<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Location</th>
<th>Operator</th>
<th>Configuration</th>
<th>Operation</th>
<th>Fuel</th>
<th>Boiler supplier</th>
<th>T/G supplier</th>
<th>Quick facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badarpur</td>
<td>Delhi</td>
<td>NTPC Ltd</td>
<td>3 x 100 MW, 2 x 210 MW</td>
<td>1973-1981</td>
<td>hard coal</td>
<td>BHEL</td>
<td>BHEL, DDIT</td>
<td>Photograph courtesy of Ministry of Power</td>
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<td></td>
<td></td>
<td>Posted 12 May 2004</td>
</tr>
<tr>
<td>Bokaro</td>
<td>Jharkhand</td>
<td>Damodar Valley Corp</td>
<td>4 x 45 MW, 3 x 210 MW</td>
<td>1953-1993</td>
<td>hard coal</td>
<td>CE, Babcock</td>
<td>AEG, GE, MAN, BHEL</td>
<td>Photograph courtesy of Ministry of Power</td>
</tr>
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<td></td>
<td>Power, BHEL</td>
<td></td>
<td>Posted 12 May 2004</td>
</tr>
<tr>
<td>Dadri (NCTPP)</td>
<td>Delhi</td>
<td>National Thermal Power Corp Ltd</td>
<td>4 x 210 MW</td>
<td>1991-1994</td>
<td>coal</td>
<td>BHEL</td>
<td>BHEL</td>
<td>Photograph courtesy of Ministry of Power</td>
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<td></td>
<td></td>
<td>Posted 12 May 2004</td>
</tr>
<tr>
<td>Deenbandhu Chhotu Ram</td>
<td>Rajasthan</td>
<td>Haryana Power Generation Corp Ltd</td>
<td>2 x 300 MW</td>
<td>2008</td>
<td>coal</td>
<td>Podoloski, BHEL</td>
<td>LMZ, Electorsila, BHEL</td>
<td>Photograph courtesy of Petron Engineering Construction Ltd</td>
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<td></td>
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<td>Posted 21 Mar 2010</td>
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<td>Deenbandhu Chhotu Ram: In July 2002, the state government approved two 250-MW coal-fired units as Yamunanagar Phase-II. The plant, part of the 10th Plan, was subsequently named Deenbandhu Chhotu Ram. A 660-MW supercritical unit is in planning for the site. Photograph courtesy of Petron Engineering Construction Ltd.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Posted 21 Mar 2010</td>
</tr>
<tr>
<td>Hirakud Smelter</td>
<td>Orissa</td>
<td>Hindalco Industries Ltd</td>
<td>1 x 67.5 MW, 3 x 100 MW</td>
<td>1994-2008</td>
<td>coal</td>
<td>ISGEC John Thompson, ThyssenKrupp Industries India</td>
<td>BHEL</td>
<td>Photograph courtesy of Power</td>
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<td></td>
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<td></td>
<td>T/G supplier: BHEL</td>
<td></td>
<td>Posted 11 Nov 2009</td>
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<td></td>
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<td>Hirakud Smelter: The Hirakud smelter and power complex is located in Sambalpur Dist on the banks of the world’s longest earthen dam, the 25.8km Hirakud Dam spanning the Mahanadi river. The Hirakud smelter, set up by Indal in 1959, was the country’s second aluminium smelter operating on power sourced from the hydro power station of the Hirakud Dam. In 1993, Indal built India’s first CFB captive power plant. Three more steam sets were added starting about 10yrs later, each supplied by three CFB boilers.</td>
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<td></td>
<td>Posted 11 Nov 2009</td>
</tr>
<tr>
<td>Kahalgaon</td>
<td>Bihar</td>
<td>NTPC Ltd</td>
<td>4 x 210 MW, 3 x 500 MW</td>
<td>1992-2008</td>
<td>hard coal</td>
<td>Podoloski, BHEL</td>
<td>LMZ, Electorsila, BHEL</td>
<td>Photograph courtesy of Ministry of Power</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>T/G supplier: LMZ</td>
<td></td>
<td>Posted 9 Aug 2008</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>Kahalgaon: Kahalgaon is on the Ganga River and uses coal from the Jharkhand fields of Easten Coalfields Ltd. Electricity is sent out to Bihar, Jharkhand, Orissa, Sikkim, and West Bengal. Unit-5 was synchronized on 31 Mar 2007 and went commercial on 1 Aug 2008.</td>
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<td></td>
<td></td>
<td></td>
<td>Posted 9 Aug 2008</td>
</tr>
<tr>
<td>Power Station</td>
<td>Location</td>
<td>Operator</td>
<td>Configuration</td>
<td>Operation</td>
<td>Fuel</td>
<td>Boiler supplier</td>
<td>T/G supplier</td>
<td>EPC</td>
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</tr>
<tr>
<td>Rajiv Gandhi</td>
<td>Rajasthan</td>
<td>Haryana Power Generation Corp Ltd</td>
<td>2 X 600 MW</td>
<td>2010</td>
<td>Coal</td>
<td>Shanghai</td>
<td>Shanghai</td>
<td>Reliance, Utility Energytech and Engineers Pvt Ltd, Petron Engineering</td>
</tr>
<tr>
<td>Rihand 1&amp;2</td>
<td>Uttar Pradesh</td>
<td>NTPC Ltd</td>
<td>2 X 500 MW</td>
<td>1988-1989</td>
<td>Hard coal</td>
<td>ICL</td>
<td>GEC</td>
<td>Two more 500-MW sets were added in 2005.</td>
</tr>
<tr>
<td>Singrauli</td>
<td>Madhya Pradesh</td>
<td>NTPC Ltd</td>
<td>5 X 210 MW, 2 X 500 MW</td>
<td>1987-1997</td>
<td>Hard coal</td>
<td>CE, BHEL</td>
<td>Siemens, BHEL</td>
<td>The approved investment for Singrauli was Rs 1190.69 crore. The site is on Rihand Reservoir in Sonebhadra Dist. Some funding was from IDA and KfW.</td>
</tr>
<tr>
<td>Tau Devi Lal 7&amp;8</td>
<td>Haryana</td>
<td>Haryana Power Generation Corp</td>
<td>2 X 250 MW</td>
<td>2004-2005</td>
<td>Coal</td>
<td>BHEL</td>
<td>BHEL</td>
<td>This plant is also known as Panipat. Units 7&amp;8 were commissioned within 34 months of the contract award, a new record for India.</td>
</tr>
<tr>
<td>Unchahar</td>
<td>Uttar Pradesh</td>
<td>NTPC Ltd</td>
<td>4 X 210 MW</td>
<td>1988-1999</td>
<td>Coal</td>
<td>BHEL</td>
<td>Siemens, BHEL</td>
<td>A fifth 210-MW unit is under construction for service in 2006 as Unchahar Stage III.</td>
</tr>
<tr>
<td>Vindhyachal</td>
<td>Madhya Pradesh</td>
<td>NTPC Ltd</td>
<td>6 X 210 MW, 4 X 500 MW</td>
<td>1987-2007</td>
<td>Bituminous coal</td>
<td>Taganrog, BHEL</td>
<td>LMZ, Electrosila, BHEL</td>
<td>This is the largest power plant in India.</td>
</tr>
</tbody>
</table>
Coal-Fired Plants in Andhra Pradesh

