

A photograph of a nuclear power plant with four large cooling towers in the background, set against a clear blue sky. In the foreground, there is a field of green plants with several white daisies with yellow centers in sharp focus. The overall scene suggests a peaceful, natural environment coexisting with industrial infrastructure.

OPERATION OF NUCLEAR POWER PLANTS OF ČEZ, A. S. IN 2007

INTRODUCTION

By the end of 2007, the total number of six nuclear reactors at Temelin and Dukovany NPPs had experienced over 93 reactor-years of safe and reliable operation. During their operation, they produced over 346 million MWh of electricity. As one may see, the Czech Republic has a long history and tradition of nuclear power generation on which it may build and grow, and with which to compare.

The plants at Dukovany and Temelin belong to an international fleet of power plants of the CEZ Group, boasting the total of 29 power generation Units in 17 locations. Apart from the above mentioned nuclear power Units, the CEZ Group operates a large number of coal power plants located in the Northern Bohemia, where they are powered by the local supplies of brown coal. Others are in Porici and Chvaletice in Eastern Bohemia, or in Melnik, Central Bohemia. In Moravia, the Group operates the North Moravian plant in Detmarovice and the South Moravian plant in Hodonin. In 2006, new foreign members joined the fleet – the ELCHO and Skawina coal power plants in Poland, and the Varna coal power plant in Bulgaria. In 2007, we have concluded with our Bosnia-Herzegovina's partner an implementation agreement about next development of Gacko coal power plant and construction of a new power Unit at the same locality.

Large hydro power plants on the Vltava river and the pumping hydro power plants Dalesice and Dlouhé Stráně mostly cover peak periods of electricity consumption. Thanks to the total installed capacity of 14,290 MW and the total yearly generation of 73 million MWh of electricity, CEZ Group ranks among eight largest power giants in Europe.

In the Division Generation, the year 2007 was the year of ongoing integration of the generation base. It was also a year of big personal changes in the management of the power plants, and of preparation of key changes in the approach to generation, management and maintenance of our facilities. Implementation of these changes into the Assets Management system started from 1st July, 2007. Apart of safe and reliable operation of the power plants, one of the key goals for 2007 was the stabilisation of operation of the Temelin NPP, and also the launch of the refurbishment process of the brown coal power plants.

In the middle of 2007, the Temelin NPP saw the launch of a long-term project aimed at stabilising the operation of the power plant entitled SAFELY 15 TERA, which refers to safe and reliable yearly output of 15 TWh of electricity. The project was approved by the management of ČEZ, a.s. as one of the key projects of improvement, and its implementation begun in July 2007. Similar approach has been chosen at the Dukovany NPP, too, which launched the project SAFELY 16 TERA planned to be finished in 2013. The project is being carried out through making full use of output reserves, through improved efficiency, modernisation of facilities and cutting of planned outages.

In the framework of international cooperation of nuclear power plants, we continue in active participation in activities and programmes of WANO, IAEA, WNA, Foratom, and other, both worldwide and European organisations. Experts and managers from CEZ's nuclear power plants are much sought after in international teams. In the middle of the year, Dukovany NPP has undergone an international mission WANO Peer Review. The results show very positive approach to maintaining operational safety culture of this power plant.

Vladimír Hlavinka,
Executive Director of Power Plants Division



VLADIMÍR HLAVINKA
EXECUTIVE DIRECTOR OF
POWER PLANTS DIVISION

SAFETY IS OUR PRIORITY

“No task is urgent enough not to be carried out safely.”

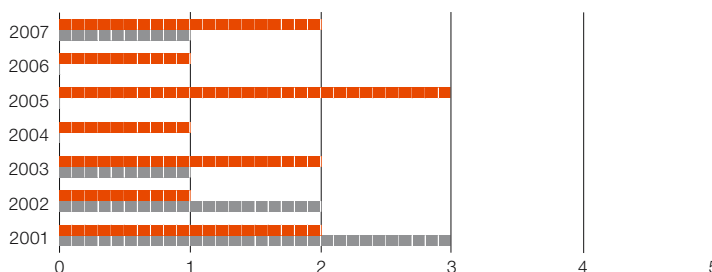
Improving the safety of its power plants is and always was the topmost priority of ČEZ, a. s. (further referred-to as CEZ). To achieve that goal, we regularly evaluate the safety of our plants and our in-house operational regulations which are designed to protect individuals, the society and the environment.

At all times, the nuclear power plants are operated with the highest safety culture, in accordance with the Limitations and Conditions of Safe Operation. Safety of nuclear power plant operation is significantly improved by the active utilisation of probability risk assessment evaluation methods, by practical application of scientific research output, and by utilisation of other nuclear operators’ operational experience.

Within the nuclear power plants, a system of operating experience feedback is consistently applied. All domestic and foreign safety-related events are analysed and used to further improve the safety and reliability of operation. Extended system of operational safety and performance indicators is applied to evaluate the safety of all possible fields of the plant. Worldwide, safety-related events are classified according to the seven-degree international INES scale (International Nuclear Event Scale). The first degree (INES 1) covers events of the lowest safety significance. For example since the beginning of operation of Temelin NPP in 2000, only incidents of the INES 0 and 1 occurred.

Number of Events Classified as INES 1

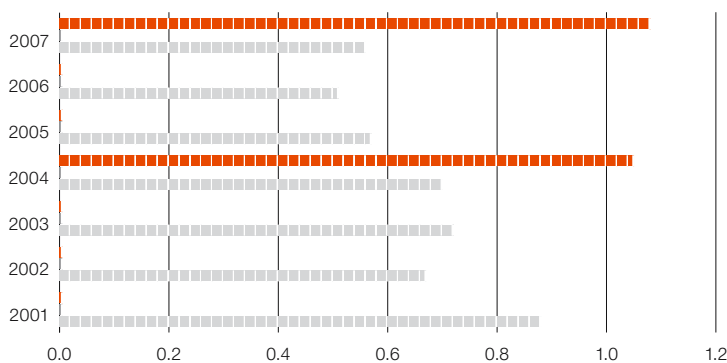
- Temelin NPP
- Dukovany NPP



Another important indicator of the power plant safety is the number of scrams (unplanned, forced, immediate reactor shutdowns).

Number of Scrams per 7000 Hours of Criticality

- Temelin NPP
- Dukovany NPP
- world – average



Radiation Protection

Both nuclear power plants have consistently shown very good performance in protection against ionizing radiation. The term “radiation protection” is defined as a system of technical and organisational measures designed to limit potential irradiation of individuals, and to protect the environment.

