete design of the test station together with the necessary test calculations are in the scope of work of the R&D division.



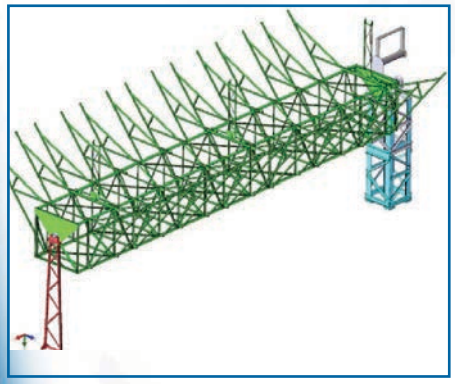
Designing test rig for centrifugal compressor

Client: MAPNA Turbine Engineering & Manufacturing Co. (TUGA)
The objective of this project is to conduct performance testing of a Frunze (Ukraine) compressor according to the latest international standards. The main objective of the test is about obtaining the performance curves of the compressor which will be manufactured in TUGA.



Master Specification Library

Client: Iran Power Development Company (IPDC)
For sharing the technical documents and get the points and feedback from the users in thermal power plants and other related industrial projects, a Master Specification Library (MSL) has been developed for the first time in IRAN. Also, an interface between Monenco and IPDC experts has created for sending feedbacks of different users to the relevant custodians, who will revise the documents biennially if necessary.
This web based database has categorized by power plant types and also by disciplines such that access to technical specifications and searching in their content be straightforward.



Design and construction of Yazd Integrated Solar Combined Cycle (YISCC) under EPCM scheme

Client: Mapna Combined Cycle Power Plant Construction and Development Co. (MD2)
According to the contract with MAPNA, Monenco Iran and its Spanish partner do the whole basic and detail design of YISCC solar portion. Under EPCM strategy, YISCC solar portion is done in a way that uses the maximum domestic potential and minimizes the cost.
In this project the energy collected by Solar field converted to the thermal fluid via HTF system and then coupled with thermal HRSG for increasing steam production in the cycle of a conventional combined cycle power plant.

Engineering Capability

Alireza Afsar
Afsar.Alireza@monenco.com

Obtained his B.Sc. in Mechanical Engineering from University of Tehran. He started to work in Khaneh Sazi Iran Co. in 1995 as supervisor. From 2000, he has worked for seven years in Moshanir Consulting Engineers as Mechanical and Process Expert. Since 2007 he joined Monenco Iran as Project Manager of Combined Cycle Power Plants and it was 2010 when he was appointed as Engineering Deputy of the Company.

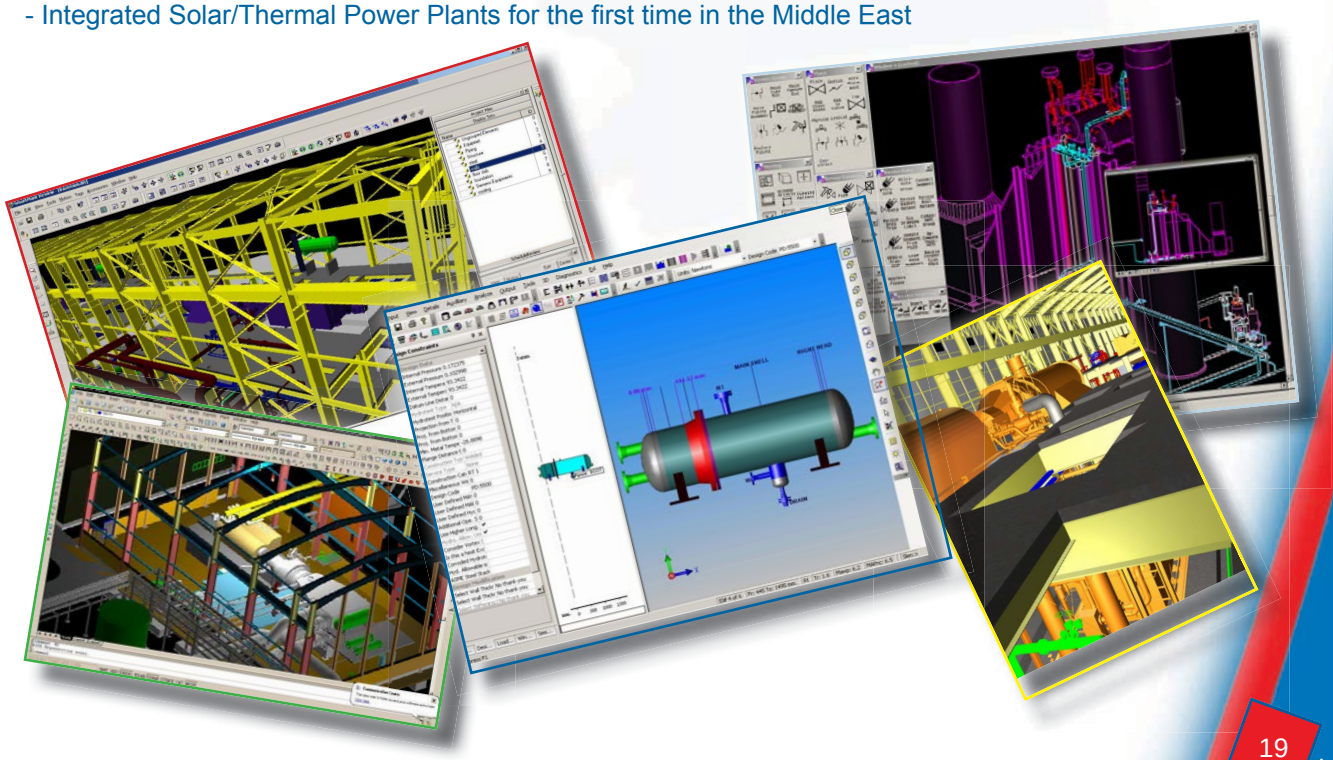
Engineering division is the most critical division in Monenco Iran to provide Engineering services for the projects. It has been kept up to date by taking advantage of the latest science and technology in their daily tasks. In addition 100 experts and more than 50 chief specialists are active in a matrix based formation.

