



Messinan Engineering Company
Eng. & Consultancy of Power Plant & Industry

Messinan Engineering Company Resume



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Major Clients

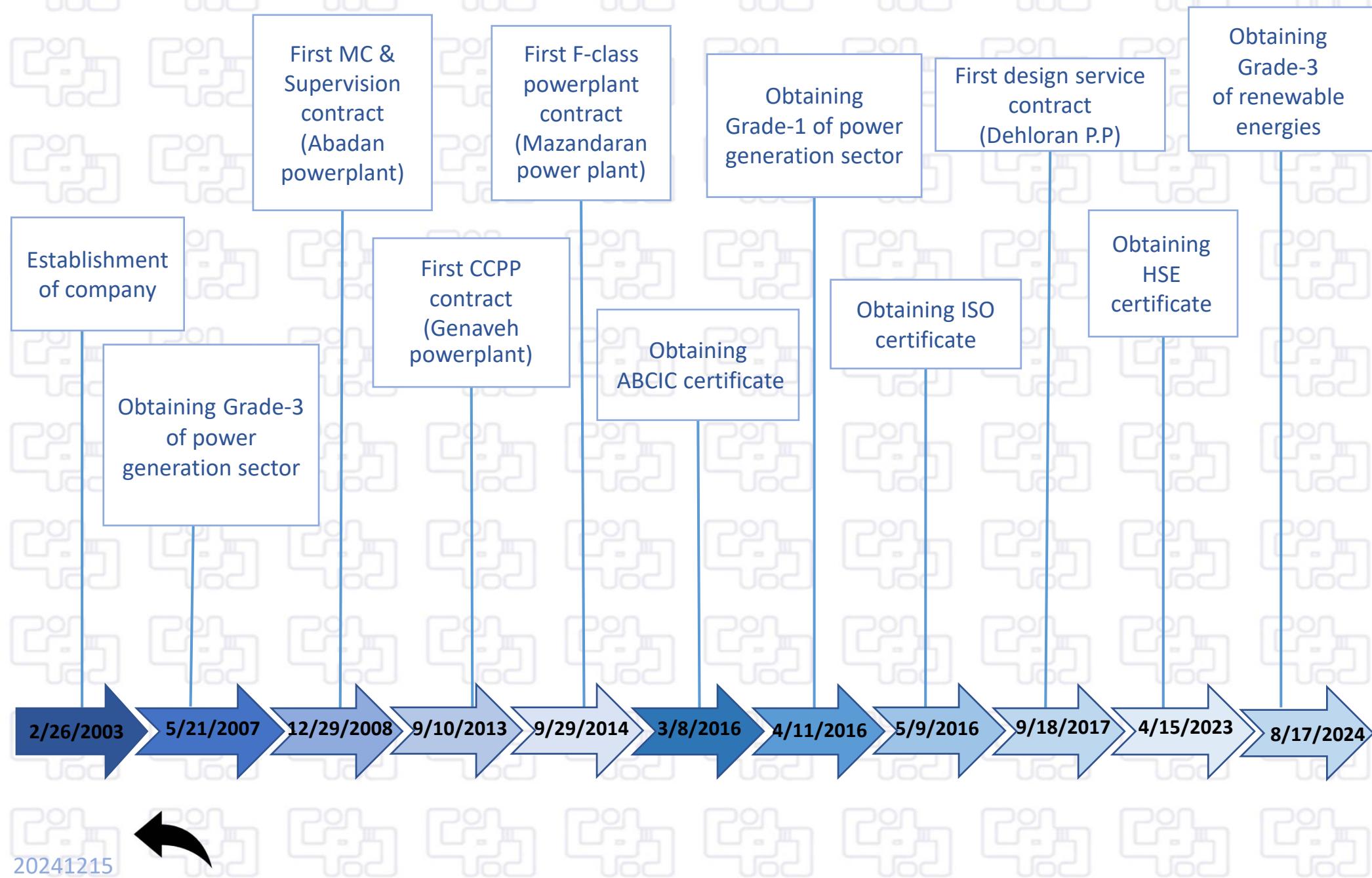


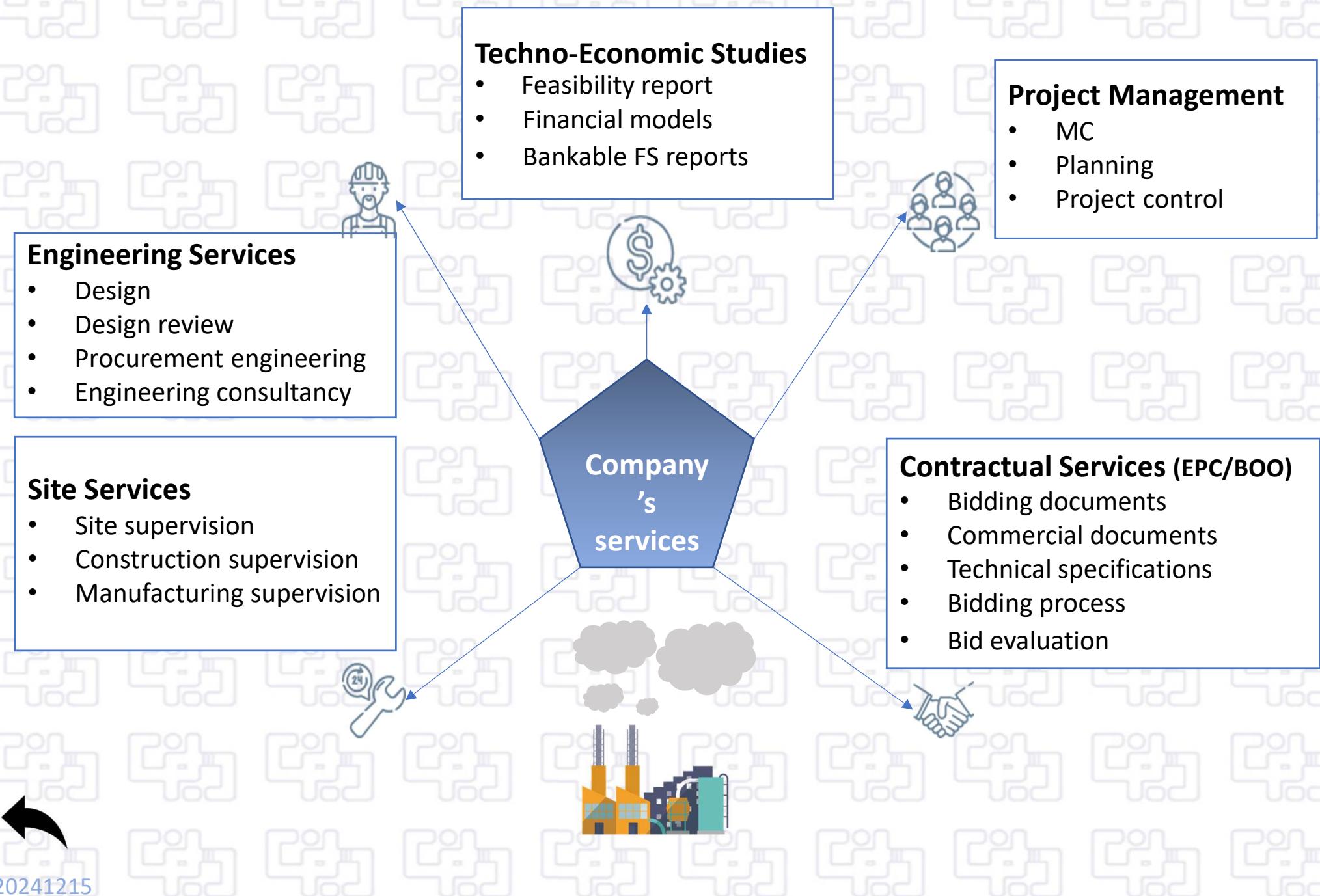
Sister Company



Visions and Missions









Click [here](#) to see some **certificates** of Messinan Company.
Also, some **certificates** are as follows:

