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HENAN ELECTRIC POWER

河南電力



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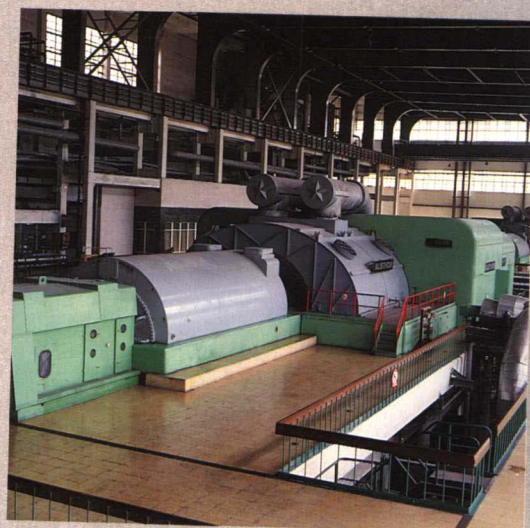
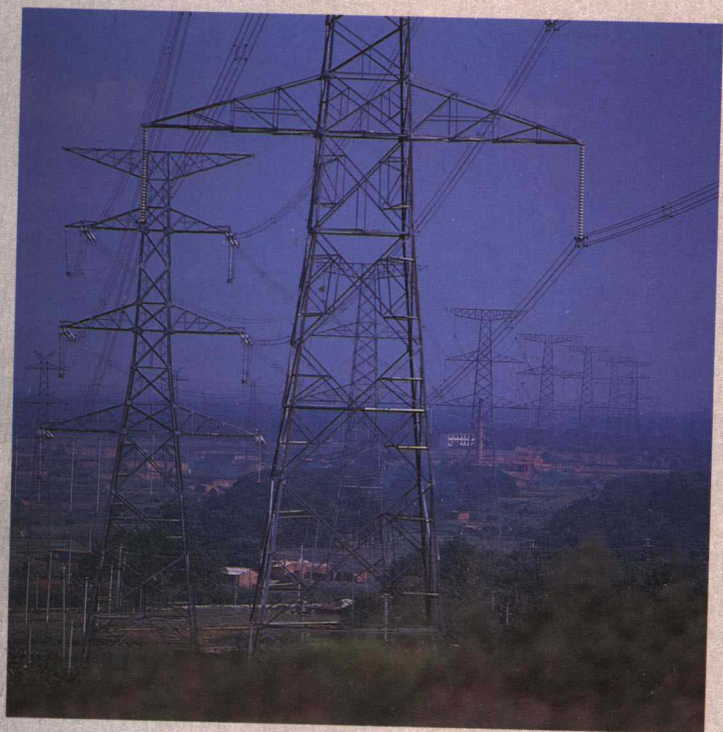
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HENAN ELECTRIC POWER

河南電力
公司





6	千載煤州	得天獨厚	資源篇
10	烏金化電	羣星璀璨	發電篇
28	天梭織錦	銀綫經緯	電網篇
46	統一調度	科學管理	調度通訊篇
56	播光撒熱	造福人民	用電篇
70	中原沃野	鄉鄉通電	農村電氣化篇
82	中州大地	魯班獻藝	設計施工篇
100	珠連璧合	精品薈萃	修造篇
106	依靠科技	發展電力	科技篇
116	人才搖籃	桃李競艷	教育培訓篇
128	多種經營	方興未艾	多種經營篇
138	精神文明	處處建樹	政工、文娛、體育篇
152	生產生活	同步發展	生活福利篇
162	中外交流	五洲結誼	引進派出篇
168	展望未來	前程似錦	展望篇