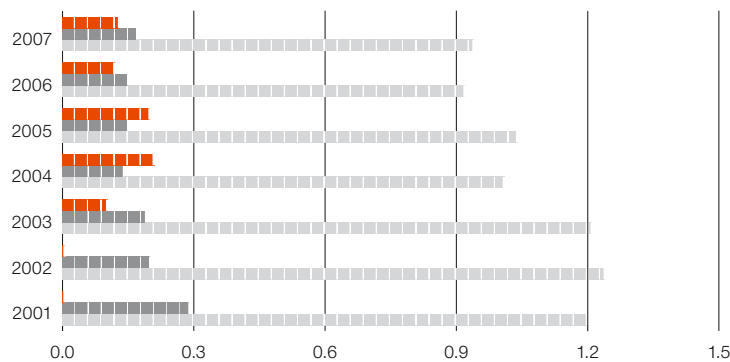
The elementary measure of efficiency of these technical and organisational measures is an indicator called Collective Effective Dose (CED). CED represents the cumulative total irradiation of all the workers who perform any activities in the radiation controlled area. The lower the value of this indicator, the better the level of radiation protection, and thus the more efficient the program of protection against ionizing radiation.

With respect to the low values of CED, both nuclear power plants operated by CEZ rank among the world elite. In 2007, the values of CED at Dukovany NPP were 0.174 Sv per Unit and 0.132 Sv per Unit at Temelin NPP.

Collective Effective Dose (CED)

(Sievert)

- Temelin NPP
- Dukovany NPP
- world – average



The low values of CED confirm that the strategy of CEZ to produce electricity and heat from nuclear resources safely is successful, and they also confirm that all the radiation protection requirements are fulfilled.

Considering effluents from nuclear power plants into the surrounding environment, both Temelin and Dukovany plants confirmed their minimum impact on the environment. The State Office for Nuclear Safety regularly reviews the amounts of effluents; for example, the gaseous effluents in 2007 reached only tenths of percent of the authorised limit. Low values of this indicator in both locations confirm the minimum impact of nuclear power plants' operation on the surrounding environment and on the population.



Emergency Preparedness

In 2007, high level of emergency preparedness was confirmed at both of our nuclear power plants, testified in the control and drill exercise results and supervised by external bodies, particularly the State Office for Nuclear Safety.

In the course of 2007, the total of 11 emergency drills aimed at practising the organisation of emergency response at reactor Units and fuel transport facilities took place. All goals of the drills were fulfilled. In October, the region of South Bohemia had undergone a complex drill entitled "The Zone 2007", in which all regional emergency and crisis centres participated. The drill confirmed the high emergency preparedness of all these authorities and the power plant staff as well.

Fire Protection

The high level of fire safety is demonstrated by the fact that all three classified fire events at our nuclear power plants in 2007 were extinguished in the very beginning of their stage by our operational staff. None of these events posed a risk to the health and lives of the staff, nor to the safety of operation of either of the two power plants.

Industrial Safety

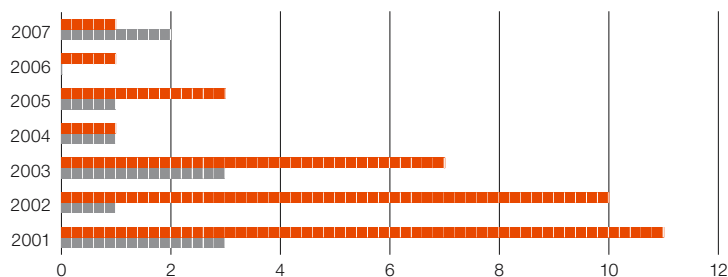
At both power plants, the performance in Industrial Safety has been excellent for years. In 2007, only light work-related injuries resulting in a sick-leave of over 3 days occurred. During the first half of the year, both plants had undergone independent review by the State office of Occupational Health and Safety, denoting them as a "Safe Enterprise". The reviews confirmed good conditions at both power plants, leading to improving occupational health and safety.

The suppliers' results in this respect are also good, with long-term improving trend.



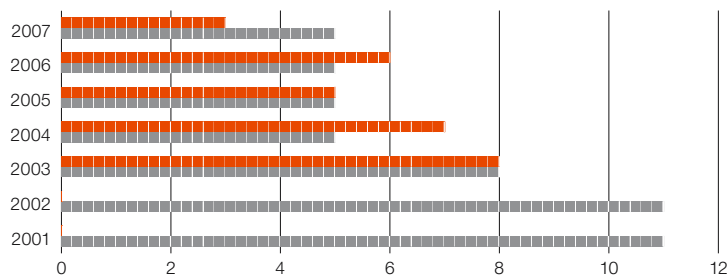
**Industrial Safety
Accidents –
Employees**
(number)

- Temelin NPP
- Dukovany NPP



**Industrial Safety
Accidents –
Suppliers**
(number)

- Temelin NPP
- Dukovany NPP

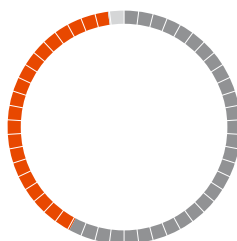


POWER GENERATION IN THE CZECH REPUBLIC

On the whole, power generation industry around the world displays one important trend – an increase of power production from emission-free resources. These resources do not emit harmful substances into the environment, namely carbon, sulphur and nitrogen dioxides. These include both renewable resources (such as hydro power plants, wind or solar-powered plants) and also nuclear power plants. From the total amount of 65.5 million MWh produced by CEZ in 2007, emission-free resources account for 27.6 million MWh, that is, 42%. The most important emission-free resources operated by the CEZ are nuclear power plants, sharing 40% of the total. Apart from these, hydro power plants, wind and solar power plants come next with the share of 2% from the total CEZ's generation.

Share of Emission-free Resources in the Total Power Generation of CEZ

- emission-emitting (58%)
- emission-free, nuclear (40%)
- emission-free, hydro + others (2%)

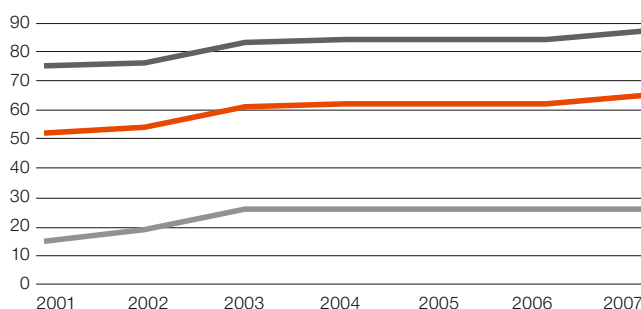


In 2007, the total amount of electricity 87.3 million MWh was generated in the Czech Republic (all producers, incl. CEZ). 30% of this amount was generated by the nuclear power plants Dukovany and Temelin. The total installed capacity of both nuclear facilities is now 3,760 MW, that being a 21% share of the total installed capacity in the Czech Republic. The high share of these resources in the total production is a result of the fact that they are utilized more, given their lower variable costs when compared to other power resources.