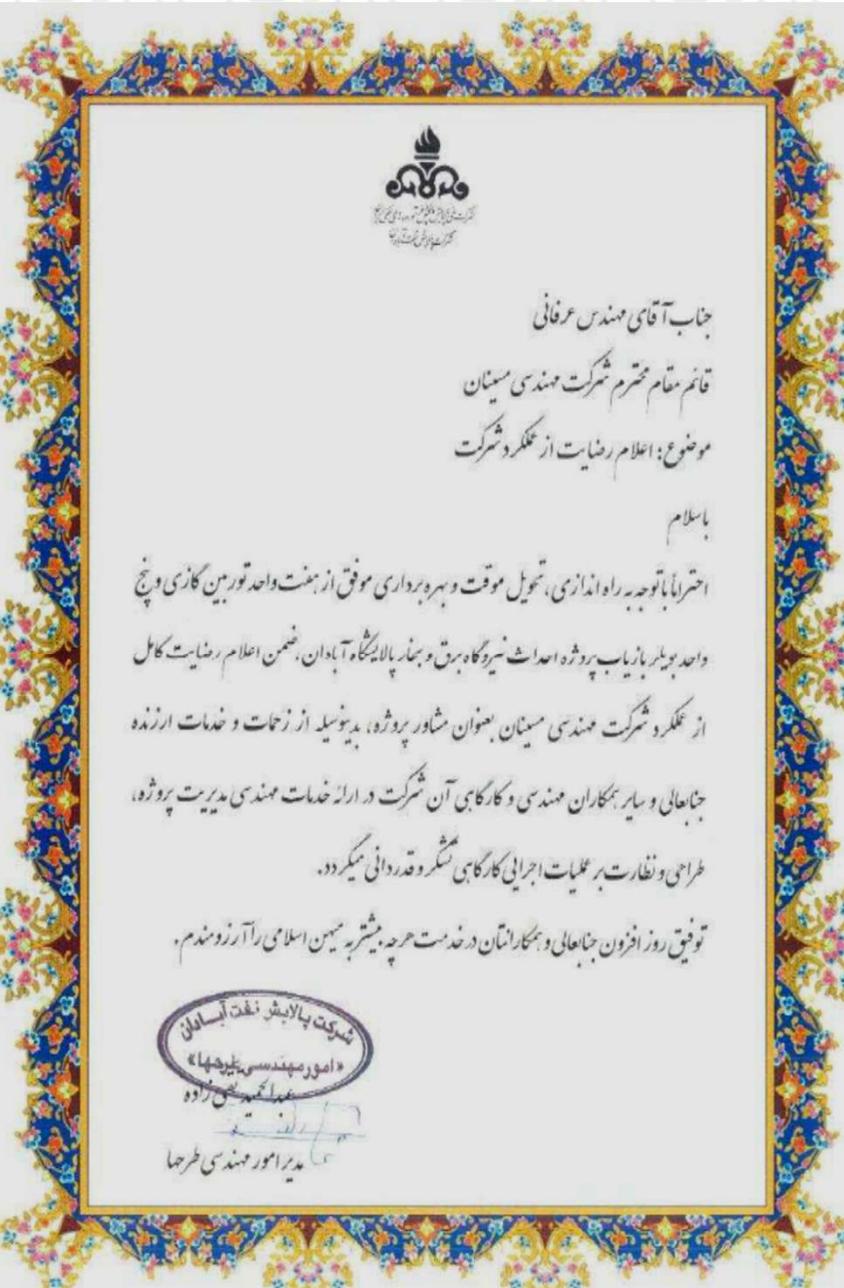
- Grade-1 of power generation from planning and budget organization
- Grade-3 of renewable energy from planning and budget organization
- Certificate from Association of Banking & Credit Investment Consultants (ABCIC)
- Certificate ISO 9001:2015
- HSE certificate



- Heris powerplant testimonial
- Tous powerplant testimonial
- Khuzestan powerplant testimonial
- Abadan powerplant testimonial



Click [here](#) to see some **testimonials** of Messinan Company.
Also, some **testimonials** are as follows:



Testimonial of Khuzestan



سنه تعالیٰ

ماره: ۲۹۷ / ۳۶۱۳
ریخ: ۲۸ / ۰۵ / ۸۶
سنت:

بنا
(سها)

گواہی

سلام،

بدینوسیله گواهی می گردد که شرکت مهندسی مسینان مطالعات تکمیلی فنی - اقتصادی انتخاب ساختنگاه خوزستان را طی قرارداد شماره ۸۵۰۳ به نحو مطلوب انجام داده است.

عزیز الله حاجی ولیئی
مدیر پروژه

IRAN POWER PLANT PROJECTS MANAGEMENT CO
ISO 9001:2000
ISO 14001:2004
OHSAS 18001:1999
DNV CERTIFIED H-GH-01 LET86-05-28

جدول زیر بایستی توسط کارفرمایان قبلی و برای هر قرارداد به طور جداگانه و مجزا تهیه و تکمیل شود

(الف)

					(الف)
نام و نشانی کارفرمای طرف قرارداد	مبلغ قرارداد	مدت	تاریخ شروع کار	شرح قرارداد	
کیلومتر ۴۵ انویان تهران- خم، شهرک صنعتی شمس آباد، بلوار سروستان، بلوار مهستان، خیابان گلسرخ ۲		۲۴ ماه	۹۷/۱۱/۳۰	خدمات مهندسی و طراحی نیروگاه گازی ۱۵۰ مگاواتی NGL3100 (MW25x6) طرح دهلران	

ب) نحوه عملکرد

Testimonial of Dehloran

نام و نشانی کارفرما	مبلغ قرارداد	مدت	تاریخ شروع کار	شرح قرارداد
شرکت تولید برق پرند مینا- تهران- بلوار میرداماد- نرسیده به نفت جنوبی- شماره ۲۸۲		۴۹ ماه	۹۳/۰۸/۰۷	خدمات نظارت عالیه، مروار طراحی و نظارت کارگاهی طرح تبدیل نیروگاه گازی پوند به سیکل ترکیبی- شماره ۳۶۱۷/۱۲۲

ب) نحوه عملکرد

ردیف	شرح معیار	متوسط	خوب	خیلی خوب	عالی	توضیحات
۱	کیفیت کارها				✓	
۲	کفايت کادر فني و کارکنان کلیدي				✓	
۳	انجام به موقع تعهدات				✓	

ب) نحوه عملکرد

ردیف	شرح معیار	ضعیف	متوسط	خوب	خیلی خوب	عالی	توضیحات
۱	کیفیت کالا و کار					✓	
۲	کفايت کادر فني					✓	
۳	زمان بندی پروژه					✓	

جداول فوق توسط اینجانب تکمیل و مندرجات آن مورد تایید می باشد

شماره تلفن: ۰۳۱۵۱۹۰۹

نام و نام خانوادگی: محمد رضا سلیمانی



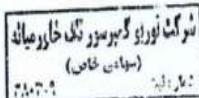
سمت: مدیر پرورش

جداول فوق توسط اینجانب تکمیل و مندرجات آن مورد تایید می باشد

شماره تلفن:

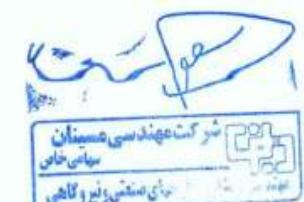
نام و نام خانوادگی: امیر رضا سلیمانی

نام و مهر شرکت یا سازمان اعلام
نظرکننده



Testimonial of Parand

امداد



نام و نشانی کارفرمای	نام و نشانی کارفرمای	مبلغ قرارداد (ریال)	تاریخ شروع کار	مدت قرارداد (ماه)	نام کار (موقعیت قرارداد)
شرکت تولید برق گناوه مینا تهران - بلوار میرداماد - نیش کجور		۹۶ میل	۱۳۸۸/۰۴/۰۹	۱۲ ماه	پرسنل، نظارت عالیه کارگاه نیروگاه سیکل ترکیبی گناوه

۲-ب: تحویه عملکرد شرکت مهندسی میسان

توضیحات	عالی	خوب	خوب	متوسط	ضعیف	عوامل ارزشیابی
- توجه به ازایش کارکرد و میزان تضییع برق	✓					کیفیت ارائه خدمات مهندسی
- توجه به مکررات خارج از این اتفاقات	✓					کیفیت کارگذاری
- رایج است مهندسی از این اتفاقات در پیشگیری از آنها						ارائه خدمات در زمان مناسب
- حضور در میان افراد از این اتفاقات						
- حضور در میان افراد از این اتفاقات						
- مکنتر از این اتفاقات						
- توجه به کاهش از این اتفاقات						
- این اتفاقات از این اتفاقات						

نام کارفرمای: شرکت تولید برق گناوه مینا
مديريت پروژه: مجید محمد کاظمی

محل مدیر و انساید کارفرمای



جدول های مذکور توسط اینجاگذار در تاریخ ۱۳۹۷/۰۴/۰۹ تکمیل و مندرجات آن تایید می گردد.

نام و نام خانوادگی: مجید محمد کاظمی

شماره تلفن: ۰۲۳۱۵۴۳۵

سند: همیم پذیره

اندیش



Testimonial of
Genaveh



تاریخ: ۱۳۹۱/۱۲/۱۹
شماره: ۹۱/۷۰۲
پیوست: ندارد

جناب آقای عرفانی

قائم مقام مدیرعامل شرکت مهندسی مشاور میستان

موضوع: قدردانی (پروژه احداث نیروگاه سیکل ترکیبی لامرد)

با سلام،

احتراماً با عنایت به اینکه آن مشاور محترم در ارائه دقیق و به موقع خدمات مهندسی و مشاوره پروژه

نیروگاه سیکل ترکیبی لامرد (که با فاینانس پیمانکار EPC از کشور چین در دست اقدام می باشد) همواره

کوشش و فعال بوده اید بدبینو سیله از خدمات مطلوب و ارزشمند ارائه شده قدردانی می گردد.

توفيق و سريانندی روزانه از جنابعالی و همکاران را در خدمت هر چه بیشتر به کشور آرزومندم.



Testimonial of
Lamerd

Major Clients



شرکت پالایش نفت آبادان
پکسد سال افتخار در صنعت نفت ایران



Thermal Power Plants Holding Co.
TPPH



شرکت شاه (سایر)
تدبیر



MAPNA GROUP
Dedicated to Excellence



شرکت تولید و مدیریت نیروگاه زاگرس کوثر



گروه صنعتی
پرشین فولاد



شرکت ساختمانی و نصب توربینکمپرسور نفت
OTCC



صنايع کاژه ويسمن
Kajheh Wiseman Industry
(سهامي خاص)



توسعه ساختمان فاخته



صبا
SABA
Saba Power and Energy Group



FATA
Part of Danieli Group

وزارت نیرو
شرکت مدیریت شبکه برق ایران
IGMC
IRAN GRID MANAGEMENT Co.

