do not have now. We may now use the facilities of other companies. We attach great significance to raising the level of knowledge of our personnel.

- ◆ The South Zagros Company produces gas as a key energy. The company consumes some of the produced energy. Do you consume only from your own production? Is such a kind of consumption optimal? Do the current ageing installations need energy monitoring?
- O We use the national gas and electricity network. We are connected to Farashband. We use the electrical energy for wellhead installations and at the refinery. Consumption is considerably optimized. We use the low-pressure gasses which cannot be compressed and transferred to the pipelines. Therefore, we have no wastage.

• What kinds of problems do you think you will face in the future?

Gheshm and Sarkhon are old sites. The exploitation of Nar and Kangan dates back to previous years. The problem which we are seriously following up is in the gas transfer pipeline. Taking into account the fact that the gas passes at high pressure through sub-soil pipelines, corrosion can create serious problems. Therefore, one of the issues which has widely preoccupied us and we are seriously dealing with is the monitoring of gas pipelines to prevent corrosion and possible accidents in the installations.

Another point is that most wells require constant care and repair. For instance because we tapped a considerable amount of energy at Kangan field, its pressure is dropping. So, it needs compressors, enabling us to continue producing for many years. At the same time, we are faced with other daily technical problems. Problems always occur. Therefor we have to be

ready to tackle them immediately.

- ◆ The current debate in the oil industry is privatization. Looking at the privatization push of other countries, we see that they have eased their regulations. If the corporation system takes shape in Iran, the technical and financial issues will be assigned to the companies. In view of the existing situation of the South Zagros Company, what status will the company have in that system?
- There are two viewpoints in this respect: public and private administrations. The world is marching towards private management system, which contains wider incentives and causes the economic systems to be optimized. A firm like the South Zagros Company will have no problems in this respect, because it will be able to sell its products and make the necessary investments with the help of its income.
- In view of the structural reforms taking place in the oil industry and the developments which may unfold in the future, what is your assessment of the expertise and technical skill of these companies?
- O Theses companies need to have an effective technical care to succeed. Of course, we cannot generalize the matter and claim that every established company has been successful. Those companies which have accumulated a stronger technical staff have been more successful, and this manpower has focused its attempts on a limited scope. But the companies which have failed to employ efficient workforce are facing serious problems and need to transfer their operations to other companies. Our understanding is that a company is like hardware and needs to have good software to run soundly. Otherwise, it will turn into an ineffectual transformer machine.

South Zagros's capacity
to produce gas
is about 40 MCM
from Aghar and Dalan fields
and about 114 MCM
from Nar and Kangan fields

and detailed expert studies.

Elsewhere we studied the hydrated well no 7 of Dalan. There is a gas layer named Kangan in the region. The Dashtak field is also in a good situation. Here, instead of working on an abandoned well, we sealed the well bottom and mounted lattice on top. Hence, we produced gas for the first time from the Dashtak layer. We kept on producing from the layer sustainably without any pressure drop, because the experience helped us both at the Dalan field and on all the other regions containing gas deposits.

I have to say that several regions are known to contain gas. We are now talking about the production of gas at the Dashtak layer, from which most experts believed it to be hard to produce gas continusly. What we did resulted in producing 44 million cubic feet of gas per day from the Dashtak field. We will even continue the trend in the long run.

● How is your relationship with the other companies such as the Oil and Gas Company and other managements? Should we consider companies as economic corporations, how are the input and output of the company arranged?

We produce 40 million cubic meters of gas daily from the Aghar and Dalan fields. We deliver some of this volume to the Southern Oil Fields Companies for injection into the southern oil fields, whereas some other portion is transferred to the National Iranian Gas Company for distribution in the national network. We can produce 114 million cubic metres of gas per day at the Nar and Kangan region, which is the biggest centre of production in Iran.