Trend of Electricity Generation in the Czech Republic

(million MWh)

- CR
- CEZ
- NPPs

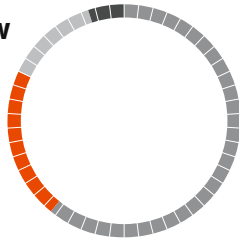


Based on estimates of investments in modernisation and reconstruction of power resources of CEZ, the share of nuclear power in the portfolio of CEZ will increase steadily in the course of 2008–2012. At the Dukovany power plant, over 13.5% increase of output is forecasted, thanks to the modernisation of technology. The output of Temelin NPP is also set to grow thanks to the optimisation of outages and stabilisation of operation.

Share of Installed Capacity and Power Generation in the Czech Republic in 2007

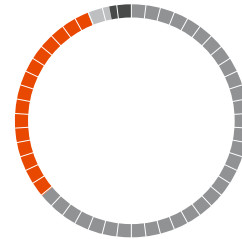
Installed Capacity in the Czech Republic 17,575 MW

- coal (61%)
- nuclear (21%)
- hydro and renewable (13%)
- gas (5%)



Generation in the Czech Republic 87.3 mil. MWh

- coal (64%)
- nuclear (30%)
- hydro and renewable (3%)
- gas (3%)



In the medium term, the lack of electricity will affect the Czech Republic too, and necessary measures must be taken to solve that situation. At present, the following aspects of power generation are being discussed:

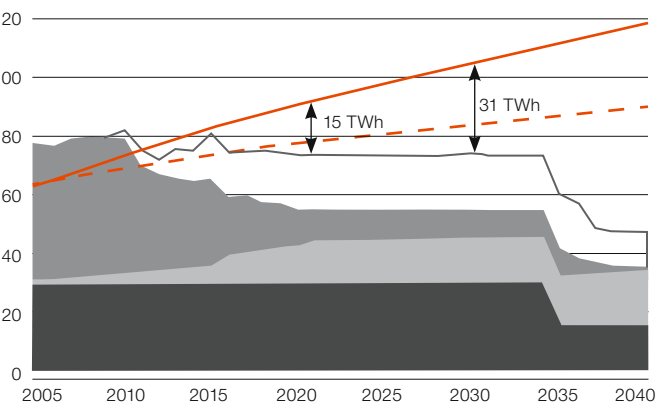
- even if the Czech potential in building new gas and renewable resources is utilised to the full, the renewal of coal powered power resources will barely cover the overall Czech consumption, even when low gross domestic product growth and full application of measures to increase effectivity are taken into account;
- resources most important and suitable for the Czech Republic are nuclear or brown coal-fueled power plants;
- both of these technologies need political support (support for a new nuclear power plant, abolition of brown coal mining limits), however environmentally, nuclear power is a better solution;
- the decision to build a new nuclear power plant must not be postponed otherwise it will affect security of supply and independence in power generation. Delay in building new power plants will result in serious future problems with electricity supply;
- European Commission denoted nuclear power to be a part of the EU future energy mix. It has low carbon dioxide emissions and it has been included in the portfolio of accepted technologies; the decision to make use of this technology is nevertheless up to each of EU states;
- as the only EU member state, we do have natural deposits of uranium, mining will soon become profitable with the growing prices of uranium worldwide;
- we do have a tradition of advanced nuclear industry which may become lost if it is not fully used. The tradition has strong potential not only for the development of domestic power industry, but also for export of technologies.

Expected Electricity Generation versus Evolution of Consumption in the Czech Republic

(situation as of the end of 2007)
(TWh)

- hydro
- nuclear
- gas and renewable
- existing coal
- renewed coal

- domestic consumption with 50% savings or with higher growth of GDP
- - - domestic consumption with maximum savings

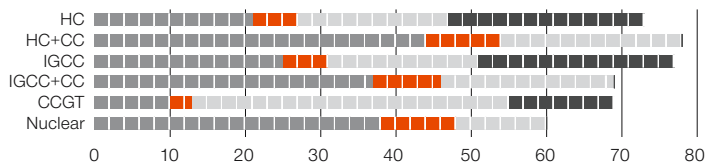


Economically, from all the available options, the building of new nuclear power plants is the most optimal one in the long-term horizon. Operating NPPs has a positive effect on the prices of electricity. Without new nuclear power Units, the prices of electricity would grow much faster than today.

Comparison of Available High-density Power Sources (EUR/MWh)

- investment
- fixed costs
- fuel costs
- CO₂

HC – hard coal, supercritical
 CC – carbon capture
 IGCC – integrated gasification combined cycle
 CCGT – combined cycle gas turbine
 Nuclear



Economy

Apart from foreign growth, acquisitions and renewal of power resources, one of CEZ priorities for 2007–2012 is the “Efficiency program”. Its goal is to make CEZ one of the most efficient companies in the European power supply market in the course of the following five years.

The Efficiency program also covers two important projects closely related to nuclear power plants:

1st project SAFELY 15 TERA – ETE has the following vision: “to improve safety and performance levels of Temelin NPP to reach the level of the first quarter of best nuclear power plants worldwide until 2010.” Goals through which this objective shall be achieved:

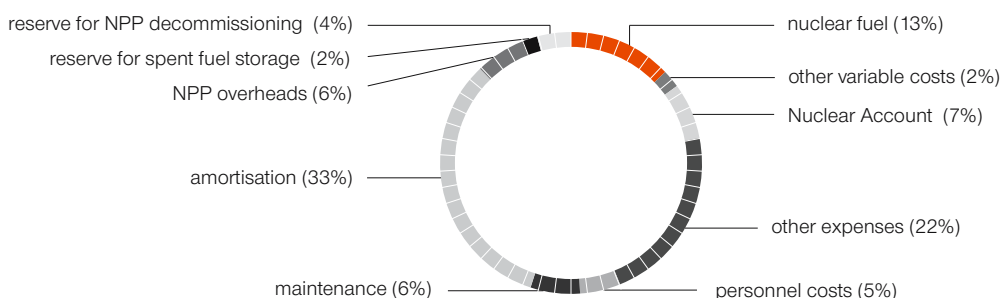
- to reduce defect rate,
- to improve Unit capability permitting yearly generation of 15 TWh,
- to operate safely and reliably in the long term,
- to reduce outage duration.

2nd project SAFELY 16 TERA – EDU has the following vision: “to boost the yearly generation of electricity at Dukovany NPP to 16 TWh and to maintain this output for the 20 years to follow.” This project has also its goals through which the objective is to be reached:

- to maintain the achieved status being in the rank of 20% of the best power plants worldwide, by the WANO performance indicators,
- to reduce outage duration,
- to increase installed capacity.