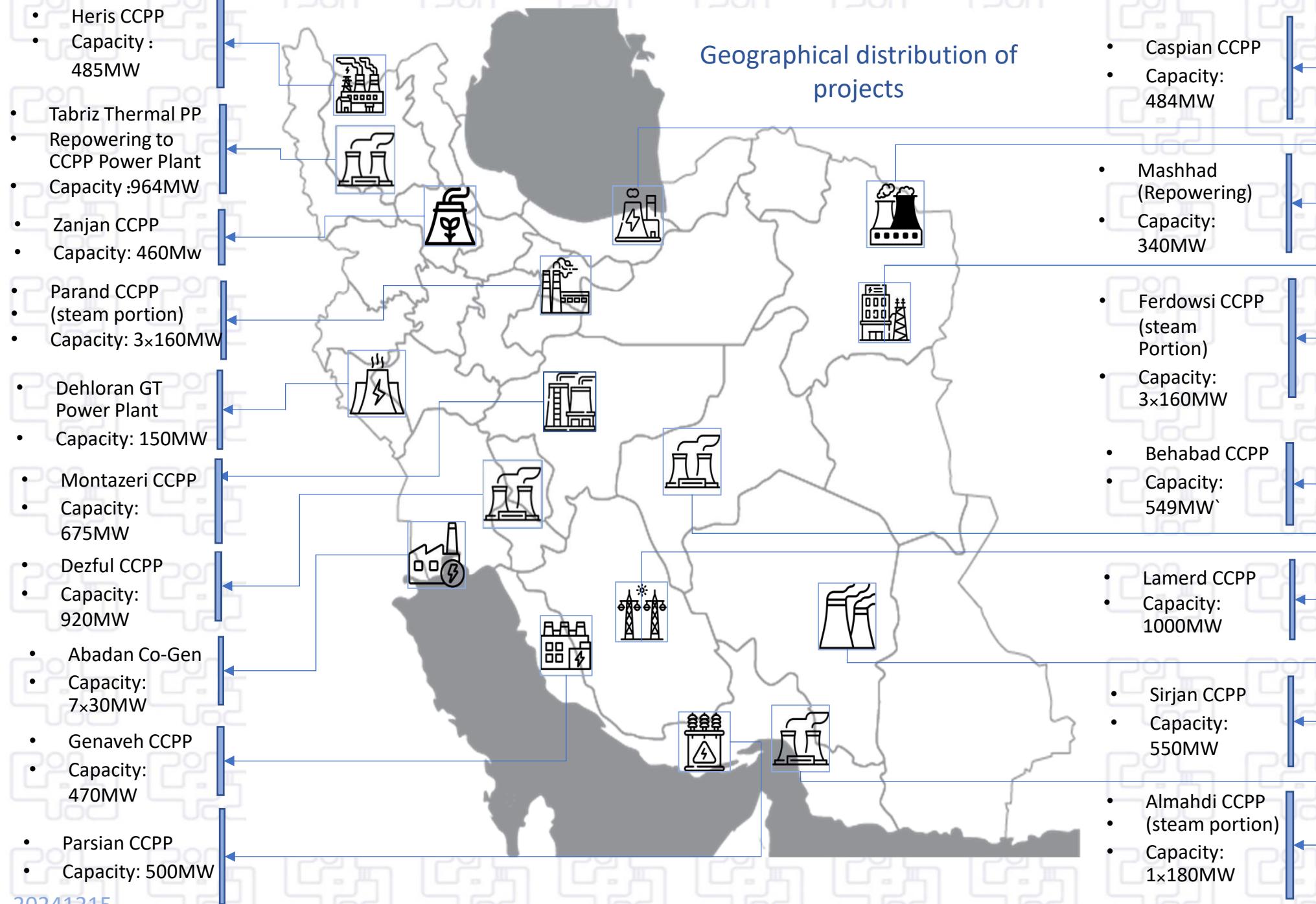


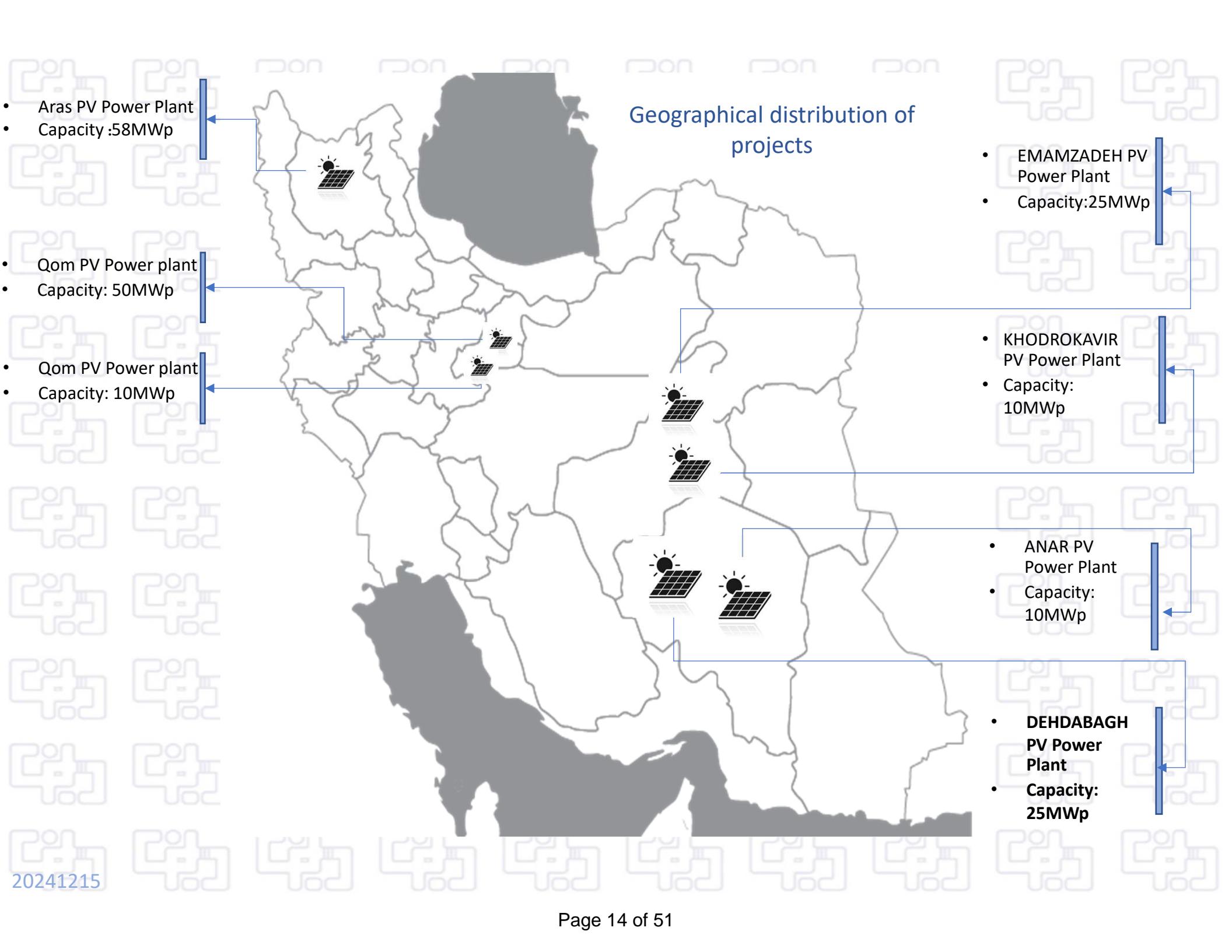
ماهتاب کهنه



ماهتاب کاسپین

Geographical distribution of projects





Heris CCPP

- ✓ Capacity : 485MW
- ✓ Client : Heris Power Plant Company
- ✓ Consultant : Messinan Engineering Company
- ✓ Contractor : TANA Energy Group
- ✓ Start date of consultant's contract : 12/21/2016
- ✓ Status : Completed, under operation
- ✓ Technical Characteristics :
 - Gas turbine : AEN-94.3TA, made by ANSALDO company (AEN)
 - Steam turbine : AENMT 15-41G, triple pressure, made by ANSALDO company
 - HRSG : Reheat type, made by AC boiler company, 110Kg/s
 - Generator : TRY(GTG) - WY217-097(STG)
 - Cooling system : ACC, made by Hamon group

Parand CCPP, steam portion

- ✓ Capacity : 3×160
- ✓ Client : MAPNA Parand Power Generation Company
- ✓ Consultant : Messinan Engineering Company
- ✓ Contractor : MAPNA Combined Cycle Power Plants Construction and Development Company (MAPNA MD2)
- ✓ Start date of consultant's contract : 10/29/2014
- ✓ Status : Completed, under operation
- ✓ Technical Characteristics :
 - Gas turbine : V94.2, made by MAPNA Group (TUGA)
 - Steam turbine : MST-54C, made by MAPNA Group (TUGA)
 - HRSG : Double pressure, made by MAPNA boiler
 - Generator : Y10546(GTG) – TLRI115/41(STG)
 - Cooling system : ACC, made by Aban Air Cooler Company