Moreover, this division has collaboration with Research and Development department as well as several outstanding international companies in order to be present stronger in the energy market.

This division consists of seven professional departments namely; Civil & Structure, Piping, Mechanic, Process, Electrical, Instrumentation & Control (I&C) and General. The specialized experts of this division, design, review, endorse and modify all engineering documents if needed, based on the project specification and clients technical requirements. Taking advantage of the most advanced tools designed by our IT department such as action plan, work flow and projects portal, design as well as its time schedule, gets followed in order to guarantee not only the quality of the design but also the monitoring the project execution .

In 2011 this division besides giving design services for all projects of our company, it was successful to extend its knowledge to the following fields and subjects;

- Design of Power Plant Cooling system (Once Through, Heller, Air Cooled Condenser)
- 3D design using PDMS and preparation of building skeleton using BOCAD
- Preparation of different guidelines for test, quality control and survey, Operation & Maintenance,
- Providing control system architecture and design of control system automation based on process and protection requirements
- Optimized guidance of processes
- Design & implementation of Large wind turbine farms as well as the turbine itself
- Energy auditing protocols & procedure in large schedule Oil & Gas complexes
- CCHP & CHP scheme for small and medium size energy consumers
- Low grade geothermal power plant for commercial, industrial and residential buildings
- Integrated Solar/Thermal Power Plants for the first time in the Middle East



Mehrnaz Ansarimehr
Ansarimehr.Mehrnaz@monenco.com

Obtained her B.Sc. in Applied Mathematics in 1993 from Iran University of Science and Technology. As the Cost & Proposal Engineer and then as PDMS Administrator, she has worked for five years in OIEC group. In 2000 she joined Petropars as Project Planner & Controller. From 2001 to 2003, she has worked in Cyber Space/Jamesazan Tarh as Senior Project Planner & Controller. Holding the same position, she has passed four years in Darya Pala Energy Company. Since 2007, she is a Monenco Iran employee and in 2010 she was assigned to be the Planning & System Deputy.
Since 2011 She has been also the Manager of Quality and Productivity group.

Information Technology Management

New Data Centre including Fire fighting, Access Control, Monitoring, CCTV and Telecommunication are designed and installed in our new building in an area of 70 sq. m based on the latest technology for data centre in the world. Also Fiber Optic network and IP phone system was installed in our new building.
Engineering Documents Management System (EDMS) which was completely designed and implemented by IT department of Monenco Iran in order to improve and expedite the management of documents in the company, as well as projects portals and document archiving system are the most important achievements of this department in 2011.
3D modeling group of IT department was responsible for management and supervision of 3D design of new projects in Monenco Iran. Last year this group has expanded its services to clients by use of Laser scan technology. This technology makes it possible to prepare 3D model and As-built drawings for power plants, Oil & Gas and Industrial complexes which are planned for revamping or expansion.

