

Strategies of Improvement of Electricity Market's Policies, Structure and Regulation Panel



Tuesday 10.16.2018, 15:30 to 17:00



Giuseppe Zampini
CEO, ANSALDO Energia

Work Experience and Designation:

Giuseppe Zampini has been Ansaldo Energia CEO since 2001. Working from the outset in the power generation sector, he started his career in 1972 at Progettazione Meccaniche Nucleari, before moving on to Nira Spa where he acquired international experience on specific projects. After these experiences in nuclear power, in 1989 he was appointed to head the Ansaldo Division responsible for energy and steam production plants (cogeneration). Then in 1990/95 he set up and managed Ansaldo Industria of America, acquiring experience in the field of project financing. He joined Ansaldo Energia in 1997 as General Manager and was appointed CEO in 2001. He reshaped the Company's business as it is today, growing internationally and developing independent technology platforms in Gas Turbines, Electric Generators and Steam Turbines.

Other memberships:

From April 2017: President Confindustria Liguria (Regional Industrial Association)

From December 2016: Vice President Galliera Hospital - Genoa

Advisor and Member of ANIMP: National association of Plant Manufacturers

Advisor of ALCE – Ligurian Association for the Foreign trade

Member ASME - American Society of Mechanical Engineering



Iranian Power Market and Future Challenges

Giuseppe Zampini

Thank you so much for the invitation. It's the third time I am in this convention and I'm particularly pleased today that our international market is running in such a difficult situation. Therefore, I thought what I could bring you as witnesses and I start with something you all know about Ansaldo. We are present in Iran for a long time. In the last speech I had here in 2016, I proposed a kind of approach to the market that I called TTF. You will understand later on why I am insisting on our experience. The future is coming from the past, never the future started so on. We were here since the 60s, as you see we have been here before the Revolution and we have built more than 13000 mega power plants in the last period. We had been the first European company massively localized in Iran in technology the same as MAPNA. We sold more than 44 Class E GTs at the beginning of this decade.

1. ANSALDO Energia **60 Years of Presence & Experience in IRAN**

- **ANSALDO presence** and project implementation experience date back to early 1960s, when we first built **Bandar Abbas Power Plant** (still in operation)
- **ANSALDO has been here in IRAN before** the 1979 Revolution, during and after as well as during the challenging years of past decade when an unjust sanction was imposed to this great nation
- **13.000 MW** of Power Plants & Strategic Equipment and Systems put into operation over the past 50 years



- **The 1st European Company** to have conducted massive LOCALIZATION in Iran
- **Between 2000-2005, 44** Units of Class E Gas Turbines together with Electric Generators were engineered and supplied for 8 different power stations in Iran

Since 2015, when JCPOA has started, we expanded our activities and never stopped even during the period which has been named the black days of 2009 to 2016, the company kept going on for what we could do. All the past 3 years, I'm pleased to say that ANSALDO helped to design, engineer and supply power train for the plants which is the most advanced today, Heris and Dalahoo. It is not as more job for us only for what we provide but for the situation to which has been provide.

ANSALDO Energia in IRAN **Intensified Activities over the past 3 Years**

- Since the **JCPOA** (Joint Comprehensive Plan of Action) implementation, **ANSALDO** has expanded its activities in the country, signed several contracts for the supply of **Power Trains** (Gas Turbine, Steam Turbine, and Electric Generators) with players.
- Over the **past 3 Years**, ANSALDO has helped to design, engineer and supply Power Train Equipment for:
 - * **Mazandaran Noshahr Combined Cycle Power Plant (500 MW)**
 - * **Tabriz – Heris Combined Cycle Power Plant (500 MW)**
 - * **Kermonshah – Dalahoo Combined Cycle Power Plant (800 MW)**



The below picture Shows the transportation of GTs, gas turbine and generator in 2016 and the next picture shows the mixed team of Italian and Iranian people on 2018 which completed Noshahr combined cycle power plants project. I am happy and glad about this achievement.

