

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION,

BHOPAL

Sub: In the matter of

- i) Petition seeking approval of the Hon'ble Commission for Relinquishment/surrender of the 140 MW power from NTPC Kawas Gas based Power Station under the Bulk Power Purchase Agreement dated 12.01.1994.;**
- ii) Petition seeking approval of the Hon'ble Commission for Relinquishment/surrender of the 117 MW power from NTPC Gandhar Gas based Power Station under the Bulk Power Purchase Agreement dated 12.01.1994;**
- iii) Petition seeking approval of appropriate directions by the Hon'ble Commission in exercise of power under Section 86(1)(b) of the Electricity Act, 2003.**

(P.No. 43 of 2021)

Order

(Hearing through Video Conferencing)

Date of order. 02.11.2021

M.P. Power Management Company Limited : Petitioner

Vs.

NTPC Ltd. : Respondent

Shri Alok Shankar, Advocate and Dr. R.V. Saxena appeared on behalf of the petitioner.

- 1 The subject petition is filed by the petitioner in pursuance of the Ministry of Power's (MoP) circular dated 22.03.2021 enabling Distribution Licensees to surrender power from Generating Stations after completion of the term of PPA, i.e beyond 25 years from the date of commissioning of the plant or a period specified in the PPA and allow flexibility to the Generators to sell power in any mode after State /Discom exit from PPA. Pursuant to aforesaid notification, the petitioner intends to relinquish its entire allocated power from Kawas & Gandhar Gas based Power Stations under their Bulk Power Supply Agreement (BPSA) executed with NTPC on 12.01.1994. The said

BPSA was deemed to have come in force on 01.11.1992 and was to remain valid for 5 years i.e. up to 31.10.1997, with an option to be mutually extended, renewed or replaced by another agreement on such terms and conditions as the parties may mutually agree. The petitioner has made following prayer in subject petition :

(i) *“issue directions allowing the Petitioner to relinquish/surrender of 140 MW power from NTPC Kawas Gas based Power Stations under the Bulk Power Purchase Agreement dated 12.01.1994”;*

(ii) *“issue directions allowing the Petitioner to relinquish/surrender of 117 MW power from NTPC Gandhar Gas based Power Stations under the Bulk Power Purchase Agreement dated 12.01.1994;”*

2 The Commission held the motion hearing on 24.08.2021 and admitted the petition with directions to enlist the NTPC Ltd. as respondent. The respondent was directed to file his response within two weeks. The Petitioner was asked to file rejoinder within one week, thereafter.

3 The petitioner in its petition has made following submission broadly as reproduced below :-

i. *National Thermal Power Corporation Ltd. (“NTPC”), a generating company incorporated under the Companies Act, 1956 entered into a Bulk Power Supply Agreement (“BPSA”) with Madhya Pradesh Electricity Board (“MPEB”) (second predecessor of the Petitioner MPPMCL) and other bulk power beneficiaries, dated 12.01.1994 for supply of power from NTPC Thermal Plants like Korba, Vindhyachal and two gas power stations namely Kawas & Gandhar, owned and operated by NTPC. These bulk power to the beneficiaries of BPSA is allocated by the Government of India. The said BPSA though signed on 12.01.1994, was deemed to have come into force on 01.11.1992 and was to remain valid for 5 years, i.e., upto 31.10.1997, with an option to be mutually extended, renewed or replaced by another agreement on such terms and conditions as the parties may mutually agree.*

ii. *Pursuant to the aforesaid agreements, the Petitioner was supplied power from NTPC’s power stations as per the allocated capacity for the State of Madhya Pradesh. However,*

the scheduling from the above mentioned Gas stations have always been low due to their very high position in the merit order of the Petitioner.

- iii. Despite best efforts to get these generating stations deallocated, the same did not happened. Our requests for surrender of power, were hosted on its website by MoP, GoI persistently for long time. But since there were no offtakers, MoP, GoI could not reallocated it to any other utility/beneficiary and hence continued to remain with MPPMCL, the petitioner company.*
- iv. The Ministry of Power, Government of India has now enabled distribution licenses to surrender power from generating station after completion of the initial duration of the PPA. vide a circular No. 23/23/2020-R&R [254623] dated 22.03.2021 (“**MoP Circular**”) the Ministry of Power issued the procedure “enabling Discoms to either continue or exit from the PPA after completion of the term of the PPA, i.e. beyond 25 years or a period specified in the PPA and allow flexibility to the Generators to sell power in any mode after State/Discom exit from PPA”.*
- v. Pursuant to the said MoP Circular, the States/ Discoms now have an option to relinquish their share of power from eligible Central Generating Stations (CGSs) after expiry of term of the PPA, i.e., 25 years from the date of commissioning of the plant or the period specified in the PPA. The said circular further provided that such requests be submitted only after approval from the appropriate State Commission. The States/ Discoms sourcing power under their respective BPSA were also permitted to relinquish the entire allocated power from those projects which have completed 25 years since the commissioning of the project and continue availing power from other stations under the BPSA. The relevant clause VIII of the said MoP Circular is reproduced as under:*