Nuclear power costs

The structure of the Czech nuclear power generation costs is shown in the chart below. It demonstrates that the nuclear price covers all external costs such as the cost of future storage of spent fuel, the expenses related to creating a fund designated for future decommissioning of the plant, and also contributions to the so-called Nuclear Account, designated to cover the costs of management of radioactive material that was generated in the operation of nuclear power plants.





DUKOVANY NUCLEAR POWER PLANT (EDU)

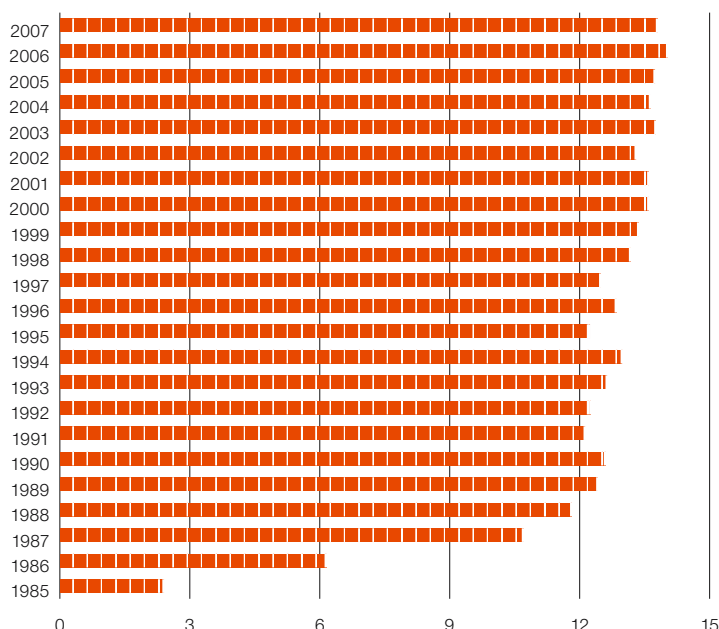
Operation

In 2007, the yearly production of Dukovany NPP was second best since the launch of its operation. Its four reactor Units with the total average capacity 1,794 MW generated 13,907,143 MWh of electricity. The most significant factor in achieving this record was the reliable operation of the NPP and the increase of output of three reactor Units by 3 × 16 MW that were modernised from 2005 to 2007. Another contributing factor was cutting the length of outages. In the upcoming years, the output will increase steadily thanks to the planned modernisation works, and the plant is expected to reach the capacity of 2000 MW by 2012.



ZDENĚK LINHART
DIRECTOR OF
DUKOVANY NUCLEAR
POWER PLANT

Power Generation at Dukovany NPP (million MWh)



In twenty two years of its safe and reliable operation, the Dukovany nuclear power plant generated the total of 279,704,300 MWh of electricity, most of all the power plants operated by CEZ.

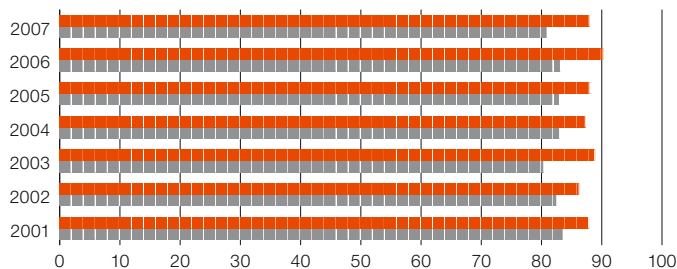
The measure of operation reliability is expressed by the indicator Unplanned Capability Loss Factor, which the Dukovany NPP keeps at one of the lowest levels in the world. The value of zero percent, meaning that in the course of the whole year, no losses occurred as a result of a technical fault on the Unit equipment, was achieved at Unit 3 in 2002 and at Unit 1 in 2005. The total value of the Unplanned Capability Loss Factor in 2007 was 0.46% from the achievable output.

Internationally, the operation capability of a plant is evaluated by the Unit Capability Factor. It is the share of real available generation to the maximum achievable power generation of the plant over a given period of time in percentage. In 2007, this value reached 88%, which is better than the worldwide average by 7%. This achievement is mainly thanks to the shortening of planned outages.

Unit Capability Factor

(in percent)

- Dukovany NPP
- world – average



All four Units operating at Dukovany are certified to provide ancillary services in the regulation of power in the grid and are permanently connected to the automatic power regulation system. For the maximum efficiency of CEZ's resources usage, the Units of Dukovany are the last to be used for the regulation of real power, thanks to their low operation costs. Nevertheless, their use in regulation is significant every year. In 2007, they operated in this regime for 365 hours.

Safe and reliable operation of the Dukovany nuclear power plant has become a standard over the years. This may be attributed to the top level, highly professional staff, taking care of all the aspects necessary to achieve safe and reliable operation.

Maintenance

The maintenance of the Dukovany NPP covers the technical and technological preparation and implementation of all maintenance and repairs activities, necessary for safe and reliable operation of the plant. At the same time, state supervisory bodies receive from the NPP all necessary documentation related to the operation of equipment and evidence of compliance with design documentation.

In the past year, much effort was invested into the preparation of new management of operational and investment budgets of the Division Generation. The goal was to improve efficiency and achieve savings detected by benchmarking of CEZ against the best power generation companies worldwide.

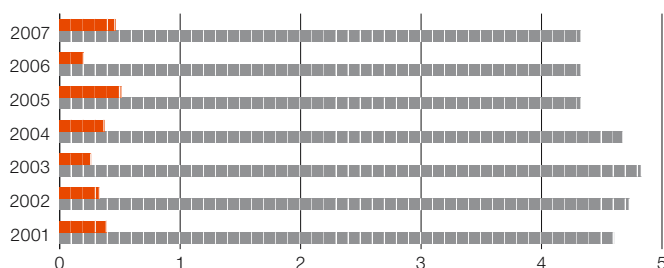
In 2007, all four reactor Units of the Dukovany NPP underwent operation outages. During these, all activities planned in the framework of the maintenance, testing and inspection programs were carried out. The total length of the outages was cut by 13 days, compared to the length originally planned.

One of the basic indicators of maintenance efficiency is the Unplanned Capacity Loss Factor. It reflects the effectivity of the programs aimed at maintaining the system condition and reliability of the technology systems and equipment at the desired level. The following chart demonstrates the extraordinary long-term results of the plant in this area.