Knowledge Management

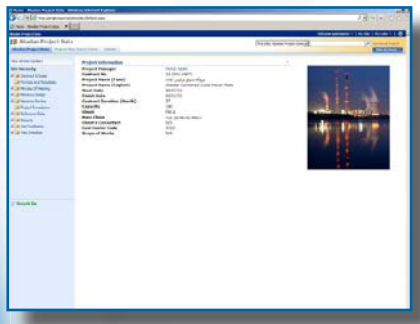
Following the successful design and development of Knowledge Management System, 2011 was the year for implementation of this system. Reorganizing knowledge management teams, completion of the knowledge documents, developing design process feedback system, providing clients with numerous technical and knowledge reports, enhancement of the ICT infrastructure, application of different tools for extraction of tacit knowledge were the main achievements in 2011 for implementation of Knowledge Management System. As a result, Monenco Iran was dedicated a Knowledge Management award in the fourth National Knowledge Management conference.

Strategic Management

As the previous years, development plans were defined to align all departments with company strategic plan. Results show that 2011 was a successful year for diversification of internal and international markets, increasing number of clients, engineering services and so on.

Systems Design and Analysis

Following the Information Technology Master Plan, Engineering Documents Management System (EDMS) was fully analyzed and conceptually redesigned to improve the integration of related processes. Based on these analysis and design, Workflows, Documents Control, Projects Portals and Archiving systems were integrated and optimized. On the other hand, logistic systems e.g. Financial and Human Resource Management Systems were replaced. Enhancement of the interoperability of engineering software based on ISO 15926 guidance and best practices was searched to adopt the effective ways for implementation in 2012.



Quality & Productivity

In recent years Monenco Iran top management have been concerned on improving the quality of services, and increasing the productivity and systemizing the activities and processes.

In this regard the company has done studies for identification and determination of solutions in line with the company activities. The Quality Management System was established 10 years ago in order to improve the clients satisfaction and improvement of the operation constantly.

Since 2009 based on OHSAS 18001: 2007 and ISO 14001: 2004 certificates, Monenco Iran implemented all the safety, occupational health and environmental management systems, while the company upgraded the Quality Management System and was awarded the ISO9001:2000 certificate. Also the company was honored the ISO/TS29001:2010 certificate from BVQI (Bureau VERITAS Quality Integrating) in oil, gas and petrochemical fields, and met all requirements of the Integration Management System in these fields.

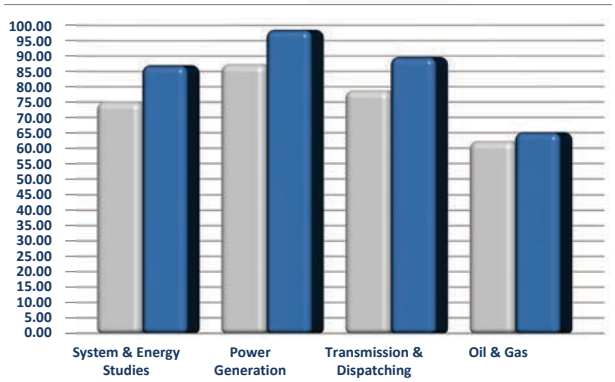
Objectives and benefits for Integrated Management System (IMS) are as bellow:

- Increasing the quality and productivity in the projects implementation
- Upgrading technical engineering services and consulting
- Endeavor in order to improve customer satisfaction
- Committment for providing the health and safety of employees who are the main investment of the company
- Protection ot the environment by respecting and executing all standards and also management of natural resources consumption
- Creation of suitable conditions in order to empowered and promoted qualified employees
- Development of national and regional markets

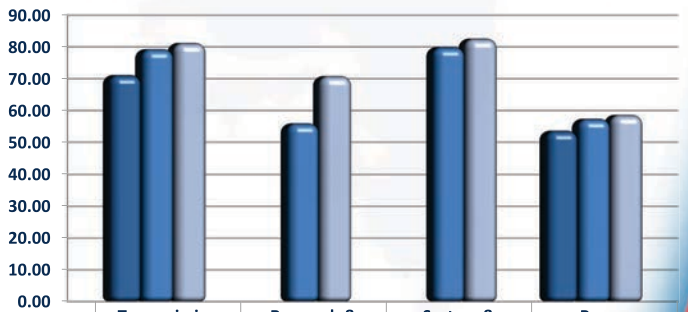
Company achievements after establishment of the systems:

- Improvement of the company technical scores which was led to being considered in the shortlist of clients or granting the project from national, regional and international clients.
- Creation of a common language between clients , consultants and contractors
- Recognition of weaknesses and barriers within the Integrated Management System (IMS) based on the internal audit programs in order to have constant improvement
- Activities and processes improvement in line with the company policy and, improvement and development of the implementation of the projects

Tenders Technical Scores



Customer satisfaction evaluation



	Transmission & Dispatching	Research & Development	System & Energy Studies	Power Generation
2009	71.16			53.61
2010	79.31	55.94	79.99	57.37
2011	81.25	70.83	82.63	58.61

Global Presence

A trusted partner to our clients, we provide the innovative technical expertise that creates, enhances, and sustains the world's built, natural and social environments.

Our collaborative approach of working globally and delivering locally is the main driver of our ability to provide our clients world class - cost effective services. With our international projects, we are currently present in Asia, Africa and Europe.

Our business in the Middle East remains strong. We have continued to expand and win new projects in Oman. We started penetrating in Iraq and Jordon and Qatar.

In the Commonwealth of Independent States (CIS), during 2011, Monenco has been selected by the World bank and the European Bank for Reconstruction and Development for the engineering and consultancy of interconnection transmission lines as well as studies on the energy loss reduction.

Our markets in Africa are performing well, particularly in hydro, mining and transmission line. Potential opportunities, strong, qualified local partners and activity diversification of Monenco play to our "sweet spot."

We have managed our business carefully throughout the economic downturn, as demonstrated by our ongoing margin improvements, which we believe will position Monenco for continued profitable growth in the years to come.

We will be competing in more markets and against more players. In order to stay in the lead, we must continue to enhance our global execution and be selective about the projects we choose. We must develop and leverage our talent base around the world to help our clients reach their goals. We must also work with and empower our network of resources – putting local face on our global presence.

Monenco Iran in the Middle East

Pooya Ansarimehr

MCE Oman - Managing Director
Ansarimehr.Pooya@monenco.com

Obtained his B.Sc. and M.Sc. both in Electrical Engineering from Sharif University of Technology in 1994 & 1998 respectively. In 1997 he started to work in Niroo Research Institute and was assigned as Head of Power System Operation Department for 9 years. It was 2007 when he joined Monenco Iran as Planning and System Deputy and in 2010 he was nominated to be Managing Director of MCE Oman.

Website: oman.monenco.com

Power sector in the Middle East has been growing strong for the past few years. Oman represents one of the fastest growing power sectors in the Middle East. Rapidly growing economy, industrialization and increasing residential demand have fueled growth of the power sector, and thus, despite economic slowdown in the world, the electricity production and consumption in Oman experiences double-digit growth.

Monenco Consulting Engineers (MCE), had significant growth and diversification while being recognized as the consultant of choice. MCE aim is to provide innovative ideas fostered by cost-effective solutions tailored to the specific needs of our clients across the Sultanate of Oman. Also as a key hub in the Middle East, MCE Plan for 2012 is to further expand its activities in Oman while penetrating other GCC countries. Along with our diversification strategy, we succeeded to enter into other areas of our core businesses. Some of our projects in 2011 are as follows:

Power Generation

- Technical Advisory Services for Implementation of Barka III & Sohar II Independent Power Projects
- Feasibility Study of Combined Cycle Power Plant in Qeshm Island (partly financed by Oman Refinery)
- Providing Design Review and Supervision Services for Qarn Alam Power Plant - Phase 3

Substation and Transmission Line

- Consultancy Services for Supervision of Replacing 132 kV Over Head Line (OHL) by undergrounding Cables between Maweleh and Seeb Gss
- Consultancy Services for Madinat Barka 132/33kV Grid Station and Associated LILO
- Consultancy Services for Al Khadra 132/33kV Grid Station and Associated LILO
- Consultancy Services for Madinat Nizwa 132/33kV Grid Station and Associated 132 kV OHL
- Consultancy Services for Al Kamil & Al Wafi 132/33kV Grid Station and Associated 132 kV OHL
- Consultancy Services for Modification of JBBA 132/33kV Grid Station
- Consultancy Services for Extension of Nizwa 132/33kV Grid Station
- Consultancy Services for 33kV 2x20 MVA Airport Height 04 Primary Substation
- Consultancy Services for 33kV 3x20 MVA Al Khuwair North 01 (Diplomatic City) Primary Substation
- Consultancy Services for Replacement of 33kV Rusayl Industrial Estate Switchgear