Dehloran gas turbine Power Plant (NGL3100)

- ✓ Start date of the Design contract : 2/18/2019
- ✓ Status : Completed
- ✓ Technical Characteristics :
 - Gas turbine : 4xSGT-600 turbines, made by SIEMENS
 - 2xIGT-25 turbines, made by OTC
 - Generator : SGT-600 5AE02Z
 - Cooling system : CCCW
- ✓ Capacity : 150MW
- ✓ End-Client : Dehloran Saba Power Plant Company
- ✓ Consultant : Ghods Niroo Engineering Company
- ✓ EPC contractor : OTC Group
- ✓ Engineering contractor : Middle East Turbo-Compressor Tech Co
- ✓ Design engineer : Messinan Engineering Company



Ferdowsi CCPP – steam section

- ✓ Capacity : 3×160
- ✓ Client : MAPNA Tous Power Generation Company
- ✓ Consultant : Messinan Engineering Company
- ✓ Contractor : MAPNA Combined Cycle Power Plants Construction and Development Company (MAPNA MD1)
- ✓ Start date of consultant's contract : 3/21/2017
- ✓ Status : Completed
- ✓ Technical Characteristics :
 - Gas turbine : V94.2
 - Steam turbine : MST-54C, made by MAPNA Group (TUGA)
 - HRSG : Double pressure, made by MAPNA Boiler
 - Generator : TLRI115/41
 - Cooling system : ACC, made by Aban Air Cooler Company

Caspian CCPP

- ✓ Capacity : 484MW
- ✓ Client : Mahtaab Caspian Company
- ✓ Consultant: Messinan Engineering Company
- ✓ Equipment supplier : ANSALDO Energia company
- ✓ Start date of consultant's contract : 12/24/2014
- ✓ Status : Completed
- ✓ Technical Characteristics :
 - Gas turbine : AE94.3A, made by ANSALDO
 - Steam turbine : AT15SS, made by ANSALDO
 - HRSG : Triple pressure, made by BHI
 - Generator : THR-L63
 - Cooling system : ACC, made by INNOSPIN



Abadan Co-Generation Power Plant

- ✓ Power generation capacity : $7 \times 30\text{MW}$
- ✓ Steam generation capacity : $5 \times 48.5\text{ton/hr}$
- ✓ Client : Abadan Oil Refining Company
- ✓ Consultant : Messinan Engineering Company
- ✓ Contractor : Farab company
- ✓ Start date of consultant's contract : 5/18/2008
- ✓ Status : Completed, under operation
- ✓ Technical Characteristics :
 - Gas turbine : H25, made by Hitachi company
 - Steam turbine : N/A
 - HRSG : Double pressure, made by SEC company
 - Generator : DG185ZP-04 , made by Hitachi Co.
 - Cooling system : CCCW

Mashhad CCPP(regeneration)

- ✓ Capacity : 340MW
- ✓ Client : Ibn-e-yamin Power Generation Company
- ✓ Basic design engineer : EMC GmbH company
- ✓ Detailed design engineer : Messinan Engineering company
- ✓ Contractor : Isfahan power repair company
- ✓ Start date of consultant's contract : 10/2/2012
- ✓ Status : Suspended
- ✓ Technical Characteristics :
 - Gas turbine : 2 GTs with capacity of 79MW, made by BBC company
 - Steam turbine : 2 STs with capacity of 60MW, made by ESKODA company
 - HRSG : Made by TLMACH
 - Generator : ESKODA(STG) – WG19L080LL5(GTG)
 - Cooling system : Wet cooling system

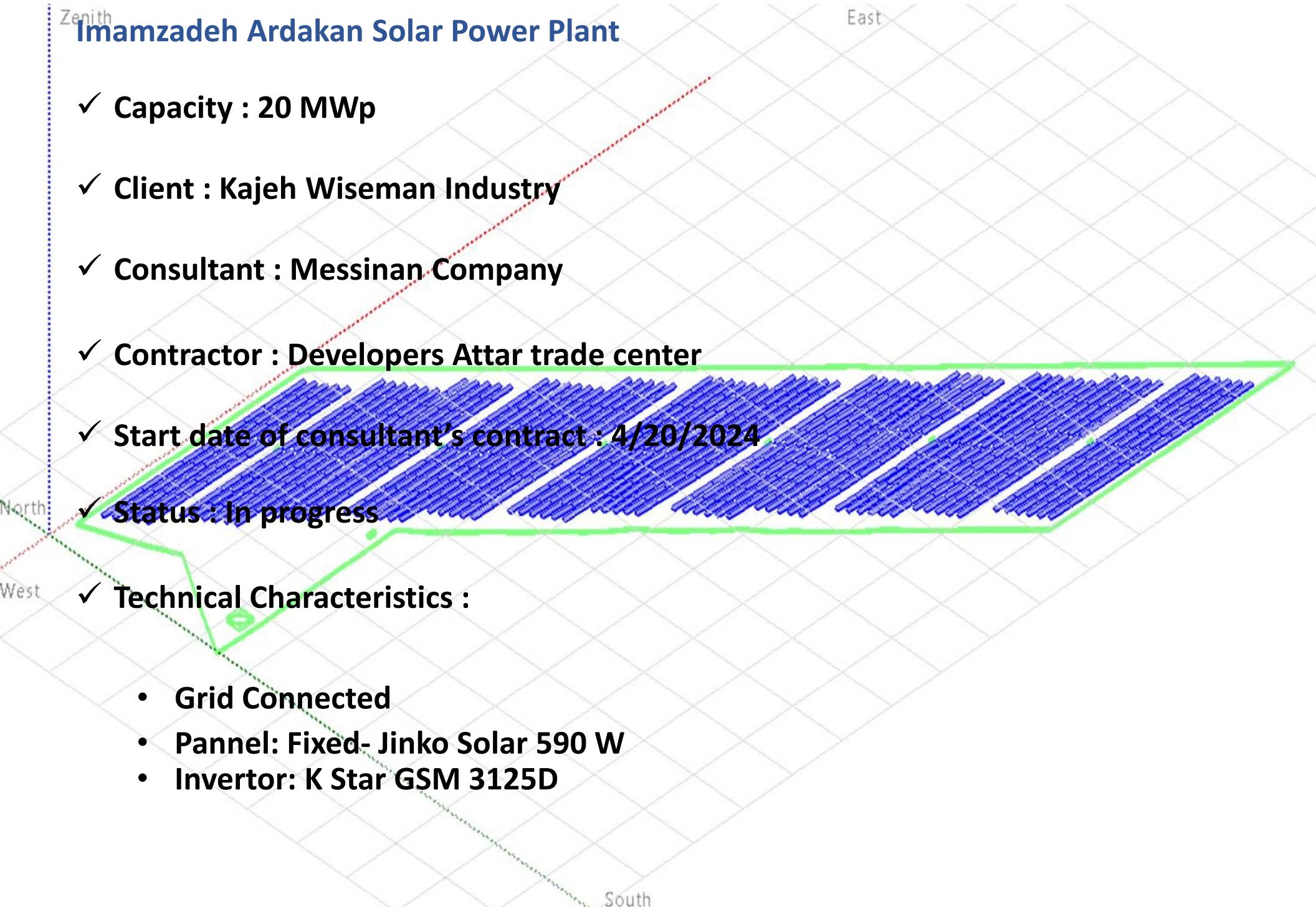
- ✓ Capacity : 549MW
- ✓ Client : MAPNA Behabad Power Generation Company
- ✓ Consultant : Messinan Company
- ✓ Contractor : MAPNA Combined Cycle Power Plants Construction and Development Company (MAPNA MD2)
- ✓ Start date of consultant's contract : 5/20/2023
- ✓ Status : In progress
- ✓ Technical Characteristics :
 - Gas turbines : MGT-70(3) , made by MAPNA Group (TUGA)
 - Steam turbine : MST-54C, made by MAPNA(TUGA)
 - HRSG : Double pressure, made by MAPNA boiler
 - Generator : MGS58-SA2(STG) – MGG58-SA2(GTG)
 - Cooling system : ACC

- ✓ Capacity : 29MW
- ✓ Client : Fakhteh Construction Development
- ✓ Consultant : Messinan Company
- ✓ Contractor : Arsis paydar Energy
- ✓ Start date of consultant's contract : 3/20/2024
- ✓ Status : Completed
- ✓ Technical Characteristics :
 - Gas turbines : GE Frame 6B, made by European Gas Turbines (EGT)
 - Generator : AEG



Almahdi, steam portion

- ✓ Capacity 546 MW
- ✓ Client : MAPNA Group
- ✓ Consultant : Messinan Engineering Company
- ✓ Contractor : MAPNA Combined Cycle Power Plants Construction and Development Company (MAPNA MD3)
- ✓ Status : Started
- ✓ Technical Characteristics :
 - Gas turbine : MGT-70, made by MAPNA Group (TUGA)
 - Steam turbine : MIST-60, made by MAPNA Group (TUGA)
 - HRSG : Triple pressure, made by MAPNA boiler
 - Cooling system : ACC



