



Transforming lives
A Maharatna Company

Format ASI: Generator Details by RRAS Provider

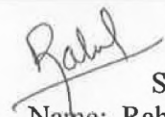
From: NTPC Barh/NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date:12/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|--|--|
| a) | Number of Generating Units | ST# I: 2*660 MW ST# II: 2*660 MW |
| b) | Total Installed Capacity (MW) | 2640(1320 + 1320) MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | ST#I: 1237.5 MW ST# II: 1237.5MW |
| d) | Technical Minimum (MW) | ST#I: 680.63 MW ST# II: 680.63MW |
| e) | Type of Fuel | Coal –Bituminous/Sub Bituminous |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | St-I: 241.7 Paise/Kwh St-II: 183.5 Paise/Kwh |
| i) | Variable Cost (paise/Kwh up to one decimal place) | St-I : 318.5 Paise/Kwh St-II: 315.9 Paise/Kwh |
| j) | Ramp-Up Rate (MW/Min) for each unit | St-I/II : 6.19 / 6.19 MW/Min |
| k) | Ramp-Down Rate (MW/Min)for each unit | St-I/II : 6.19 / 6.19 MW/Min |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | Cold: 2100 Mins Warm: 900 Mins |
| m) | Any other information | |


Signed by:
Name: Rahul Anand
Designation: DGM (OS)

राहुल आनन्द/Rahul Anand
उप महाप्रबंधक (ओ० एस०)/DGM (OS)
एनटीपीसी पू० क्षेत्र-1 मु०/NTPC ER-I HQ
PATNA

Format ASI: Generator Details by RRAS Provider

From: FSTPP/NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date: 16/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|--|---|
| a) | Number of Generating Units | ST # I& II: 3*200+2*500 MW ST# III: 1*500 MW |
| b) | Total Installed Capacity (MW) | ST # I& II: 1600 MW ST# III: 500 MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | ST #I&II:1557.0 MW ST# III: 494.0 MW |
| d) | Technical Minimum (MW) | ST # I&II: 820.3 MW ST# III: 257.8 MW |
| e) | Type of Fuel | Coal –Bituminous/Sub-Bituminous |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | ST#I& II : 76.8 Paise/KWh ST# III: 148.7 Paise/KWh |
| i) | Variable Cost (paise/Kwh up to one decimal place) | ST# I & II: 327.5 Paise/KWh ST# III: 305.2 Paise/KWh |
| j) | Ramp-Up Rate (MW/Min) for each unit | For 200 MW Stage I: 1.83MW/Unit/Min For 500 MW Stage II: 4.71MW/Unit/Min For 500 MW Stage III: 4.69 MW/Unit/Min For commercial stage I : 14.92 MW/ min |
| k) | Ramp-Down Rate (MW/Min)for each unit | -do- |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | ST#I, II & III : Cold : 360 Minutes ST#I, II & III : Warm: 240 Minutes |
| m) | Any other information | 840 Minutes in case of unit shutdown period is more than 5 days as boiler will be kept under preservation. |

Rahul

Signed by:

Name: Rahul Anand

Designation: DGM (OS)

राहुल आनन्द/Rahul Anand

उप महाप्रबंधक (ओ० एस०)/DGM (OS)

एनटीपीसी पू० क्षेत्र-I मु०/NTPC ER-I HQ

पटना/PATNA

Format AS1: Generator Details by RRAS Provider

From: KhSTPP/NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date: 12/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|--|---|
| a) | Number of Generating Units | 4X210 MW + 3X500 MW |
| b) | Total Installed Capacity (MW) | ST# I: 840 MW ST# II: 1500 MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | 2237MW (803+1434)MW |
| d) | Technical Minimum (MW) | 1194 MW(421 +773)MW |
| e) | Type of Fuel | Coal-Bituminous/Sub Bituminous |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | ST#I : 104.5 Paise/KWh ST# II: 92.3 Paise/KWh |
| i) | Variable Cost (paise/Kwh up to one decimal place) | ST# I : 285.1 Paise/KWh ST# II: 270.4 Paise/KWh |
| j) | Ramp-Up Rate (MW/Min) for each unit | Stage I- 28.7 MW/15 min Block/Unit Stage II- 70.3MW/15min Block/Unit |
| k) | Ramp-Down Rate (MW/Min)for each unit | -do- |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | Stage I- 360/240 Min Stage II- 360/240 Min |
| m) | Any other information | 840 Minutes in case of unit shutdown period is more than 5 days as boiler will be kept under preservation |