Unplanned Capacity Loss Factor

(in percent)

- Dukovany NPP
- world – average

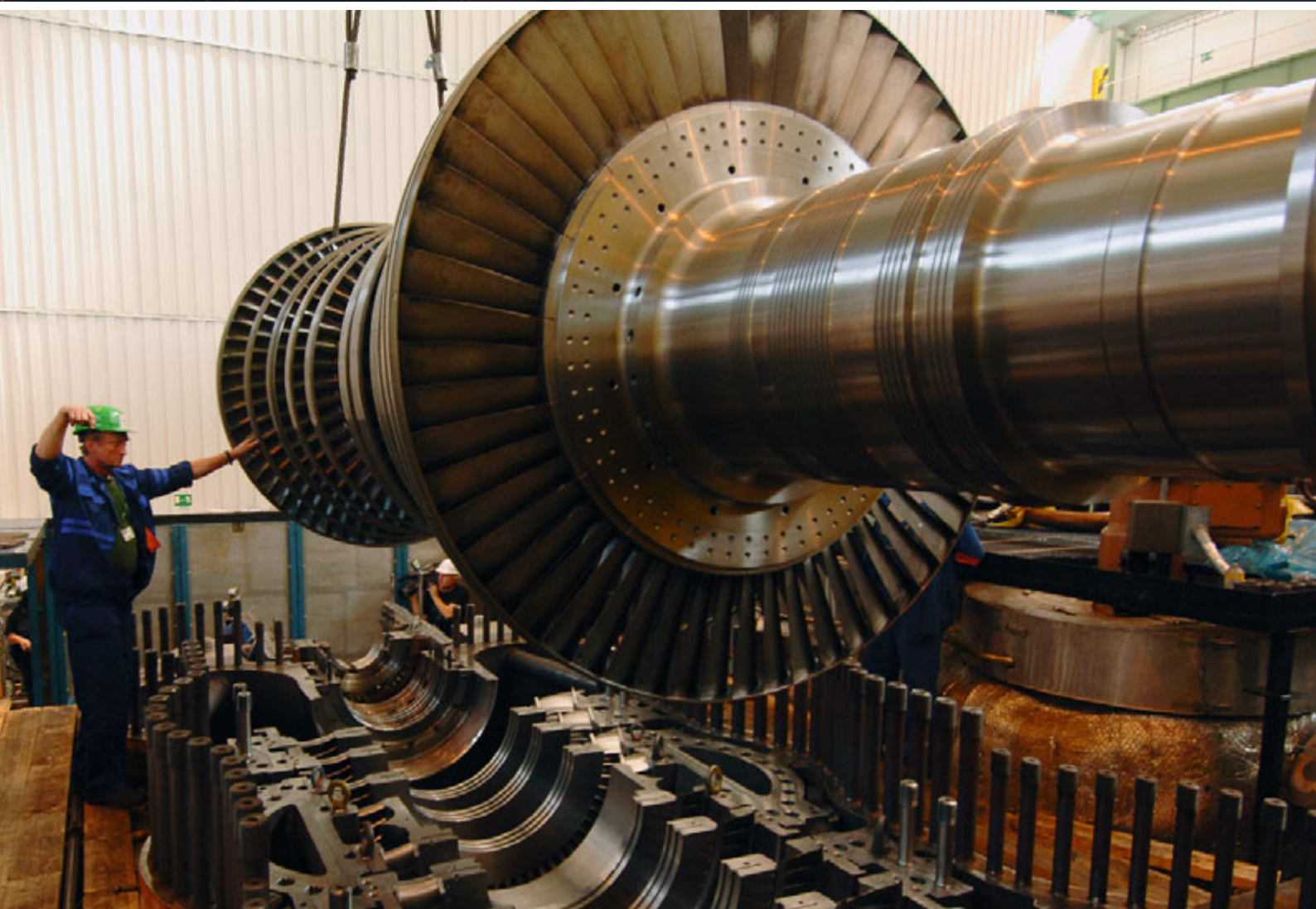


Engineering and Technological Development

Similarly to the preceding years, in 2007, the Dukovany NPP was still in the state of implementing several major investment projects, which will contribute to the modernisation of the plant and will increase the efficiency of power generation.

- **Reconstruction of the I&C system (M-module 1,2)** – reconstruction of the M1 and M2 modules represents the largest investment project at the Dukovany NPP in present. On the Unit 1 and Unit 3, the works are pretty much finished, on the Unit 2 and Unit 4, the works still continue.
- **Reconstruction of the I&C system (M-module 3–5)** – the M3–M5 program forms an individual part of the complete renewal plan of the I&C system. It covers the reconstruction of automatics and control circuits of the primary and secondary circuits, including the replacement of oil-based regulation of the turbine. At present, a contract with a supplier has been signed to prepare the implementation between 2009–2013.
- **Using of design reserves of the reactor Units** – In May 2006, a building plan was approved, in 2007, preparatory works were carried out. The goal of the project is to increase the Dukovany NPP capacity to 2000 MW.
- **Replacement of subsidiary essential power supply switchboards 0.4 kV** – for the supplying of crucial appliances.
- **Reconstruction of the low-pressure flow elements of the steam turbines** – was carried out on the Unit 1. New rotors with improved blades will cut the heat specific consumption of the turbine system by at least 3.5%. In 2008, the reconstruction will be finished by an implementation on the Unit 2.
- **Replacement of main turbogenerator exciters** – in 2007, it was carried out on the Unit 3 and 2. This modernisation has now been finished on all eight turbogenerators of the Dukovany power plant, increasing the reliability and operational capability of the reactor Units.





TEMELIN NUCLEAR POWER PLANT (ETE)

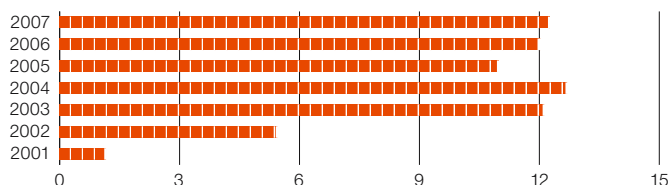
Operation

At Temelin NPP, 2007 was the year of stabilisation of its operation. The two reactor Units of the Temelin NPP generated 12,264,913 MWh of electricity in the course of the past year, thus accounting for a 19% share of the total generation of the CEZ. At the same time, the plant supplied heat to the nearby town of Týn nad Vltavou and it also covered other coverage and its own needs heating-wise. Since the launch of operation of the plant in 2000, its reactor Units have generated almost 66,720,000 MWh of electricity.



MILOŠ ŠTĚPANOVSÝ
DIRECTOR OF TEMELIN
NUCLEAR POWER PLANT

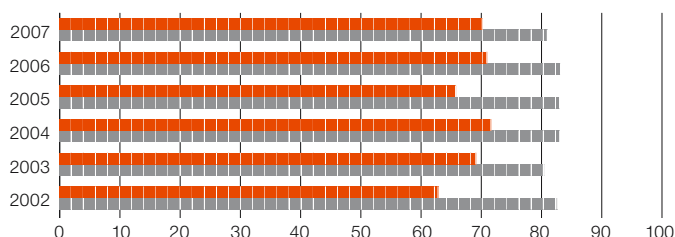
Power Generation at Temelin NPP (million MWh)



Despite of the Temelin NPP participates significantly on the CEZ total generation its utilization could be higher. Internationally, the operation capability of a plant is measured by the Unit Capability Factor. It is the share of real available generation to the maximum achievable power generation of the plant over a given period of time in percentage. In 2007, this value reached 70.2% (average of both power plant Units), and the aim is to further increase this value in the following years.