CONTENTS

6	RESOURCES	COAL BEING RICHLY ENDOWED BY NATURE FOR THOUSANDS OF YEARS
10	POWER GENERATION	ELECTRICITY FROM "JET-BLACK GOLD" AS BRILLIANT STARS
28	POWER NETWORK	BROADCASTING WITH SHUTTLE OF HEAVEN, WARP AND WEFT WITH SILVER THREAD
46	POWER DISPATCH AND COMMUNICATIONS	SCIENTIFIC MANAGEMENT AND UNIFYING POWER DISPATCH
56	POWER CONSUMPTION	SPREADING LIGHT AND HEAT, SERVING THE PEOPLE
70	RURAL ELECTRIFICATION	FERTILE LAND ON THE CENTRAL PLAIN BEING SUPPLIED POWER FROM VILLAGE TO VILLAGE
82	DESIGN AND CONSTRUCTION	PRESENT "LUBAN" SPREADING ALL OVER CENTRAL CHINA
100	REPAIR AND MANUFACTURING	STRINGS OF PEARLS AND GIRDLES OF JADE PERFECTLY COMBINED, GALAXY OF DISTINGUISHED OBJECTS PRESENTED
106	SCIENCE AND TECHNOLOGY	DEVELOPING ELECTRIC POWER RELYING ON SCIENCE AND TECHNOLOGY
116	EDUCATION AND TRAINING	THE CRADLE FOR FOSTERING TALENTED PEOPLE, PEACHES AND PLUMS FLOWERS IN BLOOM
128	DIVERSIFICATION	DIVERSIFIED UNDERTAKINGS BEING PROSPEROUS
138	IDEOLOGICAL WORK, RECREATION AND SPORT	MAKING CONTRIBUTIONS TO THE CULTURAL AND IDEOLOGICAL PROGRESS EVERYWHERE
152	WELFARE	WELFARE KEEPING STEP WITH PRODUCTION
162	INTRODUCING AND DISPATCHING	ESTABLISHING FRIENDSHIP BETWEEN WORLDWIDE COUNTRIES PROMOTING INTERNATIONAL EXCHANGE EACH OTHER
168	PROSPECTIVE	LOOKING INTO THE FUTURE, HOW GLORIOUS IT WILL BE



河南省電力工業局局長 林孔興
Director of Henan Provincial Electric Power Bureau. Lin Kong Sing

序言

電力是衡量一個國家現代化水平和現代文明的重要標誌。

新中國建立初期，河南電力工業剛剛萌芽！

新中國建立以後，伴隨着共和國前進的車輪，河南電力工業迅速發展。進入八十年代，改革大潮推動河南電力工業展翅騰飛。先進設備、先進技術被廣泛應用，裝備水平大大提高。一批高參數、大容量機組和超高壓輸電綫路相繼出現，多側面地展現了河南電力的進步。

經過四十年的艱苦創業，河南電力工業已形成包括設計、施工、發電、供電、調度、通訊、教育、科研、修造、物資供應、經營管理等在一套電力工業體系。有了一支十萬人的電業職工隊伍，形成了以500千伏綫路為主幹綫，220千伏綫路為主網架，110千伏綫路為地區網架的統一電網，成為華中電網的火電基地。到一九九〇年底，發電設備總容量已達617萬千瓦，年發電量319億千瓦時。

回顧過去，在河南初步繁榮昌盛的成就中，有河南電業職工艱苦卓絕的奉獻。

面對未來，電業職工將用自己的智慧和辛勤勞動，為河南十年規劃的宏偉藍圖，增添新的光彩。

親愛的讀者：

您想了解河南電力工業的概貌和遠景嗎？

您想一睹河南電業職工的風采嗎？

您想領略中原大地壯麗的山河、神奇的名勝和燦爛的文化嗎？

那麼請您翻過這一頁……

FOREWORD

Electric power is an important index for measuring the level of national modernization and modern civilization.

In the early period of founding New China, Henan electric power industry just sprouted.

Since founding of New China, along with the Republic's progressing pace, Henan electric power was developed rapidly. The tide of reforming pushed Henan electric power industry growing faster as entering 1980's. Advanced equipments, advanced technology have been extensively applied. The level of installation has greatly enhanced. A lot of generating units of high parameter, and large capacity together with high voltage transmission lines have presented successively, versatily unfolding the great progress of Henan electric power.

Through the past forty year's arduous founding, Henan electric power industry has formed a complete set of electric power industry system; including design, construction, generation, power supply and dispatching, communication, education, science and technology, repair, manufacture and machining, material supply operation and management, medical treatment and sanitary device. The whole system has a team of one hundred thousand staff and workers. An unique power network has been formed with 500KV lines as trasmission trunk, 220KV lines as its skeleton 110KV lines as local grid and Henan has been the thermal power base in CCPN. At the end of 1990, the total installed capacity of generating untis was 6170 MW and annual generating energy 31.9 TWh.