“VIII. In case of Bulk Power Supply Agreement (BPSA) also, the state/ discoms may relinquish the entire allocated power from such projects which have completed 25 years since the commissioning of the project. Power Supply from other projects shall continue as per the terms of the PPA.”
- vi. As stated above, due to very low scheduling of power sourced from Kawas and Gandhar stations the power sourced from them is expensive and commercially unviable. As a result of low scheduling, the capacity charges for the unutilized capacity is also an unproductive cost incurred by the Petitioner. This is coupled with the fact that above Plants have already completed the period of 25 years since the date of commissioning. The Petitioner therefore intends to relinquish its entire allocated power from Kawas and Gandhar Gas Power Stations under their Bulk Power Supply Agreement executed with*

NTPC as per Clause VIII of the MoP order dated 22.03.2021 and continue to avail power from Korba & Vindhyachal Stations covered under the same BPSA.

vii. It is pertinent to note that the aforesaid proposal seeking approval for surrender of Madhya Pradesh's share of power from NTPC's Kawas and Gandhar Gas based Power Stations has been put up by petitioner before its management and GoMP and the Energy Department, Government of Madhya Pradesh vide its letter no. F-3-58/2012/13 (Vol. IX) dated 21.06.2021 has accorded approval to the same. Subsequently matter also put up before Board of Directors of Company in its 99th meeting held on 8th July 2021, wherein it has been resolved to surrender full allocated power from Kawas and Gandhar Gas Stations of NTPC. The proposal for surrender of Madhya Pradesh's share of power from NTPC's Kawas and Gandhar Gas based Power Stations shall be sent to MoP as per the directives issued vide Circular annexed as P-2, subject to approval by this Hon'ble Commission.

REASONS FOR RELINQUISHMENT OF POWER

viii. It is submitted that the surrender of such allocated power from the aforementioned gas-based power stations under the BPSA is felt necessary to curtail payment of idle capacity charges being paid by the Petitioner, which has increased substantially to Rs. 3224 Cr during FY 2020-21 and is subjecting the already distressed Discoms in the State to a huge financial burden. Other reasons for relinquishment of power by the Petitioner under the BPSA from NTPC's Kawas and Gandhar Gas based Power Stations are discussed hereunder:

- a) The Electricity Act empowers the Appropriate State Commission to "regulate" electricity purchase and procurement process of distribution licensees. In terms of Section 86(1)(b) of the Act, this Hon'ble Commission regulates the "electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from generating companies or licensees or from other sources through agreements for purchase of power (like the PPA/BPSA) for distribution and supply within the State".*
- b) In order to cater to the needs and demand of its consumers, the Petitioner's power procurement process is focused on ensuring procurement of adequate power at competitive prices from various generators. The power procurement cost is one of the most significant items in the ARR of the Petitioner (nearly comprising of 75-80%) and has a significant bearing on the retail supply tariff of the Petitioner Y-o-Y.*

c) *The State of Madhya Pradesh being a predominantly agricultural State, has a substantial variation in demand during the high and low demand seasons during a year. The maximum (peak) demand at present is approx. 15500 MW during Rabi season, while the demand dips to the extent of 7000 MW during rainy season. Thus, during the season of low demand of electricity, which occurs during most of the time through a year, huge generation capacity remains unutilized which results in payment of heavy 'Idle Capacity Charges'.*

d) *In addition to the demand variation, the generation from the above-mentioned Gas based stations from sources other than APM Gas, i.e., non-APM Gas and liquid fuel also causes huge upward fluctuation in the energy charge for such power. Practically, no power is scheduled by the Petitioner when the plant is operating on non-APM Gas or liquid fuel. However, full capacity charge is payable to them due to declared availability/ capacity.*

e) *It is pertinent to consider that power distribution companies in 12 states are cumulatively paying a hefty Rs. 17,500 crore a year for the power they do not use, according to a report by Forum of Regulators (FoR). Among the DISCOMs tracked in the study, M.P. is second from the top 10 Discoms paying idle fixed cost of Rs 4,325 crore among others, like Uttar Pradesh (Rs 4,394 crore), Punjab (Rs 1,880 crore), Haryana (Rs 1,719 crore) and Gujarat (Rs 1,528 crore).*