Unit Capability Factor (in percent)

■ Temelin NPP
■ world – average



Maintenance

In 2007, the main objective in maintenance of Temelin NPP was to further stabilise the power plant's operation, and to manage the outages of both Units safely.

The tasks were outlined in the strategic goals of the Division Generation, being aimed at providing the highest possible preparedness of safety systems, and covered also in the implementation of the Technical stabilisation program of the plant. The program included the reconstruction of high pressure parts of the turbines of both power plant Units, and the replacement of fast acting valves of the steam pipeline. These main tasks were carried out successfully.

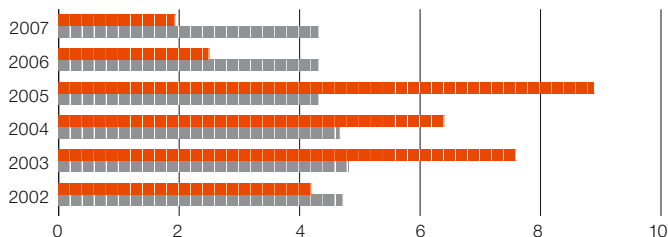
All maintenance, control and review activities were carried out according to the schedule. The controls resulted in modification of the construction of fuel assemblies called VVANTAGE-6. After the updated fuel assemblies were applied the results of reactor control clusters checks improved.

Unplanned Capability Loss Factor at Temelin NPP was successfully reduced to the level of 1.94%, see the following chart. To continue this positive trend, the activities outlined in the Technical stabilisation program as well as the tasks of the "SAFELY 15 TERA" project were carried on.

Unplanned Capability Loss Factor

(in percent)

- Temelin NPP
- world – average



Engineering and Technological Development

In 2007, a number of investment projects were carried out at Temelin NPP, aimed at increasing the nuclear safety levels and the reliability of the power generation process and heat supply, with the aim to further improve the performance indicators in the upcoming years.

Most important activities included:

- **Reconstruction of the high-pressure part of the turbine** – the flow-through part of the high-pressure turbine was replaced; the modernisation applied to the circuit and distribution elements of turbines at both Units. This increased the reliability of the high-pressure elements and the designed output of the turbines.
- **Replacement of fast acting valves of the steam pipeline** – in the framework of planned refueling outages on both reactor Units. These valves are located in the main steam pipeline between steam generators and the high-pressure part of the turbine. The modernisation removed certain undesired dynamic effects of the pipelines.

Other activities included:

- **Modernisation of the full-scope main control room simulator** – the update of software and hardware of the simulator is going on, it shall be finished in 2008.
- **Reconstruction of roofs of generation Units** – a full-scale reconstruction of the roof system of both Units is being carried out.
- **Replacement and optimisation of physical protection technological system (TSFO)** – the project is aimed at modernisation of the technologically and morally obsolete TSFO system, including adjustments based on operational experience. In 2007, the project preparation has been carried out, and the permit of the State Office for Nuclear Safety has been granted. The key part of the TSFO replacement will be carried out at the beginning of 2008.
- **Spent fuel storage facility** – in 2007, the preparation of the spent fuel storage facility continued according to the schedule. A preliminary area management building approval has been granted.



FUEL FOR NUCLEAR POWER PLANTS

The fuel of both Temelin and Dukovany NPP was supplied as scheduled, in accordance with long-term contracts and a stock building plan. Three transports of fuel from a U.S. supplier for the Temelin NPP and three transports from a Russian supplier for the Dukovany NPP took place. All transports were managed without any flaws, supervised by the State Office for Nuclear Safety.

The costs of nuclear fuel account for a significant portion of the total power generation costs and their further growth may be expected as a result of increasing prices of uranium and other services in the world markets.

This resulted in a process of optimisation that has been launched by the reactor operators as well as by the suppliers of new advanced fuel assemblies. The Dukovany NPP is finishing the process of transmission to a five-year fuel cycle, with an outlook of further transmission to a six-year cycle. This change could be achieved thanks to the upgraded construction of fuel assemblies, especially in the use of new materials and the increase of uranium enrichment from 3.82% to 4.38% U²³⁵, and in relation to this, the use of a burn-out absorber and the radial profilation of the fuel assembly. Another important effect of this change is the dramatic drop in the generation of spent fuel from the initial 114 fuel assemblies per reactor Unit to only 72 spent fuel assemblies. At the same time, the production efficiency increased from 30 MWd/kgU to approximately 51 MWd/kgU. The reduction of the number of spent fuel assemblies in turn results in significant cost savings in the final stages of the fuel cycle, especially in the reduction of necessary spent fuel containers and requirements on storage capacity.

At the Temelin NPP, the American supplier has improved the construction of the fuel which eliminated initial problems with fuel rods bending. The modernised fuel was supplied to the first Unit of Temelin power plant, and the standard cycle of refueling was re-launched. Based on a complex assessment during the selection process, a new supplier TVEL from Russia was selected. The plant will be refueled with the new fuel after the licensing process in 2010.



ENVIRONMENT PROTECTION

Nuclear power plants count among the most environment-considerate power generation resources. In their operation, no greenhouse gases are produced, and they do not consume oxygen or non-recoverable raw materials (oil, coal), which are important to be preserved for the future generations.

CEZ company pays maximum attention to the protection of environment. It does not only strive to fulfill all legal requirements, it also develops, abides and improves the Environmental Management System.

The legal standards are strictly implemented, and activities in connection with the protection of environment are closely supervised and regularly evaluated. Yearly evaluation reports are submitted to supervisory bodies, and are also available to broad public in the Information Centers of both nuclear power plants. Research centers and universities also participate in independent supervision and evaluation of the impact on environment.

The Environmental Management program of nuclear power plants is based on the principle of prevention and constant improvement of the environment protection, as required by the legal standard ČSN EN ISO 14 001. It is the basis for the environmental policy of both nuclear power plants, which regularly set out goals they plan to reach.

The Dukovany NPP abides to the certified Environmental Management System since 2001, Temelin since 2004. In 2007, the reliability of the system was re-certified by an audit carried out at both plants by an independent, international audit firm. At this occasion, it was said that both plants boast a high level of environmental safety, an open view of the field, and a great strive towards the best, most modern approach to environmental protection.