Recall the past, in the primarily splendid achievement, there was contributions made by staff and workers in Henan electric power industry through their hardship and diligence.

Facing the magnificent blue print of Henan future long term program, staff and workers in the electric power sector will surely add new lustre to it with their own wisdom and diligence.

Dear friends,

Will you like to know the present outline and future prospect of Henan electric power industry?

Are you interested in taking a look at the mental outlook of staff and workers in the electric power sector?

Will you like to make a tour to enjoy the beautiful landscape magnificent scenery, and ancient culture of the Central Plain of China?

Please turn over the following pages.

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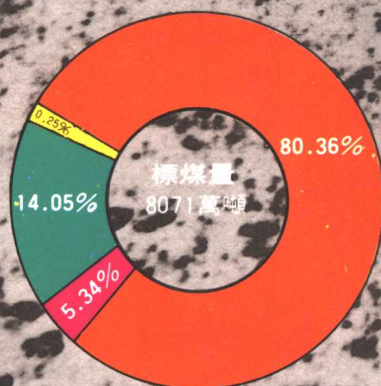
千載煤州 得天獨厚 資源篇

河南素有千載煤州之稱。一九九〇年原煤產量居全國第二位。河南雄踞中原，維係八方，為中國交通樞紐。境內鐵路交通發達，東西有蘭海、新焦、新荷、漯寶、漯周綫，南北有京廣、太焦、焦枝綫，部份已經電氣化，加上公路密佈，運力充足。河南還是晉、秦煤破外運的主要通道。河南水資源屬相對富水區，煤、水、交通運輸相結合建設火電基地，條件優越，得天獨厚。

COAL BEING RICHLY ENDOWED BY NATURE FOR THOUSANDS OF YEARS RESOURCES

Henan Province is known as a coal field for thousands of years with abundant coal resources. The output of raw coal ranked second in China in 1990. Henan is situated in the Central Plain of China, and holds together places from different directions. Henan is a hub of communications in China in which railway communication is well developed. There are Longhai (Lanzhou-Lianyungang), Xinxiang-Jiaozuo, Xinxiang-Heze, Luohe-Baofeng, Luohe-Zhoukou lines from west to east, and Beijing-Guangzhou, Taiyuan-Jiaozuo, Jiaozuo-Zhijiang, parts of them are electric railway. Its transportation capability is sufficient by further adding to it the highway network. Henan is the major thoroughfare for coal transportation from Shanxi and Shaanxi provinces outward. As Henan is classified as a relatively rich water region and has unique endowment by nature, it has superiority in building thermal power bases by combining the favourable factors of its coal, water and transportation.

一次能源產量結構
THE STRUCTURE OF
ENERGY RESOURCES (1990)



- 天然氣 0.25%
Natural Gas
- 原油 14.05%
Crude Oil
- 其他 5.34%
Miscellaneous
- 原煤 80.36%
Raw Coal