- ✓ Capacity : 20 MWp
- ✓ Client : Kajeh Wiseman Industry
- ✓ Consultant : Messinan Company
- ✓ Contractor : Developers Attar trade center
- ✓ Start date of consultant's contract : 4/20/2024
- ✓ Status : In progress
- ✓ Technical Characteristics :
 - Grid Connected
 - Panel: Fixed- Jinko Solar 590 W
 - Invertor: K Star GSM 3125D

Shahrak Khodro Kavir Solar Power Plant

- ✓ Capacity : 10 MWp
- ✓ Client : Kajeh Wiseman Industry
- ✓ Consultant : Messinan Company
- ✓ Contractor : Developers Attar trade center
- ✓ Start date of consultant's contract : 4/20/2024
- ✓ Status : In progress
- ✓ Technical Characteristics :
 - Grid Connected
 - Panel: Fixed- Jinko Solar 590 W
 - Invertor: K Star GSM 3125D

Aras Solar Power Plant

- ✓ Capacity : 58 MWp
- ✓ Client : Parto Energy Aras
- ✓ Consultant : Messinan Company
- ✓ Contractor : tender
- ✓ Status : started
- ✓ Technical Characteristics :
 - Grid Connected
 - Panel: AE Solar model: 570W-ME132BDS
 - Invertor: KSTAK model:GSM 6250D-MV37

Qom Solar Power Plant

- ✓ Capacity : 50 MWp
- ✓ Client : Aalaa ofogh
- ✓ Consultant : Messinan Company
- ✓ Contractor : MAPNA Combined Cycle Power Plants
- ✓ Construction and Development Company (MAPNA MD3)
- ✓ Status : started

DEHDABAGH Solar Power Plant

- ✓ Capacity : 25 MWp
- ✓ Client : Tabesh Khorshid Tir
- ✓ Consultant : Messinan Company
- ✓ Contractor :
- ✓ Start date of consultant's contract :
- ✓ Status : Tender
- ✓ Technical Characteristics :
 - Grid Connected

ANAR Solar Power Plant

- ✓ Capacity : 10 MWp
- ✓ Client : Kajeh Wiseman Industry
- ✓ Consultant : Messinan Company
- ✓ Contractor :
- ✓ Start date of consultant's contract :
- ✓ Status : Tender
- ✓ Technical Characteristics :
 - Grid Connected

Qom Solar Power Plant

- ✓ Capacity : 10 MWp
- ✓ Client : Kajeh Wiseman Industry
- ✓ Consultant : Messinan Company
- ✓ Contractor : Tender
- ✓ Status : Tender
- ✓ Technical Characteristics :
 - Grid Connected

Substation & Transmission activities in brief:

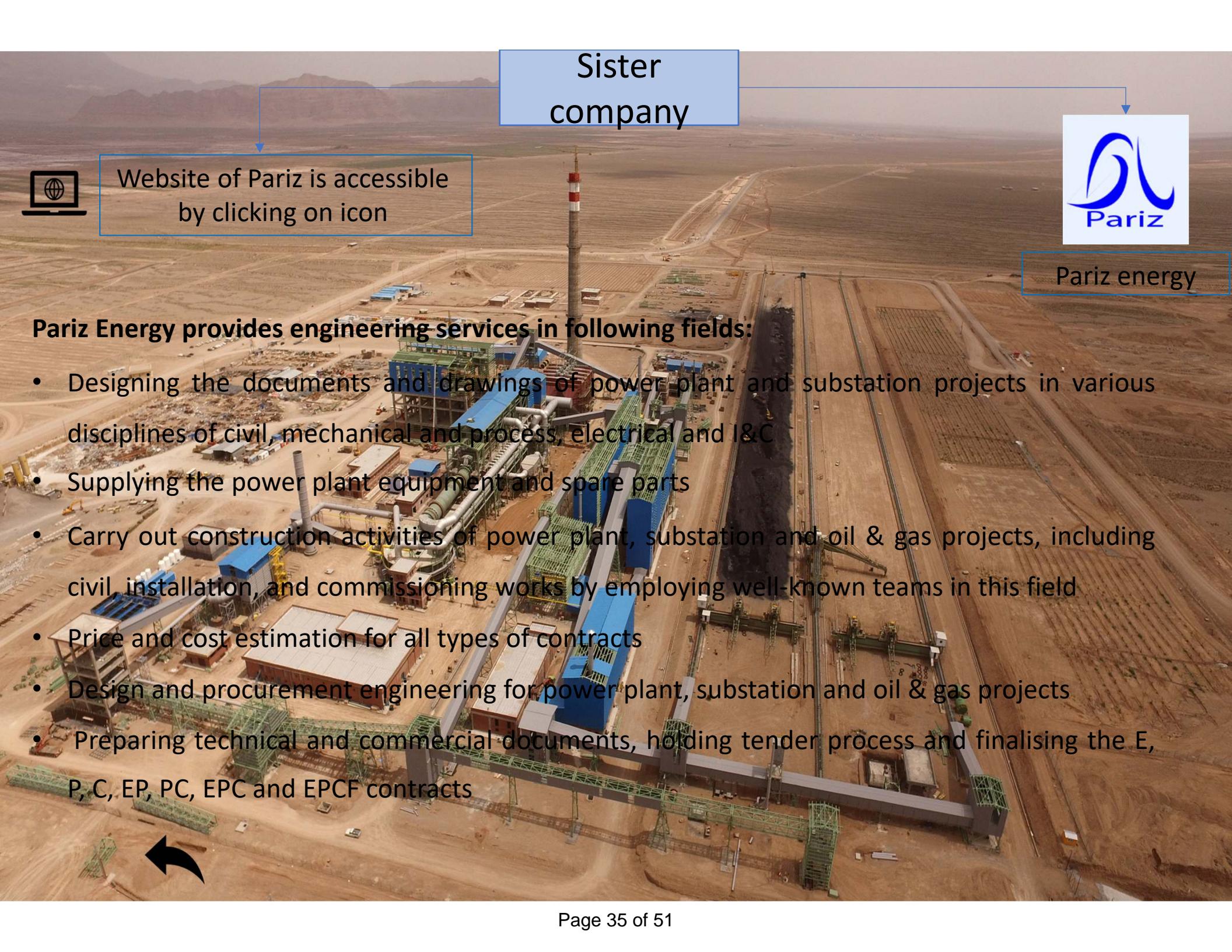
- Design services for Khonj 230kV substation
- Design services for 33kV GIS substation for Dehloran Power Plant
- Design review services for Heris F class CCPP 230kV substation
- Design review services for NGL3100 Power Plant 230kV substation
- Engineering services for preparation of "Electrical Energy Transmission" typical contract
- Design services for 230 KV substation of NAMA CCPP
- Engineering services, Project Management, Supervision and Site Supervision for Dezful CCPP 400 KV substation
- Engineering services, Project Management, Supervision and Site Supervision for Parand CCPP (steam portion) 400 KV substation
- Engineering services for Taban, Ferdosi, Tehran, Takestan and Sirjan (Samangan) BOO CCPs 400 KV substations

Substation & Transmission activities in brief (Cont.):

- Basic and Detail Engineering for High & Medium Voltage Substations, Power Distribution and Electrical Installation for Khuzestan Steel Company
- Basic and Detail Engineering Emergency power distribution and interruptible power supply system for computer department Khuzestan Steel Company
- Basic and Detail Engineering for Power increase and expansion of 33kV distribution network for Arc furnaces and utilities of Khuzestan steel company.
- Basic and Detail Engineering for Iron Ore Concentrate Reduction plant substations, extension and renovation at Khuzestan steel company.
- 230kV & 33kV Outdoor Bays Layout and cabling, control, protection and monitoring system, Telecommunication & Fire Alarm systems, Heat Tracing, Electrical Layouts and Cabling System for Electric Arc and Ladle furnaces, Electrical Systems for Subway stations, Electrical Layouts and Diagrams and protection for Mines Mobile substations, Telecommunication & Fire Alarm systems, Cathodic protection system, Electrical heat tracing, lighting and earthing system for Khuzestan steel company, JAJARM Aluminum plant, 28 Subway stations in TEHRAN, NGL-3100 Plant, IRAN-LNG Plant and ISFAHAN Refinery.

Substation & Transmission activities in brief (Cont.):

- Engineering services, Project Management, Supervision and Site Supervision for Genaveh BOO CCPP 230 KV substation
- Engineering services Project Management, Supervision and Site Supervision for Abadan Refinery's 3rd Co-Generation power plant 33 & 132 KV GIS type substation
- Engineering services for Abhar BOO CCPP 230 KV substation
- Electrical and I&C design for the Common BOP of Esfahan2 CCPP, Damavand CCPP and Dalahoo CCPP
- Engineering services for Lamard F Class BOO CCPP 400 KV substation
- Electrical and I&C design for Oman Co-Generation Power Plant
- Electrical and I&C design for the Lavan Refinery Revamping and Upgrading Project
- Designing of SCADA system & electrical design for Tous, Assalouye, Ardebil, South Pars, Yazd, Tishreen, Kashan, Aliabad, Qaen, Khorramshahr, Chabahar, Fajr, Iran LNG, Paresar, Kermanshah, Zanjan 3, Ardebil's Extension, Orumieh's Extension, Eshahan2 and Semnan POWER PLANTS.