It is submitted that the amount of idle capacity cost is equal to 13% of the annual revenue of Madhya Pradesh's DISCOMs. Thus, it is imperative for the Petitioner to adopt measures to save this hefty amount spent on fixed costs every year.

f) *The amount of idle capacity charges paid by the Petitioner over the past few years has been quite substantial, causing huge financial burden on the Petitioner and ultimately the consumers of electricity in the State of Madhya Pradesh. Such idle capacity charges paid by the Petitioner from the year 2016-17 to 2020-21 are as follows:*

<i>Financial Year</i>	<i>Idle Capacity Charges paid (Rs.) (in Cr)</i>
<i>2016-17</i>	<i>3333</i>
<i>2017-18</i>	<i>1347</i>
<i>2018-19</i>	<i>1119</i>
<i>2019-20</i>	<i>3811</i>
<i>2020-21</i>	<i>3224</i>

- g) *The following tables giving data for power scheduled by the Petitioner from Kawas and Gandhar Gas based Power Stations for FY 2019-20 and FY 2020-21 which clearly depicts that while scheduling power on principles of merit order dispatch, the Petitioner has been able to schedule only 4% to 14% power from its entitlement from these power stations, leading to non-utilisation of the capacity charges:*

<u>Kawas Gas Power Station</u>				
Year	Entitled Power	Actual power scheduled	Actual power scheduled in %	Capacity charges paid
2019-20	1098.53 MU	151.33 MU	14%	Rs. 82.31 Cr
2020-21	1137.19 MU	154.24 MU	14%	Rs. 84.35 Cr

<u>Gandhar Gas Power Station</u>				
Year	Entitled Power	Actual power scheduled	Actual power scheduled in %	Capacity charges paid
2019-20	951.85 MU	38.49 MU	4%	Rs. 89.23 Cr
2020-21	926.29 MU	197.80 MU	11%	Rs. 89.37 Cr

*A detailed sheet regarding quantum of power scheduled by the Petitioner over the past years from Kawas and Gandhar Power Stations is annexed herewith and marked as **Annexure P-4**.*

- h) *Moreover, apart from the above, the Petitioner also has to incur transmission charges payable to Power Grid Corporation of India Ltd. (“PGCIL”) for sourcing of power from Kawas and Gandhar Gas Stations to the tune of Rs. 90 Crore per annum.*
- i) *Due to the minimal scheduling of costly power from the Kawas Gas Power Station and the Gandhar Gas Power Station over the recent years, it has resulted in payment of huge amount of unnecessary idle capacity charges and transmission charges. Therefore, in view of the option given by the Ministry of Power circular dated 22.03.2021, the Petitioner has approached it’s Board, GoMP and now this Hon’ble Commission to allow and approve the surrender of power from NTPC’s Kawas and Gandhar Gas based Power Stations in order to save a portion of huge*

financial costs towards idle capacity charges and transmission charges levied on the Petitioner under the BPSA and the relevant Regulations.

ADEQUACY OF TIED-UP POWER TO MEET DEMAND OF ELECTRICITY

- ix. It is a known fact that the demand for power in the State varies all throughout the year with changing seasons and consequent agricultural, industrial and domestic requirements. To assess the demands and supply scenario in the State at present and in future, a committee was constituted by the Energy Department, GoMP vide order no. F-3/137/2010/13/(Vol-II) dated 05.02.2018 comprising members from the Petitioner Company, State Planning Cell, CEA, Energy Department, MPPTCL and MPPGCL (“Committee”). The Committee carried out a demand and availability projection for the State of Madhya Pradesh including all its on-going projects, and after excluding power scheduled from Kawas and Gandhar Power Plants of 257 MW for the period FY 2021-22 to 2029-30. The said analysis takes into consideration the peak demand in State of Madhya Pradesh in MW and MU, its peak availability with banking facility, power available from renewable sources and the consequent surplus or deficit for the relevant year.*
- x. It is relevant to consider that while undertaking such analysis and projections, the Committee considered the peak load to ensure that power is available to cater to the maximum load in the state. However, the underlying DISCOMs generally operate on base load or average load and there is a substantial difference in the base load and peak load requirements. This is even true for the State of Madhya Pradesh. Therefore, if the Petitioner has to enter into long term PPA’s to cater to its peak load requirement, which in the instant case occurs only for about a month during the entire year during Rabi season, it will lead to incurring unnecessary idle capacity charges for the entire year as such peak load will be achieved only for one month. Therefore, it will be prudent for the Petitioner to exit from eligible long-term PPA’s, in the State. In such a situation, it will be most economical and practical to procure power for such peak load requirement, by entering into short-term PPA’s and or spot purchases on need and demand basis.*
- xi. As per the analysis carried out by State Planning Cell for ascertaining the surplus or deficit in power after including power from ongoing projects as on date, it was projected that for FY 2021-22, power will be surplus to the tune of 521 MW or 3.2%. However, considering the projected demand for the State by FY 2029-30, there will be a deficit to the tune of 2737 MW or 11.3%.*