Rahul

Signed by:

Name: Rahul Anand

Designation: DGM (OS)

राहुल आनन्द/Rahul Anand
उप महाप्रबंधक (ओ० एस०)/DGM (OS)
एनटीपीसी यू० क्षेत्र-I मु०/NTPC ER-I HQ
पटना/PATNA

Format AS1: Generator Details by RRAS Provider

From: TSTPP-I /NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date: 12/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|--|---|
| a) | Number of Generating Units | 2*500 MW |
| b) | Total Installed Capacity (MW) | 1000MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | 945 MW |
| d) | Technical Minimum (MW) | 511.23 MW |
| e) | Type of Fuel | Coal Bituminous/Sub Bituminous (Start-Up with HFO/LDO) |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | 95.6 Paise/Kwh |
| i) | Variable Cost (paise/Kwh up to one decimal place) | 144.7 Paise/Kwh |
| j) | Ramp-Up Rate (MW/Min) for each unit | 4.65 MW/Min |
| k) | Ramp-Down Rate (MW/Min)for each unit | 4.65 MW/Min |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | Cold: 360 Mins Warm: 240 Mins 840 Mins if recalled after more than 5 days |
| m) | Any other information | - |



Signed by:

Name: Rahul Anand

Designation: DGM (OS)

राहुल आनन्द/Rahul Anand
 उप महाप्रबंधक (ओ० एस०)/DGM (OS)
 एनटीपीसी पू० क्षेत्र-1 मु०/NTPC ER-I HQ
 पटना/PATNA

Format AS1: Generator Details by RRAS Provider

From: Darlipali STPP/NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date: 12/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|--|--|
| a) | Number of Generating Units | 2x800MW |
| b) | Total Installed Capacity (MW) | 1600 MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | 1575MW |
| d) | Technical Minimum (MW) | 825 |
| e) | Type of Fuel | Primary :Coal Bituminous/ Sub Bituminous, Secondary: LDO |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | 165.7 |
| i) | Variable Cost (paise/Kwh up to one decimal place) | 128.2 |
| j) | Ramp-Up Rate (MW/Min) for each unit | 7.5 MW/Min |
| k) | Ramp-Down Rate (MW/Min)for each unit | 7.5 MW/Min |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | Cold: 2220 Min Warm: 1500 Min |
| m) | Any other information | Nil |

Rahul

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Designation: DGM (OS)

राहुल आनन्द/Rahul Anand
उप महाप्रबंधक (ओ० एस०)/DGM (OS)
एनटीपीसी यू० क्षेत्र-I मु०/NTPC ER-I HQ
पटना/PATNA

Format AS1: Generator Details by RRAS Provider

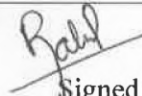
From: MTPS II STPP/NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date: 12/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|--|---|
| a) | Number of Generating Units | 2x195MW |
| b) | Total Installed Capacity (MW) | 390 MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | 372.645 MW |
| d) | Technical Minimum (MW) | 195.195 |
| e) | Type of Fuel | Primary :Coal Bituminous/ Sub Bituminous, Secondary: LDO |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | 253.7 |
| i) | Variable Cost (paise/Kwh up to one decimal place) | 281.5 |
| j) | Ramp-Up Rate (MW/Min) for each unit | 1.77 MW/Min |
| k) | Ramp-Down Rate (MW/Min)for each unit | 1.77 MW/Min |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | Cold: 360 Min Warm: 240 Min 840 Minutes in case of unit shutdown period is more than 5 days |
| m) | Any other information | Nil |



Signed by:

Name: Rahul Anand

Designation: DGM (OS)

राहुल आनन्द/Rahul Anand
 उप महाप्रबंधक (ओ० एस०)/DGM (OS)
 एनटीपीसी यू० क्षेत्र-1 यू०/NTPC ER-I HQ
 पटना/PATNA

Format ASI: Generator Details by RRAS Provider

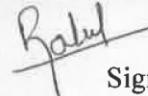
From: NPGC/NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date: 12/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|--|--|
| a) | Number of Generating Units | 3x660MW |
| b) | Total Installed Capacity (MW) | 1980 MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | 1856.25 MW |
| d) | Technical Minimum (MW) | 1020.94 |
| e) | Type of Fuel | Primary :Coal Bituminous/ Sub Bituminous, Secondary: LDO |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | 216.8 |
| i) | Variable Cost (paise/Kwh up to one decimal place) | 328.7 |
| j) | Ramp-Up Rate (MW/Min) for each unit | 6.19 MW/Min |
| k) | Ramp-Down Rate (MW/Min)for each unit | 6.19 MW/Min |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | Cold: 2100 Min Warm: 900 Min |
| m) | Any other information | Nil |