Sister
company



Website of Pariz is accessible
by clicking on icon



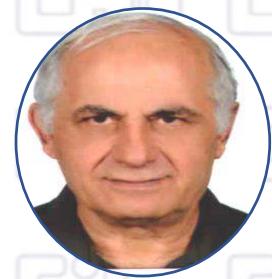
Pariz energy

Pariz Energy provides engineering services in following fields:

- Designing the documents and drawings of power plant and substation projects in various disciplines of civil, mechanical and process, electrical and I&C
- Supplying the power plant equipment and spare parts
- Carry out construction activities of power plant, substation and oil & gas projects, including civil, installation, and commissioning works by employing well-known teams in this field
- Price and cost estimation for all types of contracts
- Design and procurement engineering for power plant, substation and oil & gas projects
- Preparing technical and commercial documents, holding tender process and finalising the E, P, C, EP, PC, EPC and EPCF contracts



Board Members of Messinan



Name : Yadollah Kazemi

Post : Chairman of the Board

Last degree of education : MSc. of electrical engineering

Experiences : Project manager of BOO projects, technical manager, quality control manager, power plant project manager



Name : Mohsen Erfani

Post : CEO

Last degree of education : BSc. of Industrial engineering

Experiences : Manager of power plant projects, projects executive director, contract (technical and commercial) manager of EPC and EPCF projects,



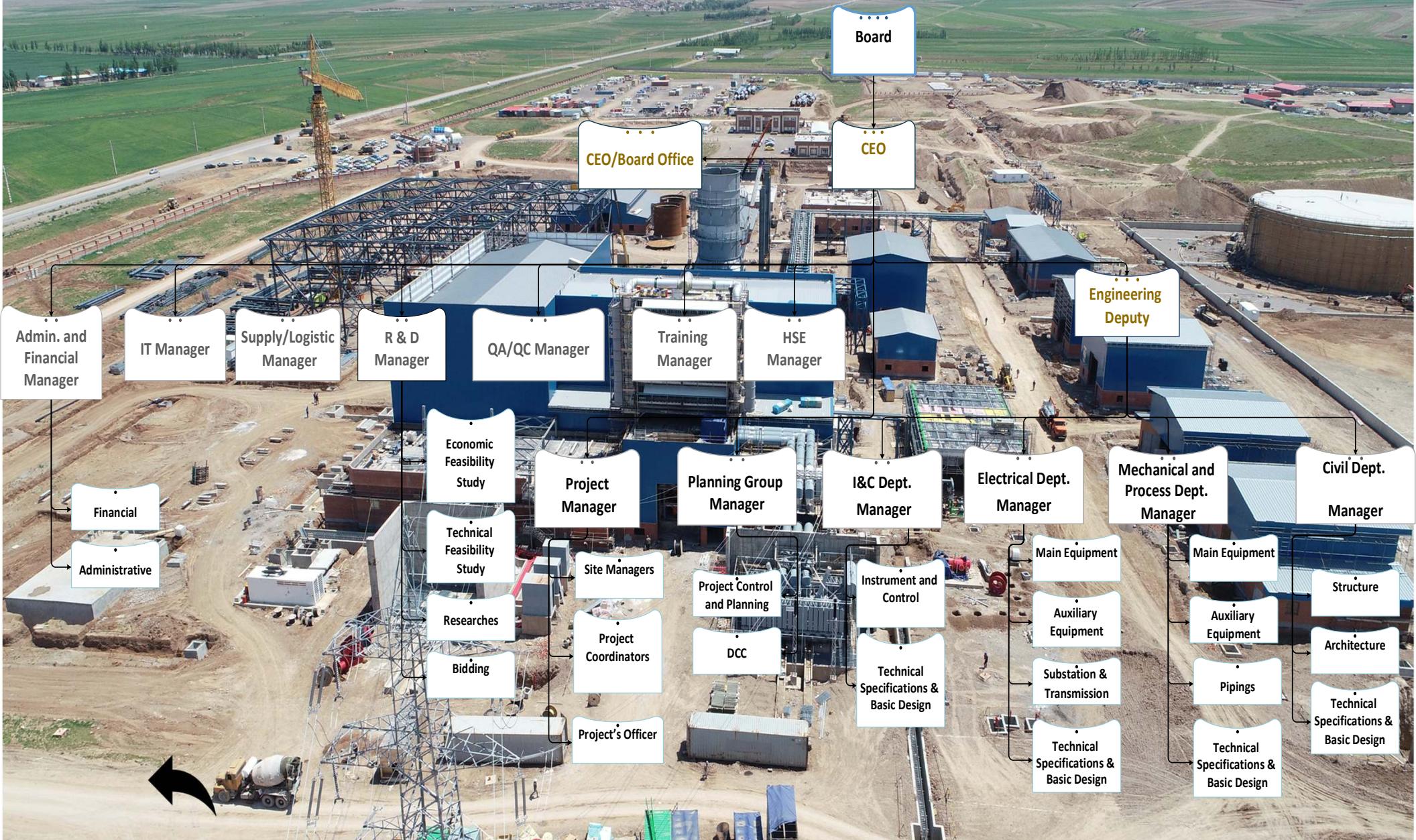
Name : Fardin Pirayesh

Post : Member of the Board

Last degree of education : BSc. of electrical engineering

Experiences : Projects site manager, engineering manager, power plant projects manager,

Organization chart



Visions and Missions



- 1 Development of management contract in power plant sector
- 2 Development of engineering and consulting services in construction and O&M of powerplants
- 3 Development of target markets for power plant investors in the industry and mining sector and a more active presence in the 10GW CCPP construction plan (by industry and mining)
- 4 Development of engineering and consulting services for production and optimization fields of water consumption, especially in power plants
- 5 Development of pertinent services for saving/ optimizing and managing of energy consumption in industries
- 6 Development of the market for renewable technologies



7

8

9

10

11

12

Evaluation, modification and improvement of existing organizational methods and procedures

Hiring and training professional human resources for succession planning

Providing the necessary platforms to create motivation, dynamism and creativity in employees

Evaluation and promotion of customers' satisfaction

Implementation of required training, including technical, managerial and the like

Expanding and communicating the knowledge of employees to each other



1	Preparation and finalizing of Commercial and Technical Documents for EPC Projects with Foreign EPC Contractors		
Row	Project Title	Client	Status
1-1	Engineering services for <u>Isfahan</u> 910 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	East Isfahan Power Generation Co.	Completed
1-2	Engineering services for <u>Dezful</u> 920 MW BOO <u>F Class</u> CCPP with <u>METKA Group</u> (Greece)	Ghadir Energy Investment Company	Completed
1-3	Engineering services for <u>Qom</u> 910 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	Tadbir Energy Development Co.	Completed
1-4	Engineering services for <u>Omidiyeh</u> 500 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	Honam Jam Co.	Completed
1-5	Engineering services for <u>12 F Class Single Shaft CCPP</u> (Italy)	Arian Mahtaab Gostar Co.	Completed
1-6	Engineering services for <u>Lamerd</u> 913 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	Ghadir Energy Investment Company	Completed
1-7	Engineering services for <u>Mazandaran II</u> BOO <u>F Class</u> CCPP with <u>ANSALDO Energia</u> (Italy)	Arian Mahtaab Gostar Co.	Completed
1-8	Engineering services for <u>Qazvin</u> BOO CCPP <u>CNEEC</u> (China)	Power Control Eng. Company	Completed
1-9	Engineering services for <u>Zanjan-1</u> BOO CCPP with <u>Qingdao Jieneng Steam Turbine Group</u> (China)	Power Control Eng. Company	Completed
1-10	Engineering services for <u>Khorramshahr</u> CCPP with <u>CMEC</u> (China)	Saba Power & Electricity Industries	Completed
1-11	Engineering services for <u>Tehran</u> 500 MW BOO CCPP with <u>CAIEC/CMIIC</u> (China)	Shahed Power Generation Company	Completed
1-12	Engineering services for <u>Hormozgan</u> 500 MW BOO CCPP with <u>CMEC</u> (China) / <u>SINOCONST</u> (China)	Azarab Industries Company	Completed
1-13	Engineering services for <u>Lamerd</u> 1000 MW BOO CCPP with <u>CNEEC</u> (China)	Ghadir Energy Investment Company	Completed
1-14	Engineering services for <u>Lowshan</u> 500 MW BOO CCPP with <u>CAIEC/CMIIC/ TANA</u> (China-Iran)	Raad Energy Aria/Ghadir Energy Investment Company	Completed
1-15	Engineering services for <u>Takestan</u> BOO CCPP with Two Chinese Companies	Takestan Industrial Systems Co.	Completed