主要一次能源儲量

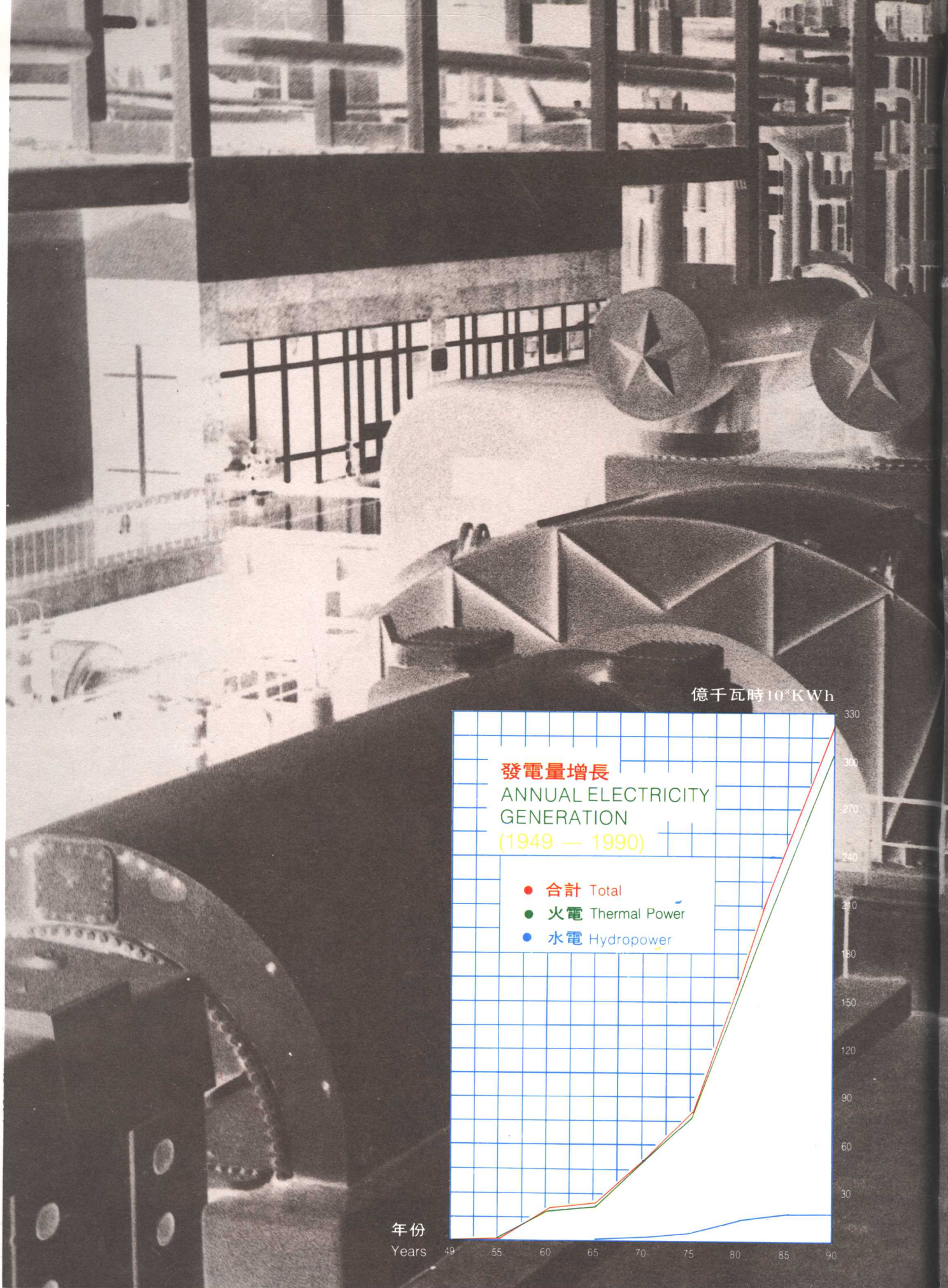
PRIMARY ENERGY RESOURCES (1990)

項目 Item	數量 Amount
煤礦保有儲量 Proven coal resources	201.2 億噸 (10^8T)
石油地質儲量 Mineral deposits of crude oil	8.35 億噸 (10^8T)
天然氣地質儲量 Mineral	1105 億立方米 (10^9M^3)
水電可開發量 Exploitable hydropower	323 萬千瓦 (10^4KW)



- 豐富的水資源
- 鐵路樞紐
- 煤海無垠
- 中原、河南兩大油田
- Abundant water resources
- Railway hub
- Boundless coal resources
- Two oil fields-Zhongyuan Oil Field and Henan Oil Field