xii. Now taking the demand and availability projections for FY 2021-22 to FY 2029-30 by excluding the availability of 257 MW power from Kawas and Gandhar Power Plants, it was projected that for FY 2021-22, the State will be in surplus of 189 MW power or 1.2 % from the peak demand. However, by FY 2029-2030, it is estimated that the State will be in a deficit of 3069 MW from the peak demand. Clearly, even after excluding power from these stations, there is marginal shortage only in the peak load which can be meet through various options discussed hereunder.

xiii. It is relevant to note that in the projections carried out in aforesaid analysis, the following has been excluded:

- a) Replacement units of MP Genco and remaining 2x660 MW units of DBFOO route are not considered in projections.
- b) 830 MW units of Satpura are also not considered beyond FY2022-23.
- c) Kakrapar and Tarapore plants are not considered beyond August 2025.
- d) Mouda I & Mouda II are not considered up to FY 2025-26, considered thereafter.
- e) DVC plants are not considered.

xiv. Thus, based on the aforesaid study of demand and availability projections for the State of Madhya Pradesh, it is observed that the impact on the surplus or deficit of availability of power in the State due to exclusion of power scheduled from Kawas and Gandhar Power Stations will be miniscule. A copy of the detailed sheet showing the calculations is annexed herewith and marked as **Annexure P-5**.

xv. Commercial Department, MPPMCL also carried out a “What-if” analysis by replacing power procured from Kawas and Gandhar Gas Stations on monthly basis during FY 2019-20 and 2020-21, considering the following three scenarios to determine their financial impact, if any:

- (i) **Scenario I: Replacing power scheduled from Kawas and Gandhar Power Stations by available back-down power through bucket filling:**

Under Scenario I, the power scheduled from Kawas and Gandhar Power Stations was considered to be replaced by available backdown power from other power stations having PPAs with the Petitioner. Usually, the power being supplied to the Discoms from a generating station is not utilized to its full entitled capacity and there is always some backdown power which can be availed on need basis.

Therefore, by utilizing the said backdown power from other generating stations to replace the minimal power that was being scheduled from Kawas and Gandhar, it was found that per unit cost of power procured from Kawas and Gandhar Gas Stations was Rs. 11.65 and Rs. 8.90 for FY 2019-20 and FY 2020-21 respectively. The per unit cost of power replaced through bucket-filling from available back-down was found to be Rs. 1.75 and Rs. 1.82 for FY 2019-20 and FY 2020-21 respectively.

Thus, this replacement will result in yearly saving of Rs. 188.03 Cr for FY 2019-20 and Rs. 178.57 Cr for FY 2020-21 on account of idle capacity charges paid to these Plants.

(ii) Scenario-II: Replacing power scheduled from Kawas and Gandhar Power Stations by procurement from Power Exchange(s) at average RTC rate for the month:

Under Scenario II, the power scheduled from Kawas and Gandhar Power Stations was considered to be replaced by power from Power Exchange(s) through Short-term Power Supply Agreements. As per this analysis, the per unit cost of power replaced through purchase from Power Exchange(s) at average RTC rate was found to be Rs. 3.11 and Rs. 2.54 for FY 2019-20 and FY 2020-21 respectively. Thus, this replacement will result in yearly savings of Rs. 162.05 Cr for FY 2019-20 and Rs. 160.41 Cr for FY 2020-21 on account of idle capacity charges paid to these Plants.