Dr Narla Tata Rao (Vijayawada)
Location: Andhra Pradesh
Operator: Andhra Pradesh Power Generation Corp
Configuration: 6 X 210 MW
Operation: 1979-1995
Fuel: coal
Boiler supplier: BHEL
T/G supplier: BHEL
EPC: WAPCOS
Quick facts: Vijayawada TPS Stage-I cost Rs193 crores while Stage-II cost Rs511 crores and Stage-III cost Rs840 crores. The plant had the highest load factor in India from 1994-98 and again in 2001-02. Vijayawada TPS received the government’s Meritorious Productivity Award for 20 consecutive years. The plant was renamed after former APSEB Chairman Dr N T Rao in Dec 2007.

Nalgonda KVK
Location: Andhra Pradesh
Operator: KSK Energy Ventures
Configuration: 1 X 43 MW
Operation: 2007
Fuel: coal
Boiler supplier: ??
T/G supplier: BHEL
Quick facts: Construction started in Apr 2006 on this captive power project for Zuari Cement and Sri Vishnu Cement. Coal is from the Mahanadi fields. The total cost was Rs 167 crore.

Paloncha
Location: Andhra Pradesh
Operator: Nava Bharat Ventures Ltd
Configuration: 1 X 50 MW
Operation: 1996
Fuel: coal
Boiler supplier: Krupp India, Lentjes
T/G supplier: LMZ, Electrosila
Quick facts: This CFB plant supplies a ferro-alloys plant and sells surplus power to a local distribution company.

Ramagundam STPS
Location: Andhra Pradesh
Operator: National Thermal Power Corp Ltd
Configuration: 3 X 200 MW, 4 X 500 MW
Operation: 1983-2005
Fuel: bituminous coal
Boiler supplier: B&W, Breda, BHEL
T/G supplier: Ansaldo, Siemens, BHEL
EPC: Development Consultants Private Ltd, BHEL
Quick facts: This was the third of NTPC’s super thermal projects and supplies electricity to Andhra Pradesh, Tamil Nadu, Karnataka, Goa, and Pondicherry. The site encompasses 10,630ac. Average coal burn is 30,000tpd. A large-scale afforestation effort is underway in the plant area.

Rayalseema-I
Location: Andhra Pradesh
Operator: Andhra Pradesh Power Generation Corp
Configuration: 2 X 210 MW
Operation: 1994-1995
Fuel: coal
Boiler supplier: BHEL
T/G supplier: BHEL
EPC: Shandong Electric Power Construction
Quick facts: Rayalaseema Stage-I cost Rs860 crores while Stage-II cost Rs511.35 crores and Stage-III cost Rs840 crores. The plant had the highest load factor in India from 1998-2001 and again in 2002-04. Two more 210-MW units are under construction for service in 2007.