We deliver gas to the refinery. The Farashband refinery for Aghar and Dalan is covered by the South Zagros Company. So, we have to treat gas. We

only handle the wells of Gheshm and remaining Sarkhon. The activities starting from the wellhead to the gas gathering are carried out by the National Iranian Gas Company. Therefore, we undertake the works related to the wells such as completion. repair... and drilling. In winder when gas output reaches its peak, the production of condensates surge beyond 40 thousand barrels per day. We transfer some of it to the Shiraz refinery, and some to the Fair refinery and from there it send to Bandar Taheri.

The Oil Ministry sets the prices and issues the final performance review. Based on our gas and condensate productions, our income is calculated and paid. Regarding the development of fields, I have to say that as long as a field is to be explored, The exploration company is in charge and then the drilling management follows up the operations. Once the existence of oil or gas is confirmed, the Oil Ministry appoints a body for the development of the field, which is normally PEDEC.

After the end of the development, they devolve the field to us for tapping. All these affairs are in the hands of the Oil Ministry. Right from the start of the project, the chief of the development plan seeks our opinion. After taking control of the project, we are already aware of the system. So, the exploitation will be easier.

• Please elaborate the plans to be implemented in your company including any likely investments and also the research that will be needed.

Our future plans include, at the first stage, the preservation of output level, in accordance with the plan conveyed by the Oil Ministry. One of our prime targets to optimize the system, because it requires massive care. We want to furnish the company with the facilities and equipments which we

Production of the company have been increased significantly in 1379 in comparision with 1378 (In some parts up to 20%) Company are mainly the independent gas fields. Meanwhile, the Eastern Oil and Gas Company handles the Khangiran and Gonbadli fields, east of Mashhad. The fields of Kermanshah and Ilam, which were previously under the supervision of the Southern Oil Fields Company, are now under the administration of the Central Oil Fields Company. It was only natural for the Southern Oil Fields Company not to be able to pay due attention to so many fields, which have been now divided into smaller fields and covered by the Western Oil and Gas Exploitation Company.

There are some oil wells at the Ahwaz and Gachsaran basins which produce 10 thousand barrels of oil per day. So, they should be given priority for any probable operation. A field of 500-1,000 barrels of oil production per day normally does not attract the attention of a major company. However a company put in charge of very small fields, can focus its attempts on such fields and yield the maximum results.

The Oil Ministry believes that the creation of small-size firms can create competition and help them concentrate on their respective fields. The issue led to the formation of several companies including the Central Oil Fields Company. The large domain of operation of the southern Oil Fields Company had practically bogged down its efforts for the development of gas fields and wells such as Aghar and Dalan.

In the aftermath of the formation of the South Zagros Oil and Gas Exploitation Company, mammoth works were done. For instance, all the wells which needed repairs were repaired in two or three years. There were no such opportunities in the past.

Therefore, the rate of productivity grew by a thumping 20 per cent in 2000 compared with a year earlier. At any rate, the cooperation of a number of seasoned experts brought about a good opportunity to work on the optimisation of production and inspection. In my opinion, the Central Oil Fields Company especially the Zagros Company are among the most successful firms ever established.

• Apart from the well repair, were any more activities carried out?

One of the key areas of development was the Aghar and Dalan zone. After the drilling of its last well, the field was devolved to the company for utilization exploitation. Another area of activity was supervision, because the task should be thoroughly monitored.

Our production in the cold season of the year exceeds the output schedule. Our claim is that we have produced more gas than the production ceiling and transferred to the National Iranian Gas Company. We have also done constructive studies,

According to the studies, the Aghar field was estimated to produce 800 million cubic metres of gas. As the Aghar field is located at a far distance (90 km) from the Farashband refinery, which is also under our supervision and contains less deposits than Dalan, we conducted extensive studies to optimise pressure from the wellhead to the refinery. The push was also aimed at avoiding the use of compressor in the long run and be able to increase output at the field.