(iii) Scenario-III: Replacing 50% power scheduled from Kawas and Gandhar Power Stations by available back-down power through bucket filling and the balance 50% Power scheduled to be replaced by procurement from Power Exchange(s) at average RTC rate for the month:

Under this scenario, the power scheduled from Kawas and Gandhar Power Stations was considered to be replaced both through available backdown power and through purchase from Power Exchange(S). The per unit cost of power under Scenario-III was found to be Rs. 2.39 and Rs. 2.14 for FY 2019-20 and FY 2020-21 respectively. Thus, this replacement will result in yearly saving of Rs. 175.74 Cr for FY 2019-20 and Rs. 170.33 Cr for FY 2020-21 on account of idle capacity charges paid to these Plants.

The table depicted below clearly shows the expenditure per unit per year due to scheduling power from Kawas and Gandhar Power Stations and the yearly

savings on replacing the said power under the three scenarios as explained above:

	<i>Cost of Power from Kawas and Gandhar (per unit)</i>	<i>Cost per Unit under Scenario I</i>	<i>Cost per Unit under Scenario II</i>	<i>Cost per Unit under Scenario III</i>
2019-20	Rs. 11.65	Rs. 1.75	Rs. 3.11	Rs. 2.39
2020-21	Rs. 8.90	Rs. 1.82	Rs. 2.54	Rs. 2.14
Savings p.a.		Rs.188.03 Cr (FY 2019-20) Rs.178.57 Cr (FY 2020-21)	Rs. 162.05 Cr FY 2019-20 Rs. 160.41 Cr FY 2020-21	Rs. 175.74 Cr FY 2019-20 Rs. 170.33 Cr FY 2020-21

xvi. As per the above analysis carried out by the Petitioner, Scenario-III was considered to be most realistic as power which remains unscheduled currently may not be available for all 15-minute time-blocks and the Petitioner may have to procure power from Power Exchange(s).

xvii. Thus, it is abundantly clear that even if the power allocated to the State of Madhya Pradesh from Kawas and Gandhar Power Stations is relinquished as per the guidelines laid out under the MoP circular, power scheduled from these two stations can be procured and satisfied from available back-down power and/or from Power Exchange(s) as per the requirement. Thus, sufficient and adequate power will be available with the Petitioner to meet the demand of electricity for all the consumers of the Discoms in the State of Madhya Pradesh.

xviii. As mentioned above, that Energy Department, Government of Madhya Pradesh had set up a Committee on 05.02.2018 to assess the long term power demand and formulate a capacity addition programme for the State upto FY 2026-27. However, in the year 2019, it was deemed necessary to expand the period of review upto FY 2029-30 so that timely steps can be taken to ensure 24x7 power supply in the State. The Committee prepared various reports, which were revised from time to time. As per the final review of demand and availability of power conducted by the Committee vide its report dated 13.05.2019, it was assessed that though the State has sufficient power for the present, but in terms of peak demand, the State may start facing deficit during Rabi season (of more than 5%) from FY 2023-24 onwards. As per the report, to overcome this deficit, a generation capacity of 3960 MW may be required in the State.

xix. *Therefore, upon relinquishment of power from Kawas and Gandhar Power Stations under the BPSA, it will lead to annual savings of approximately Rs. 80 Crores towards idle capacity charges for Kawas Gas Plant and Rs. 90 Crores towards idle capacity charges for Gandhar Gas Plant, totalling to an annual saving of approximately **Rs. 170 Crore**. Moreover, it will also lead to saving of transmission charges paid by the Petitioner to PGCIL for transmission of power from Kawas and Gandhar Power Stations to the extent of Rs. 90 Cr per annum. It is pertinent to consider that this will amount to a **total annual saving of Rs. 260 crores**, providing substantial relief to the already financially distressed position of the Petitioner Company.*

xx. *Notwithstanding the aforesaid ‘What-if’ analysis, it is imperative to consider that it will be beneficial for the Petitioner to surrender power from Kawas and Gandhar Power Stations as it will lead to annual saving of Rs. 260 crores. Further, the projected deficit of power, maximum to the tune of 332 MW as observed under the Demand and Availability Projections for the State, can easily be met by procurement of power on short term basis.*

xxi. *It is submitted that it is the bounden duty and obligation of a Distribution licensee to cut down unnecessary costs in order to ensure that power is available at least costs to its consumers. Further, the aforementioned Demand and Availability Projections is a conservative estimate and was carried out for the State considering the worst-case scenario. Moreover, such projected power deficit occurs only for a month at the time of peak demand during Rabi season in a financial year.*