1	Preparation and finalizing of Commercial and Technical Documents for EPC Projects with Foreign EPC Contractors		
Row	Project Title	Client	Status
1-1	Engineering services for <u>Isfahan</u> 910 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	East Isfahan Power Generation Co.	Completed
1-2	Engineering services for <u>Dezful</u> 920 MW BOO <u>F Class</u> CCPP with <u>METKA Group</u> (Greece)	Ghadir Energy Investment Company	Completed
1-3	Engineering services for <u>Qom</u> 910 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	Tadbir Energy Development Co.	Completed
1-4	Engineering services for <u>Omidiyeh</u> 500 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	Honam Jam Co.	Completed
1-5	Engineering services for <u>12 F Class Single Shaft CCPP</u> (Italy)	Arian Mahtaab Gostar Co.	Completed
1-6	Engineering services for <u>Lamerd</u> 913 MW BOO <u>F Class</u> CCPP with <u>Shanghai Electric Company</u> (China)	Ghadir Energy Investment Company	Completed
1-7	Engineering services for <u>Mazandaran II</u> BOO <u>F Class</u> CCPP with <u>ANSALDO Energia</u> (Italy)	Arian Mahtaab Gostar Co.	Completed
1-8	Engineering services for <u>Qazvin</u> BOO CCPP <u>CNEEC</u> (China)	Power Control Eng. Company	Completed
1-9	Engineering services for <u>Zanjan-1</u> BOO CCPP with <u>Qingdao Jieneng Steam Turbine Group</u> (China)	Power Control Eng. Company	Completed
1-10	Engineering services for <u>Khorramshahr</u> CCPP with <u>CMEC</u> (China)	Saba Power & Electricity Industries	Completed
1-11	Engineering services for <u>Tehran</u> 500 MW BOO CCPP with <u>CAIEC/CMIIC</u> (China)	Shahed Power Generation Company	Completed
1-12	Engineering services for <u>Hormozgan</u> 500 MW BOO CCPP with <u>CMEC</u> (China) / <u>SINOCONST</u> (China)	Azarab Industries Company	Completed
1-13	Engineering services for <u>Lamerd</u> 1000 MW BOO CCPP with <u>CNEEC</u> (China)	Ghadir Energy Investment Company	Completed
1-14	Engineering services for <u>Lowshan</u> 500 MW BOO CCPP with <u>CAIEC/CMIIC/ TANA</u> (China-Iran)	Raad Energy Aria/Ghadir Energy Investment Company	Completed
1-15	Engineering services for <u>Takestan</u> BOO CCPP with Two Chinese Companies	Takestan Industrial Systems Co.	Completed

2	Preparation and finalizing of Commercial and Technical Documents for EPC Projects with MAPNA or other local EPC Contractors		
Row	Project Title	Client	Status
2-1	Engineering services, Project Management, Supervision and Site Supervision for Shahid Montazeri CCPP	Persian Steel Company	Completed
2-2	Engineering services for Dezful F-Class CCPP with Farab as EPC Contractor	Ghadir Energy Investment Company	Completed
2-3	Engineering services for Mazandaran F-Class CCPP with ATA Consortium as EPC Contractor	Ghadir Energy Investment Company	Completed
2-4	Engineering services for Genaveh CCPP and related 230 KV substation with Mapna	MAPNA Genaveh Power Generation Co.	Completed
2-5	Engineering services for Qazvin CCPP and related 400 KV substation with Mapna	Power Control Eng. Company	Completed
2-6	Engineering services for Zanjan CCPP and related 400 KV substation with Mapna	Power Control Eng. Company	Completed
2-7	Engineering services for Tehran CCPP and related 400 KV substation with Mapna	Shahed Power Generation Co.	Completed
2-8	Engineering services for Khomein CCPP and related 400 KV substation with Mapna	Shahed Power Generation Co.	Completed
2-9	Engineering services for Abhar CCPP, and related 230 KV substation with Mapna	Persian Energy Abhar Co.	Completed
2-10	Engineering services for Takestan CCPP, and related 230 KV substation with Mapna	Takestan Industrial Group Co.	Completed
2-11	Engineering services for Hormozgan CCPP and related 230 KV substation with Mapna	Azarab Industries Company	Completed
2-12	Engineering services for Heris CCPP and related 230&400 KV substations with Mapna	Heris Power Generation Co.	Completed

3	Preparation of Tender Documents, Evaluation Method, Holding Tender and Contract Documents		
Row	Project Title	Client	Status
3-1	Engineering services for Tabriz Thermal Power Plant (Repowering of one STG unit to Combined Cycle Power Plant)	Nirou Atieh Saba	In Progress
3-2	Feasibility/Site Selection Studies for Iran Steam Turbine Power Plants	TPPH	In Progress
3-3	Engineering services for Aras Solar Power Plant	Kajeh Wiseman Industry	In Progress
3-4	Engineering services for Anaar Solar Power Plant	Kajeh Wiseman Industry	In Progress
3-5	Engineering services for Deh-Dabbagh Solar Power Plant	Kajeh Wiseman Industry	In Progress
3-6	Engineering services for South Kaveh CCPP (F class)	South Kaveh Steel Co.	Completed
3-7	Engineering services for Parsian CCPP (F class)	Parsian Jonoub Energy Intensive Industrial Development Company (PEI IDC)	In Progress
3-8	Engineering services for Geno CCPP (Steam Portion)	Thermal Power Plants Holding (formerly called IPDC)	Completed
3-9	Engineering services for Qom 500 MW CCPP	Rey Niroo Engineering Co.	Completed
3-10	Engineering services for Abadan Refinery's 3rd gas turbine power plant and related 33 KV GIS type substation	Abadan Oil Refining Company	Completed
3-11	Engineering services (Retender) for Abadan Refinery's 3rd Co-Generation power plant and related 33 KV GIS type substation	Abadan Oil Refining Company	Completed
3-12	Engineering services for Booyin Zahra 110 MW CCPP	Zanjan Regional Electric Company	Completed
3-13	Engineering services for Khorramshahr CCPP and "Gas Pressure Reducing Station"	Iran Grid Management Co. (IGMC)	Completed
3-14	Engineering services for Genaveh BOT CCPP	Iran Grid Management Co. (IGMC)	Completed
3-15	Engineering services for Power Purchase Agreements	Iran Grid Management Co. (IGMC)	Completed
3-16	Engineering services for preparation of "Electrical Energy Transmission" typical contract	Iran Grid Management Co. (IGMC)	Completed
3-17	Engineering services for IP department (MAPNA Investment Projects Department) related to ECA contracts	MAPNA Co.	Completed
3-18	Engineering services for EMAN department (MAPNA Engineering and Manufacturing Department) related to ECA contracts	MAPNA Co.	Completed

4	Project Management, Supervision, Design, Design Review and Site Supervision		
Row	Project Title	Client	Status
4-1	Engineering services, Project Management, Supervision and Site Supervision for Almahdi CCPP	Mapna Group	In Progress
4-2	Engineering services, Project Management for Deh-dabbagh Solar Power Plant	Tabesh Khorshid Tir	In Progress
4-3	Engineering services, Project Management for Qom Power Plant	Aalaa Ofogh	In Progress
4-4	Engineering services, Project Management, Supervision and Site Supervision for Amol gas turbine power plant	Fakhteh Construction Development	Completed
4-5	Engineering services, Project Management for Imamzadeh Ardakan Solar Power Plant	Kajeh Wiseman Industry	In Progress
4-6	Engineering services, Project Management for Shahrak Kavir Khodro Solar Power Plant	Kajeh Wiseman Industry	In Progress
4-7	Engineering services, Project Management, Supervision and Site Supervision for Goharan CCPP-3rd Block (500 MW)	Sirjan Power Plant Development (SPD) Co.	Completed
4-8	Engineering services, Project Management, Supervision and Site Supervision for Behabad CCPP	MAPNA Behabad Power Generation Co.	In Progress
4-9	<p>NGL3100 Project- gas turbine Power Plant As E of EPC, including:</p> <ul style="list-style-type: none"> ·Overall Engineering ·Design Services ·Interface Engineering ·Procurement Engineering ·Project Engineering Management ·Engineering Coordination 	OTC	Completed

4-10	•Design services for Butia CCPP	FATA S.p.A Co.	Completed
4-11	Design services for 230 KV substation of NAMA CCPP	FATA S.p.A Co.	Completed
4-12	Engineering services, Project Management, Supervision and Site Supervision for Heris F-Class CCPP	Heris Power Plant Co.	Completed
4-13	Engineering services, Project Management, Supervision and Site Supervision for Tous CCPP (steam portion)	MAPNA Ferdowsi Power Generation Co.	Completed
4-14	Engineering services, Project Management, Supervision and Site Supervision for Parand CCPP (steam portion) and related 400 KV substation	MAPNA Parand Power Generation Co.	Completed
4-15	Engineering services, Project Management, Supervision and Site Supervision for Dezful CCPP and related 400 KV substation	Ghadir Energy Investment Company	Completed
4-16	Engineering services for West Mazandaran BOO F-Class CCPP (*)	Arian Mahtab Gostar Co.	Completed
4-17	Engineering services for Taban 500 MW BOO CCPP, related 400 KV substation and gas pressure reducing station	Iran Power Development Company (IPDC)	Completed
4-18	Engineering services for Sirjan (Samangan) 500 MW BOO CCPP, related substation and gas pressure reducing station	Thermal Power Plant Holding Co. (TPPH)	Completed
4-19	Engineering services, Project Management, Supervision and Site Supervision for Genaveh BOO CCPP and related 230 KV substation	MAPNA Genaveh Power Generation Co.	Completed
4-20	Engineering services Project Management, Supervision and Site Supervision for Abadan Refinery's 3rd Co-Generation power plant and 33 & 132 KV GIS type substation	Abadan Oil Refining Company	Completed