MAZANDARAN – WEST (500MW)

Noshahr Combined Cycle Power Plans

Gas Turbine & Generator during the sea transportation



MAZANDARAN – WEST

Noshahr Combined Cycle Power Plans

Open Cycle Synchronized in July 2018



*Result of a Team Work Between Iranian and Italian people
in August 2018
Open Cycle Synchronized with the Iranian Electricity Network*



In 2016, I try to schematize to make an engineering approach called as process TTFT method. I remember Minister Industry Mr. Nematzadeh was asking in the first time I met him again to transfer technology, finance, the localize and use the product outside the country. I said Mr. Minister four things are too many. So, T stands for transparency. We had been working in a transparent way in this country. I never can say that ANSALDO play strange games. We came here, we have been open to the local entities. Transfer technology is the same, we decide to transfer technology under some condition. We were ready to look for financing because at the end of the day I am thinking of our history that working together is the best way to reach results.

2. TTFT Market Approach - Process Innovation

In the last 2016 IPEC Congress I proposed a ***Schematic Integrated Process***, through which AEN was willing to move on in the Iranian market; it was called ***TTFT*** method, where:

- *T stands for **Transparency***
- *T stands for **Transfer of Technology***
- *F stands for **Financing***

and finally

- *T stands for **Together**.*

So, let's see why we set up this method. I have a great opinion about your people, your engineering and your country. I have been here since 1988, I saw how you grew up, how you went for different times, I put myself in the position what are the expectations of Iran for those international players, are they looking for a long range or are they looking for one short a green way? So, I select the long range. We decide to stay here discussing and helping our partners



to reduce bureaucracy. We try to see how the private sector could come up against the public one. We start in our country and somewhere else to see how the financing can be provided. Mainly transfer way is simplifying the bureaucratic procedure. If you want to be transparent, you should reduce bureaucracy at the minimum level that you can do.

3. Rational Behind TTFT Method

- At that time, I liked to address the main areas of concern:
- How can an International Player (like us) meet and satisfy the expectations of the Country?
- How can an International Player be rewarded, then?
- What is a reasonable balance between the Country's **Expectations and those of the International Players?**

3. With TTFT Method – Certain questions need to be answered

- What is the extent of the localization to be imposed on the International Players ?
- Is the local legislation helping the Private Sector?
- Are the current fiscal rules and custom duty policies encouraging the foreign investment ?
- How the **financing** can be provided given the current challenges facing the Country?



4. THE VALUES

4.1 TRANSPARENCY

- The Iranian energy policy had to define clear rules in order to attract foreign investments.
- Identify a good balance between Public and Private sectors.
- Support an open and transparent competition among the different OEM's (**local/ international**) for the benefit of both clients and the local operators expectations.
- Reduce decision making process and time.
- **Simplify** bureaucratic procedures.

Transfer technology; whenever I asked to be competitive I never want to be assumed because I am a foreign entity. We were ready to create a competitive field with the local operators. In the power plant, I showed you before, we are no EPC contractor but just provide in the power train because EPC contractor is a local one and we have been an EPC contractor for what we can to set up their own technology ability.

4.2 TRANSFER OF TECHNOLOGY

- A transfer of proven technology in order to create competences in power plant engineering, construction and maintenance.
- Improve manufacturing delocalization to create a **competitive local supply chain** for the common benefit of OEM's and project operators.



Financing; that has been the headache when we are very closed to reach a very good result on last year July when SACE our export banks was close to a deal with Finance Minister here, and we didn't reach this point in any case which try to move it forward.

4.3 FINANCING

- Improve the International Banking system to become fully operational in Iran.
- Fiscal regulation has to be simplified .
- In large size project, totally financed from international entities, it is important the Iranian government support (sovereign guarantee).
- In this scenario **SACE** (the Italian ECA) was already negotiating a framework agreement with Central Bank of Iran

Together; we start making some discussion, opening up to set up joint venture, study a convention with IDRO for setting up a joint venture. We didn't reach an agreement with our friend MAPNA to set up again a friendship we had before because sometime we select another partners.

4.4 TOGETHER

- Consortium with local Contractors in order to develop EPC contracts.
- EPCF with international EPC Contractors and ECA support in joint cooperation with Iranian banking system and with the support of the Iranian Government guarantee.
- Localization of assembling and fabrication activities: partnership with Local Companies.



Possible Cooperation Between Ansaldo Energia and Iranian Companies



Today means we are starting from the beginning to when we understood that something will going to change again in this country. I put myself thinking if we were wrong in this open approach so called TTF method and if the same criteria opening transparency and transfer technology could be successful in future or short, mid time?