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Name: Rahul Anand

Designation: DGM (OS)

राहुल आनन्द/Rahul Anand
 उप महाप्रबंधक (ओ० एस०)/DGM (OS)
 एनटीपीसी पू० क्षेत्र-I मु०/NTPC ER-I HQ
 पटना/PATNA



Transforming lives
A Maharatha Company

Format AS1: Generator Details by RRAS Provider

From: NKSTPP/NTPC Ltd

To: ERPC, Kolkata

Validity of the Information: From 16/02/2024 to 15/03/2024

Date: 12/02/2024

| S. No | Title/Parameters | Values/Data |
|-------|---|---|
| a) | Number of Generating Units | 1x660MW |
| b) | Total Installed Capacity (MW) | 660 MW |
| c) | Maximum Possible Ex-Bus injection (MW) (including overload, if any) | 646.22 MW |
| d) | Technical Minimum (MW) | 363 |
| e) | Type of Fuel | Primary: Coal Bituminous/ Sub Bituminous, Secondary: LDO |
| f) | Region | Eastern Region |
| g) | Bid Area | |
| h) | Fixed Cost (paise/KWh up to one decimal place) | 240.5 |
| i) | Variable Cost (paise/Kwh up to one decimal place) | 152.7 |
| j) | Ramp-Up Rate (MW/Min) for each unit | 6.15 MW/Min |
| k) | Ramp-Down Rate (MW/Min)for each unit | 6.15 MW/Min |
| l) | Start-Up time from Cold Start(in Min) and Warm Start (in Min)for each unit | Cold: 2880 Min Warm: 2160 Min |
| m) | Any other information | Nil |

Signed by:

Name: Rahul Anand

Designation: DGM (OS)

राहुल आनन्द/Rahul Anand
उप महाप्रबंधक (ओ० एस०)/DGM (OS)
एनटीपीसी पू० क्षेत्र-I मु०/NTPC ER-I HQ
पटना/PATNA

Format ASI:Generator Details by RRAS Provider

From: (Name of RRAS Provider Generating Station)/ (Name of Owner Organization)
TEESTA-V POWER STATION (NHPC LTD.)

To: ERPC

Validity of the Information

From: 16/02/2024 **To:** 15/03/2024

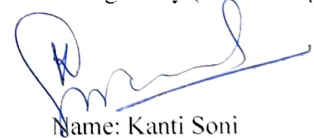
Date: 10/02/2024

| S. No. | Title/Parameters | Values/Data |
|--------|---|----------------|
| a) | Number of Generating Units (e.g. 1 x 210MW+ 2 x 500MW) | 3X170 MW |
| b) | Total Installed Capacity (MW) | 510 MW |
| c) | Maximum possible Ex-bus injection (MW) (including over load if any) | 529* |
| d) | Technical Minimum (MW) | N.A. |
| e) | Type of Fuel | WATER |
| f) | Region | EASTERN REGION |
| g) | Bid area | E1 |
| h) | Fixed Cost | 98.4 Paise/KWH |
| i) | Variable Cost | 98.4 Paise/KWH |
| j) | Ramp-Up Rate (MW/Min)for each unit | 45 MW/Min |
| k) | Ramp-Down Rate (MW/Min) for each unit | 45 MW/Min |
| l) | Start-up Time from Cold Start (in Min) & Warm Start of each unit | 15 min approx |
| m) | Any other information | |

*As per water availability

Copy to: ERLDC

Signature of Authorized Signatory (with Stamp)



Name: Kanti Soni

Designation: SM (M)

Format ASI: Generator Details by RRAS Provider

From: (Name of RRAS Provider Generating Station)/ (Name of Owner Organization)
RANGIT POWER STATION (NHPC LTD.)