4-21	Engineering services for Ferdowsi 1000 MW BOO Gas turbine power plant, related 400 KV substation and gas pressure reducing station	Iran Power Development Company (IPDC)	Completed
4-22	Engineering services for Ferdowsi BOO gas Turbine power plant and related 400 KV substation	MAPNA Tous Power Generation Co.	Completed
4-23	Engineering services of Tehran 500 MW BOO CCPP and related 400 KV substation	Shahed Power Generation Company	Completed
4-24	Engineering services for Takestan 500 MW BOO CCPP and related 400 KV substation	Takestan Industrial Systems Company	Completed
4-25	Engineering services for Repowering of Mashad power plant (*)	Esfahan Maintenance Co.	Completed
4-26	Engineering services for Abhar 500 MW BOO CCPP and related 230 KV substation	Persian Energy Abhar Co.	Completed
4-27	Electrical and I&C design for the Common BOP of: - Esfahan2 CCPP - Dalahoo CCPP	Safanicu as MAPNA's Contractor	Completed
4-28	Engineering services for Lamard 1000 MW F Class BOO CCPP and related 400 KV substation	Ghadir Energy Investment Company	Completed
4-29	Electrical and I&C design for Oman Co-Generation Power Plant	Hirbodan as Oman Refinery's Contractor	Completed
4-30	Electrical and I&C design for the Lavan Refinery Revamping and Upgrading Project	Iran International General Contractor Company (IGC)	Completed

4-31	Designing of the SCADA system & electrical design for Tous GTPP	NEDA as MAPNA's Contractor	Completed
4-32	Electrical and I&C design for the Jahrom Power Plant	MAPNA	Completed
4-33	Design of peak cooling / pre-heating system for: - Arak Thermal Power Plant (Dry/Deluge piping system) - Fars CCPP (Dry/Deluge piping system) - Khoy CCPP (Dry/Deluge piping system)	MAPNA as EPC Contractor	Completed
4-34	Design of air evacuation System for: - Arak Thermal Power Plant (equipment sizing and piping) - Fars CCPP (equipment sizing and piping) - Khoy CCPP (equipment sizing and piping) - Neka CCPP (equipment sizing and piping)	MAPNA as EPC Contractor	Completed
4-35	Designing of SCADA system & electrical design for: Tous Power Plant Assalouye Power Plant Ardebil Power Plant South Pars Power Plant Yazd CCPP Tishreen CCPP Kashan, Aliabad, Qaen, Khorramshahr, Chabahar and Fajr CCPP Iran LNG Steam Power Plant Paresar CCPP Kermanshah, Zanjan 3, Ardebil's Extension, Orumieh's Extension, Eshahan2 and Semnan CCPP	MAPNA Electric & Control, Engineering & Manufacturing Co. (MECO)	Completed
4-36	Heat balance diagram study and design for cogeneration cycle	Oman Refineries and Petrochemicals Company	Completed
4-37	Design of auxiliary cooling system for Neka CCPP (Thermal balance, equipment sizing, piping design)	MAPNA EPC contractor	Completed

4-38	<p>Civil design for concrete natural draft cooling tower for following power plants:</p> <ul style="list-style-type: none"> - Arak steam power plant <ul style="list-style-type: none"> - Khoy CCPP - Fars CCPP - Kazeroon CCPP 	MAPNA EPC Contractor	Completed
4-39	Gas turbine hall steel structure design for Tous CCPP (gas portion)	MAPNA EPC Contractor	Completed
4-40	GIS building steel structure design for Fajr CCPP (gas portion)	MAPNA EPC Contractor	Completed
4-41	High voltage transmission towers foundation design	Various	Completed
4-42	Industrial buildings steel structure and foundation design for Tous CCPP	MAPNA EPC Contractor	Completed
4-43	<p>Procurement services for following equipment:</p> <ul style="list-style-type: none"> - Steam surface condenser for 160MW steam turbine <ul style="list-style-type: none"> - Sea water intake filtering/trash rack system - Steam surface condenser tube cleaning system - Water box priming system - Steam ejector - Plate heat exchanger (4.5MW) - Hydraulic operated large size butterfly valve (DN 1600 mm) <ul style="list-style-type: none"> - Sea water vertical pumps (2x21000 m3/hr.) <ul style="list-style-type: none"> - Fin fan cooler - HRSG and auxiliary boiler - Thermal desalination (MED) - Electrical gas heater - Pressure vessels - Dosing package for wet cooling tower - Boiler and Deaerator feed pumps - Steam turbine as a mechanical drive - Gas pressure reducing station - Debris filter 	MAPNA / Oman Refineries and Petrochemical Companies	Completed
4-44	ANSALDO V94.2 gas turbine air intake C.F.D modeling by fluent software to evaluate anti- icing performance	Khorasan regional electricity company	Completed

5	Technical / Economical Feasibility Studies and Other Services		
Row	Project Title	Client	Status
5-1	Engineering services on "Energy Conversion Agreement" for Pasargad Qeshm 500 MW BOO CCPP	Pasargad Energy Development Co.	Completed
5-2	Engineering services for economic-feasibility study of Andimeshk 546 MW CCPP	Civil Pension Fund Inv.	Completed
5-3	Engineering services for economic-feasibility study of Abadan Extension CCPP	Rey Niroo Engineering Company	Completed
5-4	Engineering services (FS) for Lowshan BOO CCPP	Raad Energy Ariya Company	Completed
5-5	Engineering services on "Energy Conversion Agreement" for Hormozgan 500 MW BOO CCPP	Saman Energy Company	Completed
5-6	Engineering on "Energy Conversion Agreement" for Islam Abad (Dalahoo) 500 MW BOO CCPP	Iran Power Development Company (IPDC)	Completed
5-7	Engineering services on "Energy Conversion Agreement" for Qazvin 500 MW BOO CCPP	Power Control Eng. Company	Completed
5-8	Engineering services for Tehran and Khomein CCPP's grid study and preparation of financial model and feasibility study of power plant.	Shahed Power Generation Company	Completed
5-9	Engineering services on "Energy Conversion Agreement" for Tehran and Khomein CCPP	Shahed Power Generation Company	Completed
5-10	Engineering services on "Energy Conversion Agreement" for Fars, Parehsar and South Esfahan BOT power plants	Iran Power Development Company (IPDC)	Completed
5-11	Engineering services for Hashtroud 400 KV substation	Azerbaijan Regional power Co.	Completed
5-12	Engineering services on "Energy Conversion Agreement" for Zanjan-1 CCPP	Power and Control Eng. Company	Completed

5-13	Engineering services for feasibility study of existing Lowshan power plant in 500 MW and 1000 MW cases	Iran Power Development Company (IPDC)	Completed
5-14	Engineering services on construction of Lordegan BOO CCPP up to effective date	Iran Power Development Company (IPDC)	Completed
5-15	Engineering services for Behshahr BOO CCPP feasibility study	Arian Mahtaab Gostar Co.	Completed
5-16	Engineering services for Khouzestan BOO GTPP	Iran Power Development Company (IPDC)	Completed
5-17	Engineering services for BOO power plant's contracts	Zagros Power Generation Company	Completed
5-18	Engineering services on EPC contract for Assalouyeh and Qom BOO GTPPs	Iran Power Development Company (IPDC)	Completed
5-19	Engineering services for Azad Arvand BOO CCPP feasibility study	Benyamin Niroo Co.	Completed
5-20	Engineering services on "Energy Conversion Agreement" for Semnan-2 BOO CCPP	Iran Ferrocilis Company	Completed
5-21	Engineering services on EPC contract of Zanjan-3 CCPP	Iran Power Development Company (IPDC)	Completed
5-22	Engineering services on "Energy Conversion Agreement" of Saveh CCPP	Safa Energy Company	Completed
5-23	Engineering services on "Energy Conversion Agreement" of Khorramshahr CCPP	Safa Energy Company	Completed
5-24	Engineering services of Saveh and Khorramshahr CCPP's grid study and preparation of financial model and feasibility study of power plant.	Safa Energy Company	Completed

5-25	Engineering services for Ramhormoz BOO CCPP feasibility study	Atash Barq Khouzestan Co.	Completed
5-26	Engineering services on "Energy Conversion Agreement" of Shirkouh, Sirjan, Qeshm and Sabzvar CCPP	Iran Power Development Company (IPDC)	Completed
5-27	Engineering services for Ali Abad BOO CCPP feasibility study (Repowering)	Azarakhsh Power Generation Co.	Completed
5-28	Engineering services for Mashad power plant feasibility study (Repowering)	Ebn-e-Yemin Power Generation Co.	Completed
5-29	Engineering services for 1000 MW power plant site selection	Azerbaijan Regional Power Co.	Completed
5-30	Techno-Economical site selection study for CCPP in khouzestan province	MAPNA Group	Completed
5-31	Techno-Economical site selection study of Assalouyeh GTPP	MAPNA Group	Completed
5-32	Engineering services on Semnan 1 BOO CCPP	Sunir Company	Completed
5-33	Market analysis for main equipment of power industry in countries of Persian Gulf region	Tavanir Company	Completed
5-34	Engineering services for Hormozan 500 MW BOO CCPP feasibility study and "Energy Conversion Agreement"	IMIDRO	Completed
5-35	Engineering services for Khazar 500 MW BOO CCPP feasibility study	Khazar Power Generation Co.	Completed
5-36	Engineering services for Hormozgan 230 MW CCPP feasibility study, preparation of financial model and Energy Conversion Agreement	Azarab Industries Company	Completed