Dispatching

- Supervision on SCADA/DMS Phase 3 Project of Majan Electricity Co. (MJEC)
- System Study and Power Quality Assessment
- System Study for Power Quality Assessment of the Modern Steel Mills

MCE Certificates

- Oman Ministry of Commerce and Industry
- Oman Chamber of Commerce and Industry
- Oman Tender Board
- Oman Ministry of Defense

Siamak Khalaj

MEL Nigeria - Managing Director
Khalaj.Siamak@monenco.com

Obtained his B.Sc. in Electrical Engineering in 1997 from Iran University of Science and Technology. Since then he joined Monenco Iran and has been working for the company for 15 years. He is the head of Power Transmission Group and in 2010 was promoted to be the Managing Director of MEL Nigeria.

Monenco Engineering began the operation in 2010 as a regional hub in West Africa. Combining international expertise with local experiences was resulted the establishment of a strong consulting firm in the region.

At MEL, we focused on delivering life of asset support to our clients assets and deploy both international and local expertise in order to benefit our clients.We respond quickly to new development opportunities and will continue to pursue opportunities to expand our experience in Africa.

In order to respond to the growing business market in East Africa region and in line with our diversification policies, our regional office shall commence its operation in the near future.
We have participated in several international tender opportunities as follow:
- Consultancy Services and Engineering Design for 765kv Super Grid project in association with Monenco Iran Consulting Engineers, AF-Consult and Colenco Consulting in Nigeria.
- Expression of Interest for Rusumo Falls Hydroelectric Project under NELSAP scheme in Rwanda.

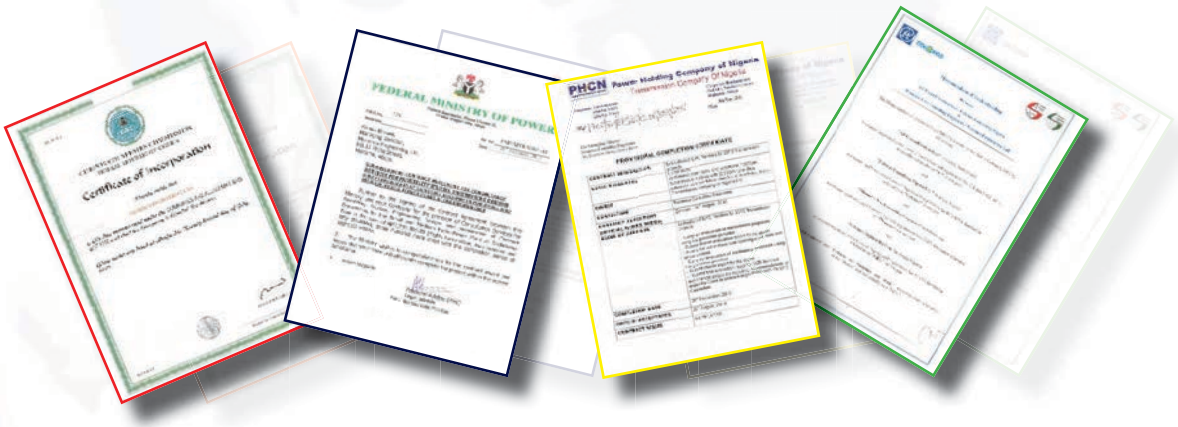
Further to our tender participation, following projects were awarded as result of technical qualification and our professional competency.

- Consultancy services for feasibility study, engineering and design for 34MW Dadinkowa Hydro dam Project in Nigeria.
- Project Management and Site Supervision for Transmission project in Nigeria.
- EPC Bid evaluation for Transmission and Substation projects for PHCN in Nigeria.

We were also honored by our clients letters of satisfaction for the performing of the Services for Kabompo Gorge Hydro power plant in Zambia and EPC Bid evaluation in Nigeria.

Besides, extending our services and improving the quality, we aim to maintain clients satisfactions in 2012 and structure a constructive relationship with our esteemed clients.