To: ERPC

Validity of the Information

From: 16/02/2024 **To:** 15/03/2024

Date: 10/02/2024

| From: | Title/Parameters | Values/Data |
|-------|---|------------------|
| a) | Number of Generating Units (e.g. 1 x 210MW+ 2 x 500MW) | 3X20 MW |
| b) | Total Installed Capacity (MW) | 60 MW |
| c) | Maximum possible Ex-bus injection (MW) (including over load if any) | 62* |
| d) | Technical Minimum (MW) | N.A. |
| e) | Type of Fuel | WATER |
| f) | Region | EASTERN REGION |
| g) | Bid area | E1 |
| h) | Fixed Cost | 201.25 Paise/KWH |
| i) | Variable Cost | 201.25 Paise/KWH |
| j) | Ramp-Up Rate (MW/Min) for each unit | 15 MW/min |
| k) | Ramp-Down Rate (MW/Min) for each unit | 15 MW/min |
| l) | Start-up Time from Cold Start (in Min) & Warm Start of each unit | 15 min approx |
| m) | Any other information | |

*As per water availability.

Copy to: ERLDC

Signature of Authorized Signatory (with Stamp)



Name: Kanti Soni

Designation: SM (M)

Format AS1: Generator Details by RRAS Provider

From: (Nabi Nagar Thermal Power Project)/ (Bhartiya Rail Bijlee Company Ltd.)

To: ERPC

Validity of the Information **from:** 16/02/2024 **To:** 15/03/2024

Date: 06/02/2024

| S No. | Title/Parameters | Values/Data |
|-------|--|--|
| a) | Number of Generating Units | 4X250 MW |
| b) | Total Installed Capacity (MW) | 4X250 MW |
| c) | Maximum possible Ex-bus injection (MW) (including overload if any) | 910 MW |
| d) | Technical Minimum (MW) (per Unit) | 137.5 MW (55% of Nameplate MCR, 9% APC) |
| e) | Type of Fuel | Coal + LDO |
| f) | Region | ER |
| g) | Bid area | E1 |
| h) | Fixed Cost (paise / kWh up to one decimal place) | 232.6 |
| i) | Variable Cost (paise / kWh up to one decimal place) | 323.1 |
| j) | Ramp-Up Rate (MW/15 min) for each unit | 34.125 |
| k) | Ramp-Down Rate (MW/15 Min) for each unit | 34.125 |
| l) | Start-up Time from Cold Start (in Min) & Warm Start of each unit | Cold Start: 480 min Warm Start: 300 min |
| m) | Any other information | |

- Startup Time from Reserve Shut Down (in case Unit Shut Down Period is more than 5 days as Boiler will be kept under preservation)

840 minutes

Copy to: ERLDC

Signature of Authorized Signatory (with Stamp) Name:

Designation:


AVINASH SHUKLA
वरिष्ठ प्रबंधक (इंजीनियरिंग)
Sr. Manager (EEMG)
बिहार बि. सो. एल. / BREL
नवीनगर टी.पी.पी. / Nabinagar T.P.P.
औरंगाबाद, बिहार / Aurangabad, Bihar

Format AS1: Generator Details by TRAS/SRAS/SCED Provider**From:** Maithon Power Limited**To:** ERPC

Validity of the Information

From: 16-02-2024 To: 15-03-2024

Date: 06-02-2024

| S.No. | Title/Parameters | Values/Data |
|-------|--|--|
| a) | Number of Generating Units (e.g. 1 x 210 MW + 2 x 500 MW) | 2 x 525 MW |
| b) | Total Installed Capacity (MW) | 1050 MW |
| c) | Maximum possible Ex-bus injection (MW) (including overload if any) | 984.38 |
| d) | Technical Minimum (MW) | 541.41 |
| e) | Type of Fuel | Bituminous/Sub-Bituminous coal (Start up with LDO and HFO) |
| f) | Region | Eastern |
| g) | Bid area | E1 |
| h) | Fixed Cost (paise / kWh upto one decimal place) | 137.0 |
| i) | Variable Cost (paise / kWh upto one decimal place) | 295.9 |
| j) | Ramp-Up Rate (MW/Min) for each unit | 4.92 |
| k) | Ramp-Down Rate (MW/Min) for each unit | 4.92 |
| l) | Start-up Time from Cold Start (in Min) & Warm Start of each unit | Cold 720 Warm 300 |
| m) | Any other information | 840 min for RSD in case of unit shutdown period is more than 5 days as boiler will be kept under preservation. |

Copy to:

Signature of Authorized Signatory (with Stamp)



Name: Sudip Dash

Designation: Head - Commercial & Regulation, MPL