Waste Management

In both power plants, all radioactive waste are treated with the utmost care. Waste from the operation of nuclear power plants is processed and conditioned in accordance to the international standards and legislative requirements, stored and disposed into the LLW–ILW (low and intermediate level radioactive waste) disposal site (URAO) at Dukovany.

Materials and waste with negligible radionuclide content are measured by certified activity measuring equipment and subsequently released into the environment under regulatory control. They are recycled or disposed. Through a continuous improvement of technological processes and the introduction of new technologies, the Czech NPPs rank among the best power plants worldwide, considering the production of low volume of radioactive waste.

The LLW–ILW disposal site at Dukovany has been operated since 1994. Its capacity of 55,000 cubic meters is sufficient not only for the disposal of all the radioactive waste produced during the operation of both NPPs, but it also allows safe deposition of waste which will result during their decommissioning period. At the end of 2007, 12 out of total number of 112 cells were filled up.



PROTECTION OF ENVIRONMENT IS ONE OF OUR TOP PRIORITIES

PUBLIC RELATIONS

In 2007, the relations with the surrounding communities of both our nuclear power plants evolved successfully, and active cooperation continued. The power plants support numerous valuable projects related to culture, travel, sport and community life. In Temelin, a project called “Orange Year” of the Community was launched in 2006 and it successfully continued in 2007 when 28 local villages from the surroundings of the plant participated. The project is dedicated to the development of an active cultural and social life and sports in the communities, and it covered over 500 individual events. The Orange Year was so successful that it received the first prize in a Czech Public Relations contest in the category of relations between corporations and municipalities. In 2007, the Temelin NPP has become the main partner of 12 information centers of South Bohemia, including The Cycling Paths of South Bohemia foundation, which aims to improve the network of cycling paths in the region of South Bohemia.



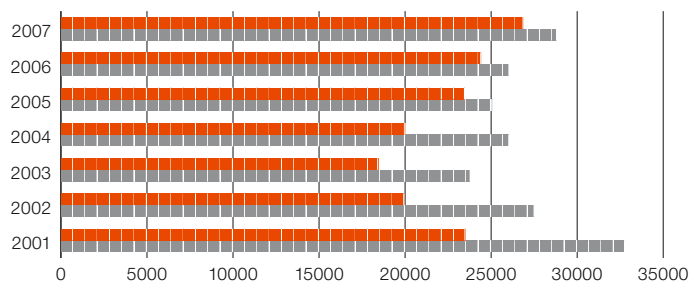
The information centers of both nuclear power plants are very popular among the general public and the number of visitors increased again. For the first time in history, the info center of Temelin NPP was visited by over 26,875 visitors. One fifth of them had also the opportunity to visit the interior facilities of the plant. In 2007, over 2,500 guests from abroad visited the Czech NPPs. The info centers of the Dukovany NPP and the nearby pumping hydro power plant Dalesice, which supplies Dukovany NPP with cooling water, welcomed together over 41,940 visitors (from which 28,810 visited IC Dukovany NPP) in 2007. Increased number of visitors may be attributed to the support of tourism activities provided by CEZ in the vicinity of their power plants. For example, the Dukovany and Dalesice power plants participated in the launch of tourist boat trips on the Dalesice reservoir; the Vysocina steam boat floating under the flag of the CEZ Group carried over 27,000 passengers over the course of the summer months.

The attitude of citizens towards the Dukovany nuclear power plant has been very positive for many years; in public opinion polls, 80–90% of those asked say that they support the power plant. Mayors of key villages in the surroundings of the power plant express their support for further operation of the power plant, and they are much in favour of keeping this locality as a power industrial area even after the Dukovany NPP will come to the end of its operational age. Although in the beginning, it was difficult for the citizens and municipalities to accept nuclear power industry in their region, today, it would be a hard blow for local social, cultural and economical environment if the industry was to leave the region.



Number of Information Centers Visitors in Czech NPPs

- Temelin NPP
- Dukovany NPP



Note:

Since 1991, the info center of Temelin NPP has been visited by 303,609 visitors; with 18,583 visitors (6.12%) from abroad. Status as of December 31, 2007



INTERNATIONAL RELATIONS

For the operation of Dukovany and Temelin nuclear power plants, it is crucial to maintain good technical international relations on a variety of levels. The goal of these relations is to form the necessary contacts, to gather necessary technical information and know-how, and exchange of operating experience and feedback with foreign partners. The aim is to fulfill the CEZ strategy of improving safety, reliability and efficiency of Czech nuclear power plants' operation.

One of the priorities is to prevent isolation of our nuclear power plants from the quickly evolving worldwide nuclear power community in all respects: operations, safety, maintenance, outline and fine-tuning of legal framework, use of good practices, new methods and approaches. Our goal is not only to follow the worldwide trend, but also to compare with similar businesses and carry out benchmarking of our activities so as to reach the best results in three main fields A, B, C (Acceptance, Best safety and Competitiveness).

The employees of CEZ are active members of a number of international organisations related to the safe operation of nuclear power plants, namely WANO and IAEA, but also a number of others such as FORATOM, ISOE, ENC, Eurelectric, WNA, etc. Apart from this, both power plants maintain close relations with partner nuclear power plants: Bohunice and Mochovce in Slovakia, Paks in Hungary, Loviisa in Finland, Cattenom in France, Volgodonsk in Russia, etc., and also with corporations such as SE-ENEL, EdF, TVO, Rosenergoatom, Energoatom, etc.

Most important event in this respect was the WANO Peer Review carried out at the Dukovany NPP in mid-June 2007. A team of experts from 11 countries took two weeks to examine a variety of safety aspects of Organisation and Administration, Operations, Maintenance, Engineering Support, Operational Experience feedback, Radiation Protection, Chemistry, and Training. The final report of WANO has been handed over to the top management of CEZ at the exit meeting in Prague, August 30, 2007. The international team of WANO suggested 12 areas for improvement, and pointed out 10 good practices which are to be recommended to other nuclear power plants worldwide.



NEW NUCLEAR POWER PLANT

Since the consumption of electricity in the Czech Republic grows steadily along with several power plants nearing the end of their generation lifetime, the need for new resources of electricity is pressing. The situation will not dramatically change with the implementation of planned power savings nor with modernisation of existing operating Units, nor with the increased support of renewable resources. To supply the necessary amount of electricity after 2015, it will be necessary to thoroughly consider the possibility of nuclear power development as a suitable business opportunity for the CEZ Group.