5. TODAY SITUATION

- Looking back from these **worst days** at the so far recalled **TTFT** approach, a simple question crossed my mind:
- was everything we did **wrong and loss of time**?

If not

- can **the same criteria** be **workable** in the **short- middle** future?

Today the situation brings me to the point that if financing is still the main lack of the situation, then we didn't do wrong, we didn't lose our time. At least in my opinion, we didn't lose our time because set up would be a differentiation with local identities, we set up and we understood that it could be a different business model to work in your country.

5. TODAY SITUATION

- I don't think **we lost time**
- **AEN approach worked well enough: we saw improvements on both sides**
- Clearly we **haven't be successful enough in Financing**

but

- We developed **a new, friendly business model with Your Country**



So, we kept going on transferring technology perhaps even more than before. As financing started last year in our country, we try to push to help some of those to set up specific fund to work with Iran. With no links to other international banks, we are today jeopardizing or they are worried to work here with us. So far, we have not been successful but still I am here because we have been working till today in the right way.

5. TODAY SITUATION

- **T** for **Transparency** and **T** for **Technology** created **better knowledge** among **our organizations**
- **F** as **Financing** pushed **AEN** to look for and to find a potential alternative solution to the **usual bank channels** to finance some Iranian power plant and we are still pushing to provide better solutions

In regard to today's situation, I don't think I lost time because in mid time we set up some good agreements like OTC company, a very well-known company of yours. Those agreements which are not implied so far, may permit us to move forward.

5. TODAY SITUATION

- **AEN** reached engineering agreements with some of the excellent Iranian Companies such as **OTC**, **agreements and activities, which does not imply significant financial transaction which can jeopardize such cooperation.**



What we are offering? What we think? This three years of experience is that we are offering our capability, open mind knowing your capability and technology of your country to review existing power plant. I think the country could be a regional hub for interconnection of electricity with the other country nearby. Starting with this point, I think there are activities in services, engineering, supervision, project management, already to improve environmental condition. Some of you know that we are working with a Russian partner for a power plant which recovers flare gas and gas turbine, doing this we are cleaning up the environmental pollution, we are providing electricity and we are providing a low price. That approached which started 2 years ago, is going on with the local entities in the way that leads to success in the next future. Digitalize solution; ANSALDO ENERGIA recently started to become a more digitalized company. We set up what is called a smart factory, our equipment components are connected, particularly we are able to monitor existing gas turbines of the power plant, existing operational power plants. We have now a good solution for predicted maintenance that is why on the way of future we are ready to bring our experience jointly with you.

6. ANSALDO OFFERING TODAY

- **We can support and help** the optimization of the existing power plant, **working together to find out** the best solutions.
- **We** see Iran as a potential **regional hub**, trading gas and electricity, with the potential to set up **a robust Interconnection Electricity Network**.
- **We** are ready to offer **our services in engineering, supervision, project management** for improving **environmental** and **digitalized** solutions both for the power plants and for energy distribution.



In short, as I see the difficulties for the big banks and international banks to support big transactions, why not take advantages of this kind to study an electrical market solution for your country as you did before. We are ready to support engineering if you want strategy from your point of view. Don't lose this time, don't look back. I'm now very happy to have been here in the country these years, I have a lesson, I learnt something, you are great negotiators and you are great technologists, and I think ANSALDO gave something but ANSALDO received even some from Iran.

6. ANSALDO OFFERING TODAY

- **In short, we are available** to set up the basis to continue to develop and to exchange technical information to create a new business oriented model, and viable solutions for **"today Country situation"**.
- **We** are available to bring and share with you our experiences and expertise, **even if only as engineering & strategy** consultant - while waiting for Contracts to be implemented in a *more brilliant future **which we believe will come back again.***

In conclusion, I have a TTF key approach that works well. I think in short period of time it should be a workable and a win-win solution for the next future. I am here today mainly to say that two friends are those who stay closed during the bad period time. I like to say ANSALDO is nearby your country and T as together stands today more than before. Thank you so much.



7. CONCLUSION

- I am here today to say that in my mind our approach **worked well**
- I am here today to say that **our idea of business** is always a **workable and win-win solution** for the **next future**
- I am here today to say that we **will try our best in this regard**

7. CONCLUSION

- Mainly, I am here because the **true friends** are those who stay together and help each other in the most difficult days, in the best way they can do.

***T as Together stands today more
than before for a win-win solution***