Simhadri
Location: Andhra Pradesh
Operator: NTPC Ltd
Configuration: 2 X 500 MW
Operation: 2002
Fuel: hard coal
Boiler supplier: BHEL
T/G supplier: BHEL
Quick facts: Two more units are being built at this site.
Coal-Fired Plants in India - Chhattisgarh & Orissa

**Bhilai**
Location: Chhattisgarh
Operator: NTPC-SAIL Power Co (P) Ltd
Configuration: 2 X 250 MW
Operation: 2008-2009
Fuel: coal
Boiler supplier: BHEL
T/G supplier: BHEL
EPC: BHEL
Quick facts: This plant was built to supply electricity to the Bhilai Steel Works and other SAIL units. Excess output is sold into India's Western Grid. Unit-1 went commercial on 22 Apr 2009, followed by Unit-2 on 21 Oct 2009.

Photograph courtesy of NTPC-SAIL Power Co (P) Ltd
Posted 14 Feb 2010

**Hirakud Smelter**
Location: Orissa
Operator: Hindalco Industries Ltd
Configuration: 1 X 67.5 MW, 3 X 100 MW
Operation: 1994-2008
Fuel: coal
Boiler supplier: ISGEC John Thompson, ThyssenKrupp Industries India
T/G supplier: BHEL
Quick facts: The Hirakud smelter and power complex is located in Sambalpur Dist on the banks of the world's longest earthen dam, the 25.8km Hirakud Dam spanning the Mahanadi river. The Hirakud smelter, set up by Indal in 1959, was the country's second aluminium smelter operating on power sourced from the hydro power station of the Hirakud Dam. In 1993, Indal built India's first CFB captive power plant. Three more steam sets were added starting about 10yrs later, each supplied by three CFB boilers.

Photograph courtesy of Power
Posted 11 Nov 2009

**Kharagprasad**
Location: Orissa
Operator: Nava Bharat Ventures Ltd
Configuration: 1 X 30 MW
Operation: 2003
Fuel: coal
Quick facts: The plant supplies a ferro-alloys plant and sells surplus power to a local distribution company. A 64-MW unit is being added to the site.

Photograph courtesy of Nava Bharat Ventures Ltd
Posted 22 Jun 2007

**O P Jindal**
Location: Chhattisgarh
Operator: Jindal Power Ltd
Configuration: 4 X 250 MW
Operation: 2007-2008
Fuel: coal
Boiler supplier: BHEL
T/G supplier: BHEL
EPC: BHEL, Punj Lloyd
Quick facts: This is the largest coal-fired IPP in India. A second phase with 4 X 600-MW units is on order. The plant is named after Om Prakash Jindal, the late founder of O P Jindal Group. The associated

**Pathadi-I**
Location: Chhattisgarh
Operator: Lanco Amarkantak Power Pvt Ltd
Configuration: 2 X 300 MW
Operation: 2009-2010
Fuel: coal
Boiler supplier: Dongfang
T/G supplier: Dongfang
EPC: MMC Corp, Shapoorji Palonji
Quick facts: In Feb 2004, Lanco Amarkantak Power issued an RFQ for the EPC contract for its proposed 250-MW coal-fired plant at Pathadi village in Korba District. In the event, two 300-MW sets were

**Raigarh**
Location: Chhattisgarh
Operator: Jindal Steel and Power
Configuration: 2 X 21 MW, 2 X 55 MW
Operation: 1994-2004
Fuel: waste coal
Boiler supplier: BHEL
T/G supplier: BHEL, DDIT
- **Rourkela Phase-II**
  - **Location:** Orissa
  - **Operator:** NTPC-SAIL Power Co (P) Ltd
  - **Configuration:** 2 X 60 MW
  - **Operation:** 1987-1988
  - **Fuel:** coal
  - **Boiler supplier:** Rafako
  - **T/G supplier:** BHEL
  - **Quick facts:** This is the second phase of a captive power plant at Rourkela Steel Works. Operations were taken over by NTPC-SAIL power in March 2001.
  - Photograph courtesy of NTPC-SAIL Power Co (P) Ltd
  - Posted 14 Feb 2010

- **Talcher STPS**
  - **Location:** Orissa
  - **Operator:** National Thermal Power Corp Ltd
  - **Configuration:** 6 X 500 MW
  - **Operation:** 1995-2006
  - **Fuel:** bituminous coal
  - **Boiler supplier:** Stein, BHEL
  - **T/G supplier:** ABB, BHEL
  - **EPC:** Fouress, Tata Projects
  - **Quick facts:** This is India's second largest power plant. Fuel is mainly from Coal India Ltd's Mahanadi Coalfield Ltd. Talcher was originally established by the Government of Orissa and subsequently sold to NTPC. However, the entire power generated from TTPS is dedicated to the State.
  - Photograph courtesy of BHEL
  - Posted 25 Jun 2007