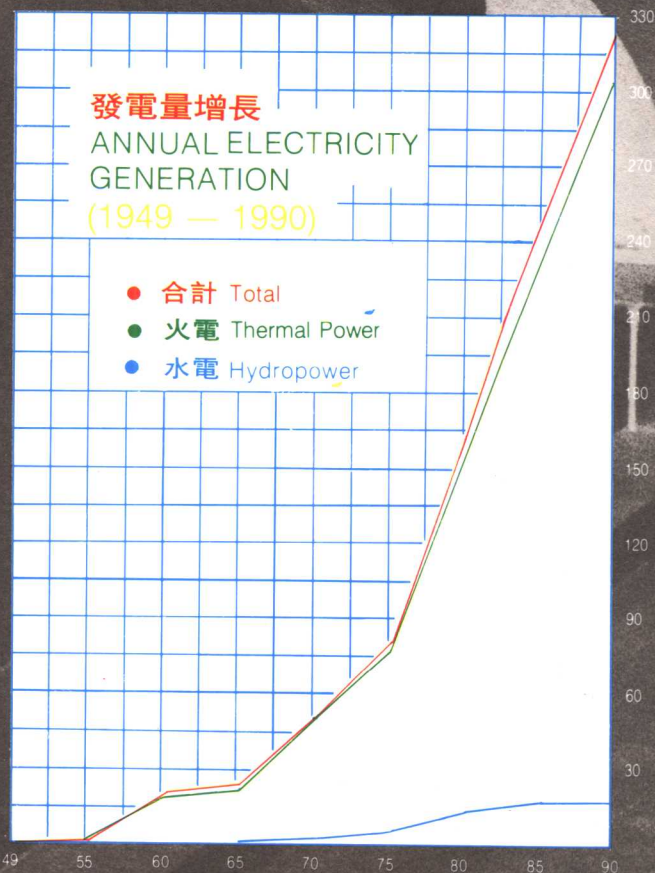


億千瓦時 10⁸ KWh

發電量增長
ANNUAL ELECTRICITY
GENERATION
(1949 — 1990)

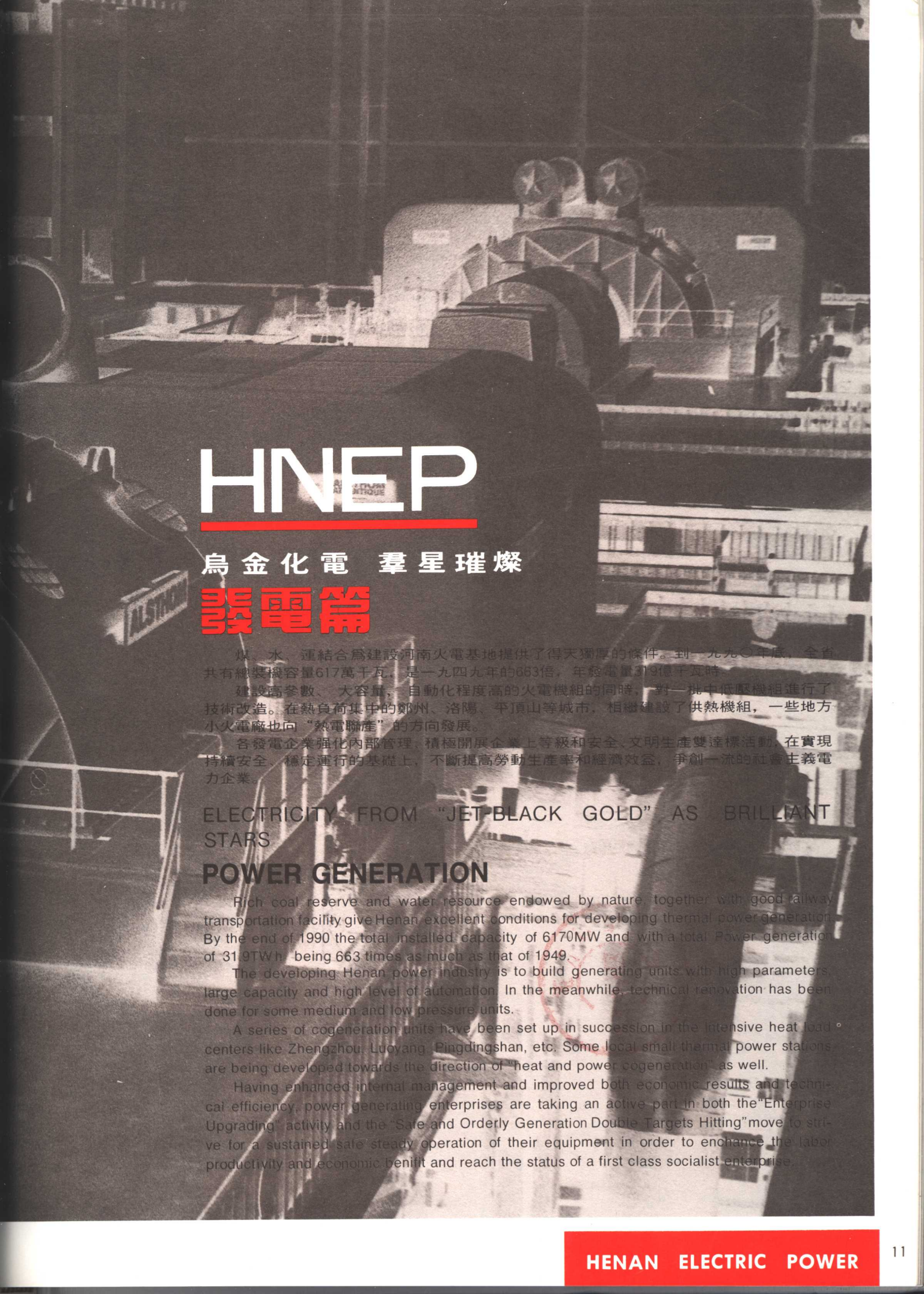
- 合計 Total
- 火電 Thermal Power
- 水電 Hydropower