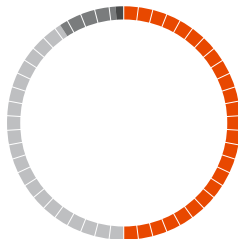
A new section entitled Analysis of Nuclear Power Development launched its work within CEZ at the beginning of 2007, profiting from the rich experience and knowledge gained through the operation of Dukovany and Temelin nuclear power plants. Close cooperation with consultant, engineering and project companies both domestic and foreign was opened. The aim was to gather professionals from the field who would offer a clear position related to the possibility of building a new nuclear power source, an activity which would constitute the largest single investment in the history of the Czech Republic.

The result is a feasibility study which has shown that Temelin is the most suitable location by far, fit for the building of two further reactor Units of the most recent technology. The total installed output of the two Units could be up to 3,400 MW. The Temelin power plant was originally designed to host four reactor Units, so the present infrastructure and supporting facilities may be used. The location has passed a demanding evaluation process according to international measures and it is ready for the building of new reactor Units. If the decision for construction was launched immediately, the new Units could begin their operation after 2020 the earliest, taken the demanding preparation process and the range of legislative permits and approval procedures.

Finishing the Temelin nuclear power plant would not only help to provide the electricity necessary to supply the power grid, it would also help to accelerate the evolution of the South Bohemian region, to bring in new employment opportunities, to support local businesses and to strengthen the standing of the Czech nuclear power industry as a whole. The new power plant would mean thousands of jobs across the Czech Republic, and also the new nuclear power Units would contribute to the goals of the EU in the cutting of greenhouse gas emissions and in increasing security of power supply in the Czech Republic.

“Do you think that the Czech Republic should remain independent in power generation in the future years?”

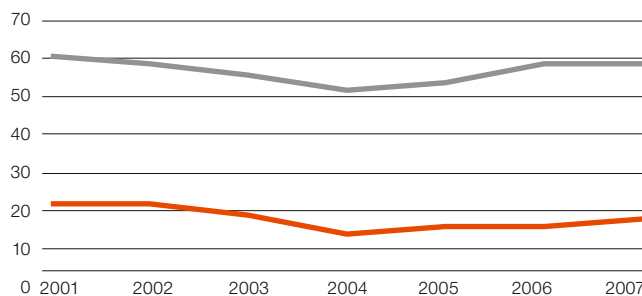
- certainly yes
- probably yes
- probably no
- certainly not



Source: STEM, Trendy 2/2007, 1222 respondents over 18 years of age

“Are you personally in favour of nuclear power development in our country?”

- certainly yes + probably yes
- certainly yes



Source: STEM, Trendy 1994–2007

CEZ GROUP GENERATING FACILITIES IN THE CZECH REPUBLIC

“Safe, economical and environmental friendly operation of NPPs creates a good basis for the Sustainable development of power industry in the Czech Republic”



Temelin NPP



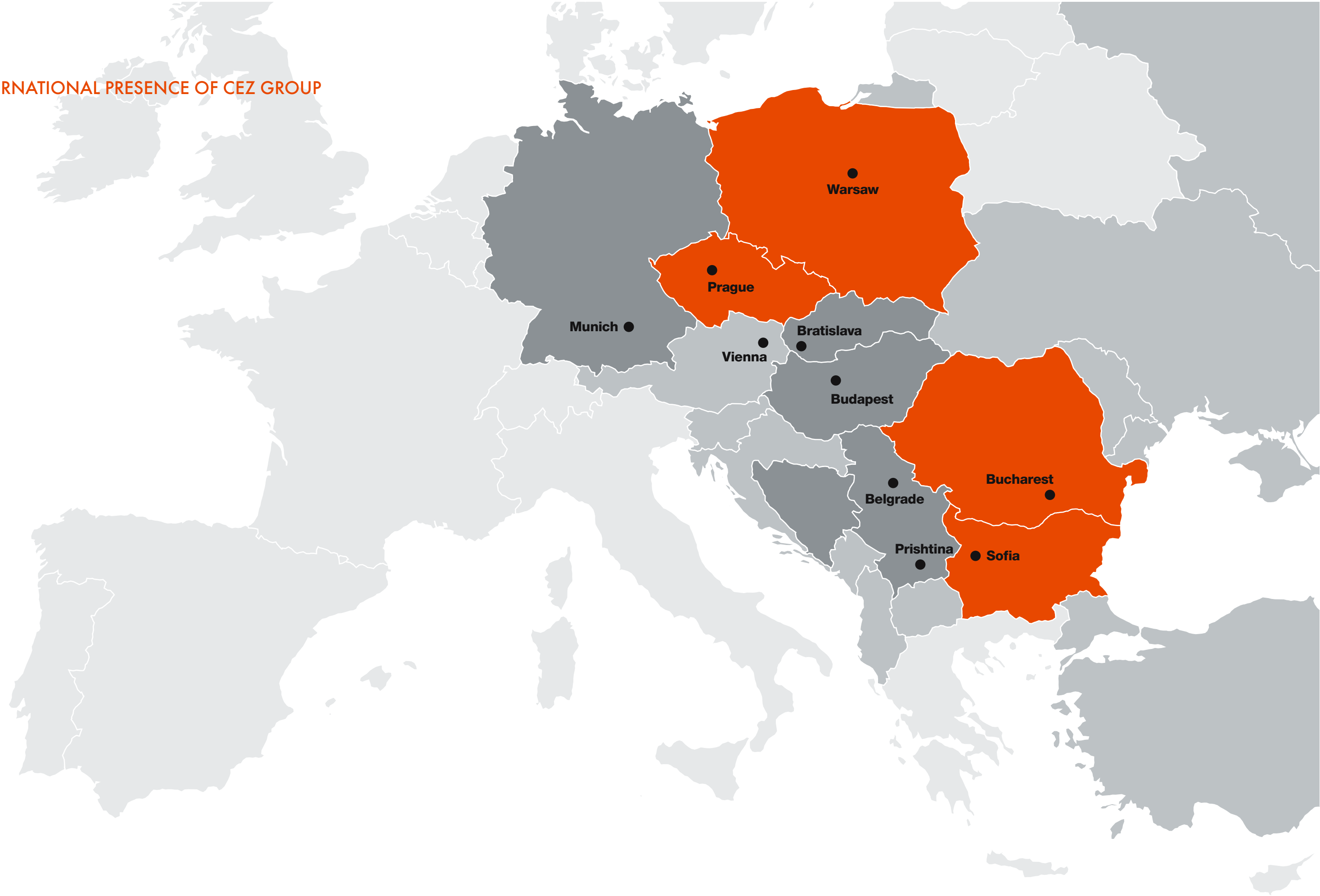
Dukovany NPP

- nuclear
- hydro
- pumping hydro station
- brown coal
- power heating plant
- black coal
- wind
- solar
- black coal and gas
- combined cycle steam-gas

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INTERNATIONAL PRESENCE OF CEZ GROUP



■ markets with CEZ Group assets ■ CEZ Group presence ■ target markets ● trading license