- **Photograph by V A Chakrarthi (Panoramio)**
  - Posted 2 Jun 2010

- **Photograph courtesy of Jindal Steel and Power Ltd**
  - Posted 31 Oct 2009

- **Photograph courtesy of Jindal Steel and Power Ltd**
  - Posted 1 Feb 2004

The mine is the largest in the private sector and it has a 6mn tpy coal washery, also the largest in the country. The facility has a 7km overland covered conveyor from the mine facility, the longest in India. The tie-line to the grid is a 258km, double-circuit 400kV installation built in 1.5yrs. It was built without any joint-venture with PowerGrid Corp.
Coal-Fired Plants in India - Gujarat

**Gujarat Cement Works**
- Location: Gujarat
- Operator: Ultratech Cement Ltd
- Configuration: 4 X 23 MW
- Operation: 2008-2009
- Fuel: lignite
- Boiler supplier: CMEC
- T/G supplier: CMEC
- EPC: Development Consultants Private Ltd, Desai Construction
- Quick facts: This CPP at Kovaya cost about Rs620cr.

**Sabarmati**
- Location: Gujarat
- Operator: Ahmedabad Electric Co Ltd
- Configuration: 3 X 110 MW, 1 X 125 MW
- Operation: 1979-2003
- Fuel: hard coal
- Boiler supplier: BHEL
- T/G supplier: BHEL

**Sikka**
- Location: Gujarat
- Operator: Gujarat Urja Vikas Nigam Ltd
- Configuration: 2 X 120 MW
- Operation: 1988-1993
- Fuel: coal
- Boiler supplier: Combustion Engineering, BHEL
- T/G supplier: BHEL
- Quick facts: Sikka is a small coastal town in Jamnagar District. Two 250-MW units are under construction for service in 2010.

**Surat**
- Location: Gujarat
- Operator: Gujarat Industries Power Co Ltd (GIPCL)
- Configuration: 4 X 125 MW
- Operation: 1999-2010
- Fuel: lignite
- Boiler supplier: BHEL
- T/G supplier: BHEL
- Quick facts: GIPCL was formed by Gujarat Electricity Board (now Gujarat Urja Vikas Nigam Ltd (GUVNL)), Gujarat State Fertilizers & Chemicals Ltd (GSFC), Gujarat Alkalis & Chemicals Ltd (GACL), and Petrofils Co-operatives Ltd. Surat was built as an IPP with its own captive mines and has a power purchase agreement with GUVNL. Units 3&4 were dedicated on 30 May 2010 and two 250-MW units are planned. All blocks have CFB boilers.

**Ukai**
- Location: Gujarat
- Operator: Gujarat Urja Vikas Nigam Ltd
- Configuration: 2 X 120 MW, 2 X 200 MW, 1 X 210 MW
- Operation: 1976-1985
- Fuel: bituminous coal
- Boiler supplier: Combustion Engineering, BHEL
- T/G supplier: BHEL
- Quick facts: Ukai is sited on the Left Bank Canal of the Tapti River in Tapi District. Units-1 was extensively overhauled and returned to service in May 2008 and a similar program is underway at Unit-2. The plant burns imported and domestic coal. A 500-MW extension is in planning.

**Wanakbori**
- Location: Gujarat
- Operator: Gujarat Urja Vikas Nigam Ltd
- Configuration: 7 X 210 MW
- Fuel: bituminous coal
- Boiler supplier: Combustion Engineering, BHEL
- T/G supplier: BHEL, Siemens
- Quick facts: This is the largest thermal power station in Gujarat. It is near Wanakbori Dam on the bank of Mahi River in Kheda District.
**Bellary**  
**Location:** Karnataka  
**Operator:** Karnataka Power Corp Ltd  
**Configuration:** 1 X 500 MW  
**Operation:** 2008  
**Fuel:** coal  
**Boiler supplier:** BHEL  
**T/G supplier:** BHEL  
**EPC:** BHEL  
**Quick facts:** The first 500-MW unit of BTPS cost Rs 2,120 crore and was commissioned on 3 Nov 2008 at the site near Kudatini Village, 22km from Bellary. The unit zero date was 29 Dec 2003. Estimated cost of power is Rs 2.20/kWh and annual generation is expected by be about 3,500 GWh. The unit connects to the 400kV grid at Davangere Substation. The stack is 275m tall. Fuel is from a captive block of Western Coal Fields Ltd.  
*Photograph courtesy of Karnataka Power Corp Ltd*  
*Posted 8 Nov 2008*

**Bhusawal**  
**Location:** Maharashtra  
**Operator:** Maharashtra State Power Generation Co Ltd  
**Configuration:** 1 X 55 MW, 2 X 210 MW  
**Operation:** 1968-1982  
**Fuel:** bituminous coal  
**Boiler supplier:** Cekop, BHEL  
**T/G supplier:** Siemens, BHEL  
**EPC:** Development Consultants Pvt Ltd  
**Quick facts:** This power station is 8km from Bhusawal City and 450km from Mumbai. Unit-1 was derated to 55 MW from 62.5 MW in Apr 2007. Two more 500-MW sets are under construction for service in 2010/11. Cooling water is from the Tapi River.  
*Photograph courtesy of Maharashtra State Power Generation Co Ltd*  
*Posted 3 Feb 2010*