年份
Years



● 引進的30萬千瓦汽輪發電機

● The imported 300MW turbo-generator units



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烏金化電 羣星璀璨

發電篇

煤、水、運結合為建設河南火電基地提供了得天獨厚的條件。到一九九〇年底，全省共有總裝機容量617萬千瓦，是一九四九年的663倍，年發電量31.9億千瓦時。

建設高參數、大容量、自動化程度高的火電機組的同時，對一批中低壓機組進行了技術改造。在熱負荷集中的鄭州、洛陽、平頂山等城市，相繼建設了供熱機組，一些地方小火電廠也向“熱電聯產”的方向發展。

各發電企業強化內部管理，積極開展企業上等級和安全、文明生產雙達標活動，在實現持續安全、穩定運行的基礎上，不斷提高勞動生產率和經濟效益，爭創一流的社會主義電力企業。

ELECTRICITY FROM "JET-BLACK GOLD" AS BRILLIANT STARS

POWER GENERATION

Rich coal reserve and water resource endowed by nature, together with good railway transportation facility give Henan excellent conditions for developing thermal power generation. By the end of 1990 the total installed capacity of 6170MW and with a total Power generation of 31.9TWh, being 663 times as much as that of 1949.

The developing Henan power industry is to build generating units with high parameters, large capacity and high level of automation. In the meanwhile, technical renovation has been done for some medium and low pressure units.

A series of cogeneration units have been set up in succession in the intensive heat load centers like Zhengzhou, Luoyang, Pingdingshan, etc. Some local small thermal power stations are being developed towards the direction of "heat and power cogeneration" as well.

Having enhanced internal management and improved both economic results and technical efficiency, power generating enterprises are taking an active part in both the "Enterprise Upgrading" activity and the "Safe and Orderly Generation Double Targets Hitting" move to strive for a sustained safe steady operation of their equipment in order to enhance the labor productivity and economic benefit and reach the status of a first class socialist enterprise.