xxii. *Thus, keeping the interest of consumers as paramount consideration along with saving of unproductive expenditure ultimately passed on to the consumers in the State, the Petitioner has moved the present petition before this Hon’ble Commission seeking approval for surrender of MP’s share of power from Kawas and Gandhar Power Stations.*

xxiii. *The Petitioner herein further undertakes before this Hon’ble Commission to ensure adequate uninterrupted 24x7 power supply to the consumers of State of Madhya Pradesh at present and in future and that this proposed relinquishment of 257 MW power from Kawas and Gandhar Power Stations will not have any adverse impact on the adequate supply of electricity for all the consumers of the Discoms of the State.*

xxiv. *The Petitioner herein further undertakes before this Hon’ble Commission to enter into short term or medium-term power purchase agreements in future should the need*

arise, in addition to the upcoming units for supply of power to meet the future demand in the State.

xxv. *The Petitioner also furnishes an unconditional undertaking that it will settle all dues of NTPC (qua Kawas and Gandhar Gas Stations) and no payments are due as per the prevailing rules/regulations with respect to power from Kawas and Gandhar Gas based Power Stations.*

xxvi. *Resultantly, the Petitioner seeks issuance of appropriate directions by the Hon'ble Commission in exercise of powers under Section 86 (1) (b) of the Electricity Act 2003 read with the MoP circular issued by the Ministry of Power, Government of India to allow the Petitioner to relinquish 140 MW power from Kawas Power Station and 117 MW power from Gandhar Power Station under the BPSA in the interests of the consumers and the financial viability of the distribution utilities in the State of Madhya Pradesh.*

4 In response, respondent has filed its submission on 27.09.2021 whereby it is prayed to conduct a thorough prudence check with respect to the submissions made by the Petitioner regarding projections of future demand of power of MP and adequacy of the tied up capacity of the Petitioner to meet the same after relinquishing/surrendering power from NTPC Kawas GPS and NTPC Gandhar GPS. The written submission made by the Respondent is reproduced below: -

a. Useful life of Gandhar GPS and Kawas GPS

- i. *It is submitted that COD of the Gandhar GPS was 01.11.1995 and the station has completed 25 years since COD on 01.11.2020. However, to serve its beneficiaries in an efficient and sustained manner, NTPC undertook R&M of GTs of Gandhar GPS which was duly approved by Hon'ble Central Electricity Regulatory Commission. (CERC). Accordingly, life extension of 10 years on account of R&M of GTs was allowed by CERC and as per CERC's Order dated 10.04.2017 in Petition No 325/GT/2014, useful life of Gandhar GPS as on 01.04.2018 approved as 9.47 years. Accordingly, balance useful life of Gandhar GPS as on 01.04.2021 is 6.47 years.*
- ii. *It is submitted that COD of the Kawas GPS was 01.11.1993 and the station has completed 25 years since COD on 01.11.2018. However, to serve its beneficiaries in an efficient and sustained manner, NTPC undertook R&M of GTs of Kawas GPS which was duly approved by Hon'ble CERC. Accordingly, life extension of 10 years on account of*

R&M of GTs was allowed by CERC and as per CERC's Order dated 24.03.2017 in Petition No 341/GT/2014, useful life of Kawas GPS as on 01.04.2018 was approved as 6.23 years. Accordingly, balance useful life of Kawas GPS as on 01.04.2021 is 3.23 years.

- iii. *In view of above, it is submitted that both Gandhar and Kawas GPS have balance useful life as on date and can serve its beneficiaries to meet their power demand. Also, the Petitioner (MPPMCL) was a party to the Petitions of NTPC in CERC for determination of tariff of these stations vide which Hon'ble CERC extended the useful life of the stations on account of R&M of GTs. The Petitioner did not raise any objection on the R&M of these stations undertaken by NTPC, which shows the intention of the Petitioner to continue to avail power from these stations and service the tariff (inclusive of R&M cost) as determined by CERC till the completion of useful life of the Stations. It is humbly submitted that NTPC had incurred expenditure towards R&M activities considering that the Power would continue to be availed by the beneficiaries till the extended life of the Stations on account of R&M activities. Hence, it is submitted that MPPMCL is liable to settle the balance depreciation (inclusive of R&M cost) pertaining to its allocations from Kawas GPS and Gandhar GPS before it is allowed to relinquish/surrender its allocated share from these stations.*

b. Cost of power from Gandhar and Kawas GPS

- iv. *It is submitted that for both Kawas and Gandhar GPS, having completed 25 years, depreciation is substantially recovered and interest on loan component is considerably reduced and hence these stations are having appreciably low Fixed Charges.*
- v. *It is further submitted that the ECR of the power generated from these stations based on APM Gas is at quite competitive rate and is also availed by the Petitioner. With the Gas production in the country expected to augment in the coming years, and NTPC continuously exploring alternatives to source Gas at competitive rates, it is expected that ECR of these Stations would be at competitive rate at most of the times in the coming years.*

c. Apparent shortcomings in the analysis of the Petitioner to meet the future demand of power