**Chandrapur**  
**Location:** Maharashtra  
**Operator:** Maharashtra State Power Generation Co Ltd  
**Configuration:** 4 X 210 MW, 3 X 500 MW  
**Operation:** 1983-1997  
**Fuel:** bituminous coal  
**Boiler supplier:** ACC Vickers Babcock Ltd, Combustion Engineering, BHEL  
**T/G supplier:** Siemens, BHEL  
**EPC:** Development Consultants Pvt Ltd  
**Quick facts:** This mine-mouth power station is 6km from Chandrapur Town in far western Maharashtra. The foundation stone for the first phase was laid on 16 Jan 1977 and Unit-1 was commissioned in Aug 1983, followed by Unit-2 in Jul 1984. The station was dedicated to the nation on 8 Oct 1984 by PM Indira Gandhi. The plant is the terminus of a 400kV double-circuit line from NTPC's Korba STPS and originally the Chandrapur station had 3 X 400kV circuits delivering up to 1,200 MW of power to Mumbai. ABB and BHEL subsequently built a 1,500-MW, 500kV HVDC line on the route Chandrapur-Padghe. The 753km link was commissioned in 1999 thereby allowing more efficient utilization of Chandrapur and facilitating the development of two more 500-MW sets now in planning.  
*Photograph courtesy of maharashtra.bsnl.co.in*  
*Posted 10 Jan 2009*

**Dahanu**  
**Location:** Maharashtra  
**Operator:** Reliance Energy  
**Configuration:** 2 X 250 MW  

**Khaperkheda-I Phase 2**  
**Location:** Maharashtra  
**Operator:** Maharashtra State Electricity Board  
**Configuration:** 3 X 30 MW  
**Operation:** 1960-1964  

**Khaperkheda-I Phase 2**  
**Location:** Maharashtra  
**Operator:** Maharashtra State Power Generation Co Ltd  
**Configuration:** 4 X 210 MW
Raichur
Location: Karnataka
Operator: Karnataka Power Corp Ltd
Configuration: 7 X 210 MW
Operation: 1985-2003
Fuel: coal
Boiler supplier: BHEL
T/G supplier: Shanghai, BHEL, Siemens
EPC: TCE Consulting Engineers, Mysore Construction, Gammon India
Quick facts: Raichur was developed per a 1978 MOU with TCE Consulting Engineers who were consultants for the first two stages. The 300ha site is on the Krishna River in Raichur Dist about 500km from Bangalore. Unit-1 was completed in Mar 1985 and Unit-2 a year later. Construction of Unit-3 was started in 1986 and completed in Mar 1991 while Unit-4 was started in 1989 and completed in Sep 1994. These four units cost about Rs 13,860mn. In 1996, three more units were started and these cost Rs 15,450mn. Unit-7 was completed in a then-record 25mos at the end of 2002. An eighth 250-MW set is under construction and two 500-MW units are planned. About 7mn tpy of coal is delivered from Singareni Collieries, Western Coalfields Ltd. and Mahanadi Coalfields Ltd and station output is about 10 TWH/yr, up to 40% of the state’s electricity requirement. Unit-4 was financed by Japan’s ODA.

Ratnagiri
Location: Karnataka
Operator: JSW Energy Ltd
Configuration: 4 X 300 MW
Operation: 2010
Fuel: coal
Boiler supplier: Shanghai
T/G supplier: Shanghai
EPC: EDAC Engineering, SEW Constructions, Sunil HiTech Engineers
Quick facts: In Aug 2007, JSW Energy closed on Ratnagiri Phase-I in Ratnagiri district. This Rs4,500cr project will burn about 4.1mn tpy of imported coal. Power evacuation will be via two 400kV lines to Koyna and two more to Karad. MOEF clearance was received in Nov 2007.

Trombay
Location: Maharashtra
Operator: Tata Electric
Configuration: 1 X 150 MW, 2 X 500 MW, 1 X 180 MW CC
Operation: 1965-1993
Fuel: coal, natural gas, oil
Boiler supplier: CE, BHEL
T/G supplier: BHEL, GE, Siemens
Quick facts: Trombay has India’s first 500-MW generating unit and the country’s first FGD system.

Wardha Warora
Location: Maharashtra
Operator: KSK Energy Ventures Pvt Ltd
Configuration: 4 X 135 MW
Operation: 2010-2011
Fuel: lignite
Boiler supplier: Dongfang
T/G supplier: Dongfang, Harbin
EPC: Sichuan Electric Power Designing & Consulting Co Ltd
Quick facts: In May 2007, KSK closed on the first phase of its Wardha Warora project in Chandrapur district. The foundation stone was laid shortly thereafter. Steel maker Viraj Profiles has a 25yr PPA for the entire 270 MW for captive use. KSK has a coal supply agreement with the Gujarat Mining Development Corp, which will supply coal from a captive coal block in Chhattisgarh. The Rs 2,416cr plant began commissioning in Q1 2010.