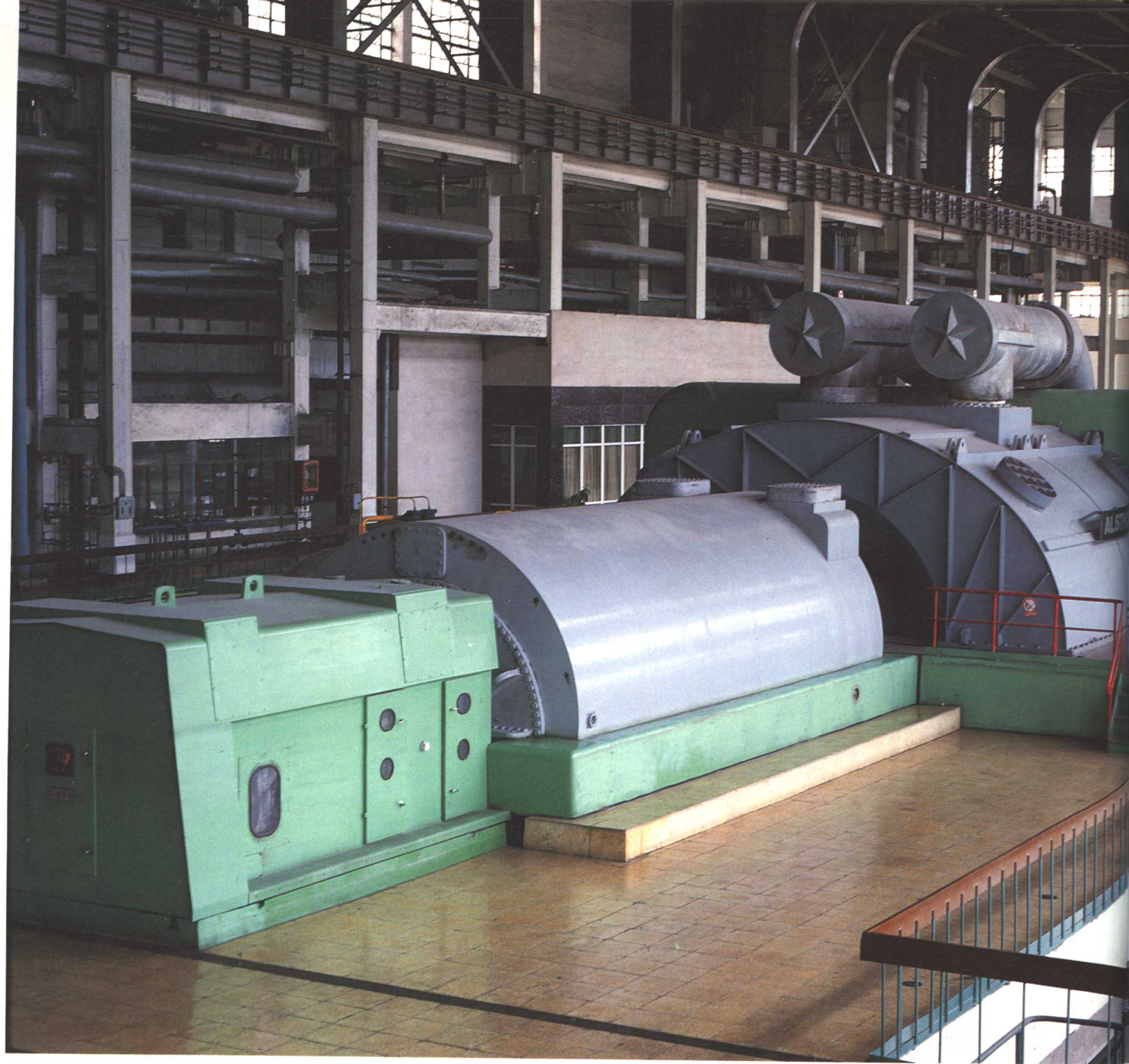




- 中原大地的日日夜夜因為有了它而五彩繽紛——平頂山姚孟電廠（裝機120萬千瓦，是華中電網的主力電廠）
- 由水庫提供循環水

- The day and night is blazing with colour in the Central Plain of China just because of it—Yaomeng Power Plant, Pingdingshan
—It is the main thermal power base in CCPN with an installed capacity of 1200MW(4×300MW)
- The circulating water is provided by the reservoir





- 引進的30萬千瓦汽輪發電機組
- 一機一人監控的3、4號機組自動化控制室
- 擔負2×30萬千瓦發電機組數據巡測及事件報告任務的 W2500 雙計算機系統
- 第一台國產30萬千瓦汽輪發電機組

- The imported 300MW turbo-generator units
- The I&C control room of No.3&4 Unit, a whole units can be monitored only by one person
- W2500 duplex computer system responsible for data tracing and event reporting of 2×300MW units
- 300MW turbo-generator, the first unit made in China