Here are some of ongoing Projects in Africa:
- Consultancy Services for Feasibility Studies, Engineering, Design and Preparation of Contract Documents for Small and Medium Hydropower Plant at Dadinkowa Dam (Nigeria)
- Consultancy services for kabompo Gorge Hydro Power Plant (Zambia)



Elham Sadeghian
Sadeghian.Elham@monenco.com

Obtained her B.Sc. in 1995 from Bahonar University and her M.Sc. in 1995 from Khaje Nasir Tusi University in Electrical Engineering. From 1999 to 2007 she worked in Niroo Research Institute, from 2006 she was there as the Head of Electric Department. Since 2007 she has been working in Monenco Iran and from 2010 was appointed as the Administration Deputy.

Profit (Loss) Statement 20 March 2012

	1389 (at 20 March 2011) Rials	1390 (at 20 March 2012) Rials
Services Income	400,113,347,248	307,457,896,086
Services Finished Price	-267,768,520,840	-236,488,015,770
Gross Profit	132,344,826,408	70,969,880,316
General, Administrative & Financial Costs	*-41,622,050,021*	*-33,934,556,756*
Other Operating Income (net)	129,018,000	100,000,000
	-41,493,032,021	-33,834,556,756
Operating Profit	90,851,794,387	37,135,323,560
Other non-operating income	4,524,892,071	68,540,831,642
Profit Before Tax	95,376,686,458	105,676,155,202
Tax on Income	-22,709,551,457	-7,128,057,176
Net Profit	**72,667,135,001**	**98,548,098,026**

Accumulated Profit/Loss Account Turnover

Net Profit	72,667,135,001	98,548,098,026
Accumulated Profit in the beginning	65,069,649,764	122,302,513,294
Annual Modifications	-4,676,606,050	-8,218,715,431
Accumulated Profit in the beginning-modified	60,393,043,714	114,083,797,863
Profit Distribution	133,060,178,715	212,631,895,889
Appropriation of Profit:		
Legal Reserve	-3,633,356,750	-6,821,597,622
Dividend	-6,724,308,673	-7,277,908,114
Board Bonus	-399,999,998	-344,444,443
Accumulated Profit in the Final Period	**122,302,513,294**	**198,187,945,710**

Balance Sheet 20 March 2012

Assests	1389/12/29 20-Mar-11 Rial	1390/12/29 20-Mar-12 Rial	Liabilities and Equities	1389/12/29 20-Mar-11 Rial	1390/12/29 20-Mar-12 Rial
Current Assest:			*Accounts Payable:*		
Cash in Bank	4,219,329,254	1,500,000,000	Accounts Payable	9,023,163,282	10,830,213,906
Short- term Investments	3,703,669,068	7,910,000,000	Liabilities	-	-
Accounts Receivale	213,397,004,510	170,000,000,000	Other Accounts Payable	225,085,255,770	143,000,000,000
other Accounts Receivale	43,599,045,003	35,000,000,000	Advanced Received	8,596,166,675	50,000,000,000
Project in progress	2,768,796,577	-	Tax Provision	5,748,735,780	-
Material & Goods Inventory	350,183,122	500,000,000	Dividend Payable	11,643,617,272	19,937,125,192
Prepayments	12,642,245,542	20,000,000,000	Portion of Borrowing	40,812,054,793	93,000,000,000
Total Current Assests	280,680,273,076	234,910,000,000	**Total Current Liabilities**	300,908,993,572	316,767,339,098
Fix Assest:			*Non-Current Liabilities:*		
Tangible Assests	360,514,008,683	757,711,071,505	Long- term Acounts Payable	17,214,673,559	210,000,000,000
Long-term Investments	26,119,518,855	5,000,000,000	Benefits Reservation for Employees Termir	21,122,992,400	30,000,000,000
Intangible Assests	102,113,684	200,000,000	Total Non-Current Liabilities	38,337,665,959	240,000,000,000
Other Assests	6,418,005,695	10,000,000,000			
Total Fix Assests	393,153,646,917	772,911,071,505	**Total Liabilities**	339,246,659,531	556,767,339,098
			Equities:		
			Capital	195,118,180,000	195,118,180,000
			Legal Reserve	9,993,035,256	12,690,220,378
			Other Reserve	7,173,531,912	7,173,531,912
			Accumulated Profit	122,302,513,294	236,071,800,117
			Total Equities	334,587,260,462	451,053,732,407
Total Assests	673,833,919,993	1,007,821,071,505	**Total Liabilities and Equities**	673,833,919,993	1,007,821,071,505

No.12, Attar St., Vali e Asr Ave., North Vanak Sq., Tehran, Iran
Tel:+98 - 21 – 81 96 6055 | Fax:+98 - 21 - 88 77 12 06

info@monenco.com | www.monenco.com