Photograph courtesy of KSK Energy Ventures Pvt Ltd
Posted 24 Apr 2010
### Coal-Fired Plants in India - Rajasthan

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Location</th>
<th>Operator</th>
<th>Configuration</th>
<th>Operation</th>
<th>Fuel</th>
<th>Boiler supplier</th>
<th>T/G supplier</th>
<th>EPC</th>
</tr>
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<tbody>
<tr>
<td>Beawar Works</td>
<td>Rajasthan</td>
<td>Shree Cement Ltd</td>
<td>2 x 18 MW</td>
<td>2003</td>
<td>lignite, pet coke</td>
<td>Thermax</td>
<td>Shin Nippon, TD Power Systems</td>
<td>Development Consultants Ltd, SBP Projects &amp; Consultancy, Thermax</td>
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<tr>
<td>Chhabra</td>
<td>Rajasthan</td>
<td>Rajasthan Rajya Vidyut Utpadan Nigam Ltd</td>
<td>2 x 250 MW</td>
<td>2009-2010</td>
<td>coal</td>
<td>BHEL</td>
<td>BHEL</td>
<td>BHEL, Tata Projects, Punj Lloyd</td>
</tr>
<tr>
<td>Jallipa Kapurdi</td>
<td>Rajasthan</td>
<td>JSW Energy Ltd</td>
<td>8 x 135 MW</td>
<td>2009-2011</td>
<td>coal</td>
<td>Dongfang</td>
<td>Dongfang</td>
<td>Dongfang, Tata Projects, Punj Lloyd</td>
</tr>
<tr>
<td>Kota</td>
<td>Rajasthan</td>
<td>Rajasthan Rajya Vidyut Utpadan Nigam Ltd</td>
<td>2 x 110 MW, 3 x 210 MW, 2 x 195 MW</td>
<td>1983-2009</td>
<td>coal</td>
<td>BHEL</td>
<td>BHEL</td>
<td>BHEL, Tata Projects</td>
</tr>
<tr>
<td>Mundra Phase I</td>
<td>Rajasthan</td>
<td>Adani Power Ltd</td>
<td>2 x 330 MW</td>
<td>2010</td>
<td>bituminous coal</td>
<td>Babcock &amp; Wilcox Beijing</td>
<td>Beijing Beizhong</td>
<td>Sichuan Machinery &amp; Equipment Import and Export, Sichuan Fortune Project Management, Era Constructions, Petron Engineering</td>
</tr>
<tr>
<td>Suratgarh</td>
<td>Rajasthan</td>
<td>Rajasthan Rajya Vidyut Utpadan Nigam Ltd</td>
<td>5 x 250 MW</td>
<td>1998-2003</td>
<td>coal</td>
<td>BHEL</td>
<td>BHEL</td>
<td>Development Consultants Private Ltd, BHEL</td>
</tr>
</tbody>
</table>

**Quick facts:**
- Chhabra: This captive power plant with CFB boilers was built in 17mos.
- Chhabra: In Jul 2005, the state government cleared the Chhabra power project on a 1,100ac site at Chowki and Motipura villages, Baran district. The first unit went online in Sep 2009 using fuel from coal fields in Korba. In Sep 2008, BHEL was awarded a Rs990cr order for two more 250 MW sets at the plant and these are expected online in late 2011. Two 660-MW sets will complete the site in 2015 or so.
- Jallipa Kapurdi: In Nov 2009, the first 135-MW unit was commissioned at the Raj West power station in Barmer district. A total of eight identical sets are being installed on an EPC basis by Dongfang. These have CFB boilers firing imported coal with provision for use of local lignite. Raj West is a unit of JSW Energy.

*Photograph courtesy of Shree Cement Ltd
Posted 22 Jul 2007*

*Photograph by Rajasthan Rajya Vidyut Utpadan Nigam Ltd
Posted 23 Jun 2010*

*Photograph courtesy of JSW Energy Ltd
Posted 3 Apr 2010*
and budgeted at Rs143cr. The 250ha site is on the left bank of the Chambal River, upstream from the Kota Barrage which forms a reservoir used for plant cooling. The plant is connected to the grid via a 220kV substation. On 4 Sep 2004, Unit-6 was commissioned in a then-record time of 2yrs and 19 days.

Photograph by Sunil Singhal (Panoramio) Re-posted 16 Jun 2010

Mundra thermal power station in Kutch district is divided into four phases. In Phase-II, the company will commission two more 330-MW units while Phase-III (2 X 660 MW) and Phase-IV (3 X 660 MW) consist of supercritical coal-fired sets. Financial close for Phase-I was in Sep 2006. Unit-1 was synchronized in May 2009 and full-load was achieved in Aug 2009. Commercial operation is expected in early 2010 with the second unit to follow in 2-3mos. Fichtner India is owner’s engineer.

Photograph courtesy of Petron Engineering Construction Ltd Posted 31 Dec 2005

Quick facts: Cooling water is supplied via a 1.2km channel from the Indira Gandhi Canal. Unit-2 synchronized in 20.5 months, then an all-India record.