- vi. *The Petitioner has cited the report of MP's State Planning Cell to contend that it would be able to meet the projected demand of electricity of the State through the existing and capacity addition of power expected in the coming years. A closer look at the capacity*

addition programme from the year 2021-22 to 2031-32, as submitted by the Petitioner at Annexure-P5 of the instant Petition, raises several queries such as:

- A. The Petitioner has submitted it would avail 191 MW of Power in 2024-25 through NTPC Lara STPS Unit-3,4,5. However, as of now, only Stage-I of Lara with two (2) units of 800 MW are under operation and there is no investment approval till date for setting up additional units in Lara STPS. Hence, it is highly unlikely that additional units of NTPC Lara, if any, would come up by 2024-25.*
 - B. As of now, the status of several thermal projects listed by the Petitioner to avail power in future such as Pench Thermal energy, Tilaiya UMPP, Odisha UMPP, etc. is ambiguous and it is uncertain if the Petitioner would be able to meet its future demand of electricity through these projects.*
 - C. The Petitioner has not provided the details of Solar / Non-Solar Projects and the past record of capacity addition of similar projects to substantiate if capacity addition through such projects as envisaged by the Petitioner would really take place.*
- vii. In Scenario-II / III submitted by the Petitioner to replace power scheduled from Kawas / Gandhar by procurement from Power Exchange (s), the Petitioner has considered average RTC rate to calculate the net financial impact. However, the Gas Stations under consideration, on virtue of their inherent ability of faster ramp-up / ramp-down are most beneficial for peak-load requirements of the beneficiary, in which case cost of power at exchange during peak demand periods has been witnessed to be much higher than the average RTC. Further, the cost of power at the exchange is showing an increasing trend and with the economy witnessing a strong growth in the recent period resulting into higher demand of electricity, the cost of power at exchange, which is mostly dependent upon demand-supply gap, is expected to rise even further.*
- viii. It is submitted that the Petitioner had earlier made requests for surrender of its allocated share of power from coal based NTPC Mauda Stage-I and Mauda Stage-II STPS, based on which MP's share in Mauda STPS was reallocated to other beneficiaries by Ministry of Power (MoP). However, as soon as MP was deprived of its allocated share from MaudaSTPS, it started contending that the same was done unilaterally by the MoP without taking MP's consent. Further, as per Para 16 (iv) of the instant Petition, MP is considering the power from Mauda-I and Mauda-II STPS after FY 2025-26 to meet its future demand of power. In addition, MP had requested for de-allocation of power from Khargone STPS of NTPC in September 2019, however, owing to subsequent increased demand of power, MP decided to withdraw request of deallocation in March 2021. This*

shows that demand projections and tied up power to meet the demand as considered by MP in the past have been uncertain, and with high power demand being witnessed across the country with the revival of the economy amidst recovery from COVID-19 pandemic situation, the base power demand has risen and MP may re-seek the power from Kawas GPS and Gandhar GPS, which might be difficult for NTPC to fulfil once MP relinquishes/surrenders its allocated share from these stations.

- ix. *In view of above points, NTPC pleads the Hon'ble MPERC to conduct a thorough prudence check on the contentions made by the Petitioner with respect to projection of demand of power, adequacy of tied-up power to meet the future demand of electricity of the State and the net financial impact - after relinquishing the power from Kawas and Gandhar GPS.*