Taking into account the refinery capacity, which stands at 1,400 million cubic feet, we eliminated three wells at Aghar and increased two at Dalan to make up for the low output of Aghar through further production at Dalan field. We carried out all the activities which were necessary for drilling. The drilled wells had very good outputs.

We are now drilling the 11th well. The momentous task was carried out only through concentration on the fie!

Aghar, Dalan,
Nar & Kangan
gas fields
are covered by
South Zagros Compay

INTERVIEW

South Zagros Oil and Gas Exploitation Company

The new structure of the Oil Ministry, seeking to decentralise operational activities, has assigned some part of its duties to the newly established companies. The Zagros Oil and Gas Exploration Company is one of the three subsidiary firms affiliated to the Central Iranian Oil Fields Company.

In 1998, the Zagros Company was commissioned with tapping the gas fields in the provinces of Bushehr, Hormuzgan, Fars, Kohkiluye Boyer Ahmad, and Charmahalo Bakhtiari. Based in province, Shiraz. Fars company is entrusted with utilising the oil and gas fields of Nar and Kangan, Aghar, Dalan, Gheshm and Sarkhon. The fields produce 150 million cubic metres of gas per

We held an interview with Hashem Bagherpour, director of technical affairs and the acting chief of the Zagros Company. Here are excerpts:

- We have heard that in line with the reform and privatization policy in the structure of the Oil Ministry, a new company named the "South Zagros Oil and Gas Exploitation Company" has been set up. Please describe the background of this company?
- O The South Zagros Company is one of the subsidiary firms of the Central Iranian Oil Fields Company, which was formerly run under the supervision of the Southern Oil Fields Company. The company, was however, established in January 1999, in line with the Oil Ministry's new policy.

Following the establishment of the Central Oil Fields Company, subsidiary firms emerged including the South Zagros Oil and Gas Exploitation Company, the Eastern Oil and Gas Exploitation Company, and the Western Oil and Gas Company. The South Zagros officially opened in January 2000 in Shiraz. After the purchase of the building in 2000, the company began administrative employing its operational personnel. By March 2000, the company almost recruited the majority of its workforce.

- How many people are working in it and what are the facilities of the company?
- © Based on the organisational chart, we should have a workforce of 1,243 people,some of whom have not yet been employed. The South Zagros Company, based in Shiraz, has to have 100 personnel, 50-60 of whom are already working. The domains of activities of the company include the gas fields of Aghar, Dalan, Nar and Kangan, Gheshm and Sarkhon.
- How is the manpower pyramid of the company and the level of work experience and educational background of the personnel? IS there any specific ratio between different sectors?

- O The number of workers and staff are almost the same. Some departments including technical affairs, engineering and construction naturally require educated people, whereas other departments may not need so many educated personnel.
- Please elaborate on the fields and deposits located in the domain of operation of the South Zagros Company?
- The domain of operation of the company include the Aghar and Dalan fields in Fars province, Gheshm and Sarkhon in Hormuzgan, Nar and Kangan in Bushehr, and some fields in Kohkiluye Boyer Ahmad, and Chaharmahal Bakhtiari. Presently, the developed fields are located in three zones. Some other fields such as Sarvestan and Sadat Abad, Fars province, are to be soon developed. The oil produced from the fields will be transferred to the Shiraz refinery.

Meanwhile, the oil fields of Khesht, Bushehr, Bushkan and Kuhkaki are to be developed, and then assigned to the South Zagros Oil and Gas Company. There are number of fields around Yasuj including Shurvan, Rig, Dudro and Bakhtiar, which yet lack a proper development plan.

Gas fields to be covered by the South Zagros Oil and Gas Company are the Tabnak, Shanul, Varavi, Gardan and Rey, which will be devolved for utilization to the South Zagros Company after development.

- The fields covered by the Central Oil Fields Company are apparently the same fields which used to be under the supervision of the Southern Oil Fields Company within the former structure of the Oil Ministry. What is the aim of the new structure, and how far has it been successful?
- © The fields which came under the supervision of the Central Oil Fields