Photograph courtesy of BHEL Posted 31 Dec 2005

Quick facts: This CFB unit in Gurha village, Bikaner district went commercial on 31 Mar 2010. Lignite is supplied from the Gurha (East) lignite block at Kolayat, Bikaner, and was linked to the project in Jul 2005. VS LP has a 30yr mining lease agreement with the state government and a long-term transmission agreement with Rajasthan Rajya Vidyut Prasaran Nigam Ltd.

Photograph courtesy of KSK Energy Ventures Pvt Ltd Posted 24 Apr 2010
## Coal-Fired Plants in Tamil Nadu

### Alathiyur
- **Location:** Tamil Nadu
- **Operator:** Madras Cements
- **Configuration:** 2 X 18 MW
- **Operation:** 2005
- **Fuel:** coal
- **Boiler supplier:** Thermax
- **T/G supplier:** TD Power Systems
- **EPC:** Thermax
- **Quick facts:** CFB boilers. Constructed in 16 months.

*Photograph courtesy of Thermax*  
*Posted 12 Oct 2005*

### Ennore
- **Location:** Tamil Nadu
- **Operator:** Tamil Nadu Electricity Board
- **Configuration:** 2 X 60 MW, 3 X 110 MW
- **Operation:** 1970-1975
- **Fuel:** bituminous coal
- **Boiler supplier:** Brno, BHEL
- **T/G supplier:** BHEL, Skoda
- **Quick facts:** Coal for Ennore is supplied by Coal India from fields in Orissa and West Bengal. From Ennore Port, the material is transported by rail to the power station. Unit-5 was overhauled by Skoda in 2002. The 1,000-MW Vallur power project is being built nearby as a JV of NTPC and TNEB.

*Photograph courtesy of Tamil Nadu Electricity Board*  
*Posted 23 Jul 2008*

### Neyveli I
- **Location:** Tamil Nadu
- **Operator:** Neyveli Lignite Corp Ltd
- **Configuration:** 6 X 50 MW, 2 X 100 MW
- **Operation:** 1962-1970
- **Fuel:** lignite
- **Boiler supplier:** Taganrog
- **T/G supplier:** LMZ, Electrosila
- **Quick facts:** Neyveli operates the largest open-cast lignite mines in India with annual production of about 24mn tons. The Neyveli plants were the first minemouth power stations in India.

*Photograph courtesy of Neyveli Lignite Corp Ltd*  
*Posted 11 Jul 2007*

### Neyveli-II
- **Location:** Tamil Nadu
- **Operator:** Neyveli Lignite Corp Ltd
- **Configuration:** 7 X 210 MW
- **Operation:** 1986-1993
- **Fuel:** lignite
- **Boiler supplier:** Ganz-Danubius, EVT, BHEL
- **T/G supplier:** Tosi, Marelli, BHEL
- **EPC:** Development Consultants Private Ltd
- **Quick facts:** These were the first tower-type, single-pass boilers in India. Power is sold to Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and Pondicherry UT.

*Photograph courtesy of Neyveli Lignite Corp Ltd*  
*Re-posted 11 Jul 2007*
Coal-Fired Plants in West Bengal

**Bakreswar**
Location: West Bengal
Operator: West Bengal Power Development Corp Ltd
Configuration: 5 X 210 MW
Fuel: coal
Boiler supplier: BHEL, Fuji, BHEL
T/G supplier: Fuji, BHEL
EPC: Development Consultants Private Ltd, BHEL, Ilochu, Larsen & Toubro
Quick facts: Bakreswar TPS is 260km from Kolkata and 12km from Suri, Birbhum Dist. Unit-1 was commissioned in 37 months and 17 days, ahead of schedule. Expansion with a 600-MW unit is planned.

Photograph courtesy of West Bengal Power Development Corp Ltd
Posted 3 Nov 2009

**Budge Budge**
Location: West Bengal
Operator: CESC Ltd
Configuration: 3 X 250 MW
Operation: 1997-2009
Fuel: coal
Boiler supplier: BPL, BHEL
T/G supplier: Parsons, BHEL
EPC: Development Consultants Private Ltd, BHEL
Quick facts: This plant is in Achipur, part of Budge Budge municipality in South 24 Parganas District.

Photograph courtesy of CESC
Posted 3 Nov 2009

**Durgapur Phase-II**
Location: Orissa
Operator: NTPC-SAIL Power Co (P) Ltd
Configuration: 2 X 60 MW
Fuel: coal
Boiler supplier: Rafako
T/G supplier: Zamech, Dolmel
Quick facts: This is the second phase of a captive power plant at Durgapur Steel Works. Operations were taken over by NTPC-SAIL power in March 2001.

Photograph courtesy of NTPC-SAIL Power Co (P) Ltd
Posted 14 Feb 2010

**Kolaghat**
Location: West Bengal
Operator: West Bengal Power Development Corp Ltd
Configuration: 6 X 210 MW
Operation: 1984-1993
Fuel: coal
Boiler supplier: BHEL, Combustion Engineering, ACC Vickers Babcock
T/G supplier: BHEL, Siemens
EPC: Development Consultants Private Ltd
Quick facts: Kolaghat TPS is near Mecheda, East Midnapore Dist, and is the largest state-owned power station in WB. The plant has retrofit ammonia-based flue gas conditioning systems.

Photograph courtesy of West Bengal Power Development Corp Ltd
Posted 3 Nov 2009

**Sagardighi**
Location: West Bengal
Operator: West Bengal Power Development Corp Ltd
Configuration: 2 X 300 MW
Operation: 2008
Fuel: coal
Boiler supplier: Dongfang
T/G supplier: Dongfang
EPC: Northwest Electric Power Design Institute, Fourth Engineering Corp of Northwest Power Construction
Quick facts: This 1,600ac site is on the western bank of the Hooghly_River in Murshidabad Dist. The project cost Rs 2,750 crore. Several 500-MW units are to be added.

Photograph courtesy of West Bengal Power Development Corp Ltd
Posted 3 Nov 2009

**Santaldih**
Location: West Bengal
Operator: West Bengal Power Development Corp Ltd
Configuration: 4 X 120 MW, 1 X 250 MW
Operation: 1974-2009
Fuel: coal
Boiler supplier: BPL, ACC Vickers Babcock
T/G supplier: GEC, BHEL
EPC: BHEL
Quick facts: Located on the right bank of Damodar River, Santaldih TPS is in Purulia Distr. Unit-5 was built turnkey by BHEL with McNally Bharat extending the coal handling plant. In Mar 2007, another 250-MW set was ordered from BHEL.

Photograph courtesy of West Bengal Power Development Corp Ltd
Posted 3 Nov 2009
<table>
<thead>
<tr>
<th>Plant</th>
<th>Location</th>
<th>Operator</th>
<th>Configuration</th>
<th>Operation</th>
<th>Fuel</th>
<th>Boiler supplier</th>
<th>T/G supplier</th>
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</thead>
<tbody>
<tr>
<td>Southern-B</td>
<td>West Bengal</td>
<td>CESC Ltd</td>
<td>2 X 67.5 MW</td>
<td>1990</td>
<td>coal</td>
<td>BHEL</td>
<td>BHEL</td>
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<tr>
<td>Titagarh</td>
<td>West Bengal</td>
<td>CESC Ltd</td>
<td>4 X 60 MW</td>
<td>1983-1985</td>
<td>coal</td>
<td>ACC Vickers Babcock</td>
<td>Parsons</td>
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Photograph by Rajenda (SkyScraperCity)  
Photograph by pratik (panoramio)
<table>
<thead>
<tr>
<th><strong>Other Thermal Plants in India</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durgapur Works</strong></td>
</tr>
<tr>
<td>Location: West Bengal</td>
</tr>
<tr>
<td>Operator: Phillips Carbon Black Ltd</td>
</tr>
<tr>
<td>Configuration: 1 X 30 MW CHP</td>
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<tr>
<td>Fuel: tailgas</td>
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<tr>
<td>Operation: 2008</td>
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<tr>
<td>Boiler supplier: BHEL</td>
</tr>
<tr>
<td>T/G supplier: Hangzhou, Greenesol Power Systems</td>
</tr>
<tr>
<td>Quick facts: In Oct 2008, PCB started-up this captive power plant at a cost of Rs1bn. The plant was commissioned in April 2009. PCB is India’s largest carbon black producer and a company of RPG Enterprises. The new cogen plant fires tail gas from the carbon black manufacturing process. Surplus power is sold to CESC.</td>
</tr>
<tr>
<td>Photograph courtesy of Phillips Carbon Black Ltd</td>
</tr>
<tr>
<td>Posted 5 May 2010</td>
</tr>
<tr>
<td><strong>Haldia Complex</strong></td>
</tr>
<tr>
<td>Location: West Bengal</td>
</tr>
<tr>
<td>Operator: Haldia Petrochemicals Ltd</td>
</tr>
<tr>
<td>Configuration: 2 X 52-MW steam, 2 X 23 MW gas turbine CHP</td>
</tr>
<tr>
<td>Fuel: naphtha</td>
</tr>
<tr>
<td>Operation: 1999-2000</td>
</tr>
<tr>
<td>Boiler supplier: ??</td>
</tr>
<tr>
<td>T/G supplier: ABB</td>
</tr>
<tr>
<td>EPC: Larsen &amp; Toubro, Sargent &amp; Lundy</td>
</tr>
<tr>
<td>Quick facts: Haldia Petrochem is a $1.2bn complex with a naphtha cracker unit and associated plants which manufacture LLDPE, HDPE, polypropylene, and other chemicals. It is owned by West Bengal Industrial Development Corp, Chatterjee Petrochem, and Tata Group.</td>
</tr>
<tr>
<td>Photograph courtesy of Larsen &amp; Toubro</td>
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<tr>
<td>Posted 18 Aug 2007</td>
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