d. Unique advantages of Gas Stations

- x. *It is submitted that the gas based thermal generating stations offer greater flexibility of ramping up and ramping down. Thus, Gas Stations can provide alternative source for balancing power to address the intermittency of renewable generation. When coal based generating stations are used for balancing requirements, the frequent regulation of thermal generation adversely affects the plant & machinery in terms of reduced life, higher maintenance expenditure, higher downtime and lower efficiency. Hence, with the vastly increasing penetration of renewable energy (GoI target of 175 GW by 2022 and 450 GW by 2030) into the grid resulting into higher variability of power supply, it would be pertinent for Discoms to have Gas Stations in their portfolio to effectively take care of such variability.*
- xi. *Also, Gas based power generation is much less polluting than DG sets or Coal based generation. With curtailment of carbon emissions being a top-level agenda globally as well as of GOI, Gas Stations being environment friendly offer added advantage in this respect.*
- xii. *Relevant extracts from National Electricity Plan 2018, Consultation Paper by CERC on Terms & Conditions of Tariff Regulations for the Period 2019-24 and a report by CEA on Study of optimal location of various types of balancing energy sources/energy storage devices to facilitate grid integration of renewable energy sources and associated issues, highlighting the importance and relevance of Gas Based Power Generating Stations in the context of power scenario of the country is attached at **Annexure-A**.*

e. Future Scenario of Gas Based Power Generation

- xiii. *It is submitted that the GOI has set a target of raising the share of natural gas in the energy basket to 15% by 2030 from about 6.2% in 2020 to cut the carbon emissions in*

the economy. Gas based power generation would be a key component of the increased share of natural gas in the energy mix of the country. Several policy level steps and significant investments are being taken up by the GOI to enhance the domestic gas production and develop requisite gas infrastructure including gas pipelines, city gas distribution networks and import LNG terminals. Such steps are expected to significantly boost the availability of gas at affordable prices and consequently lead to affordable and sustained gas-based power generation.

xiv. *Relevant clippings of Press Information Bureau, GoI and newspaper in this regard are attached at **Annexure-B**.*

f. Other relevant points with respect to Gas based power generation

xv. *In the last few months, coal based thermal generating stations across the country are facing coal shortage. Coal stock at several coal-based power stations has been at critical position resulting into shutdown of many stations due to unavailability of coal. This has led to uncertainty in the availability of adequate coal- based power generation to meet the base load. Due to continuing high demand of power and supply being hit due to coal shortage issue, the electricity prices at spot market too are witnessing a surge. Amidst such a critical situation, gas-based power generation has provided some relief and it is observed that Gas based plants are being regularly scheduled by the beneficiaries amidst the prevailing scenario. It is submitted that with the base load power demand of the country witnessing an increase due to strong growth of the economy in the recent period, such situations (of coal shortage etc. resulting into inadequate coal-based power generation) may occur more frequently in future, in which case Gas based power stations would play a critical role in meeting the power demand of the beneficiaries.*

xvi. *It is further submitted that for meeting the peak requirement, Power System Operation Corporation (POSOCO) is repeatedly scheduling the gas stations under Reserves Regulation Ancillary Services (RRAS).*

xvii. *In view of above, it is submitted that Gas stations including the Stations under consideration, i.e. Gandhar GPS and Kawas GPS are playing an important role in effectively meeting the power demand of the beneficiaries.*

g. Pertinent points in respect of MOP guidelines dated 22.03.2021 regarding relinquishment of power

xviii. *The Petitioner has submitted the instant petition pursuant to MOP guidelines dated 22.03.2021 regarding enabling Discoms to either continue or exit from the PPA after completion of the term of the PPA i.e. beyond 25 years or a period specified in the PPA.*

xix. *The relevant provisions of the above-mentioned guidelines are enumerated below:*

- II. *“Willing State/Discoms may relinquish their share from eligible CGSs after expiry of the term of the PPA i.e. on completion of 25 years from the date of commissioning of the plant or a period specified in the PPA. The request for relinquishment of such power from CGSs may be submitted only after the approval of the State Commission who would ensure the adequacy of power tied up with the Discoms to meet the demand of electricity for all the consumers under such Discoms.*
- III.
 - a) *The States/ Discoms having Long-term PPAs with the Central Generating stations, which are due to expire in the near future can opt to relinquish the entire allocated power (firm and unallocated share) from such eligible CGSs post completion of the PPA tenure i.e. on completion of 25 years from the date of commissioning of the plant or a period specified in the PPA by giving six months advance notice for their intention to relinquish such power.*
 - b) *For the Stations, which have already completed 25 years, States may exit from the PPA of such eligible CGS after giving six months of notice of relinquishment of such power.*
- IV. *The relinquishment of such power will be considered only after the State/ discoms have cleared all the past dues. The State/Discoms shall continue to be liable to make all the eligible payments/ dues as per the prevailing rules/regulations to the Generators whose share of power has been relinquished till final settlement.*
- V. *In all such cases of relinquishment of share from power stations, the power allocation, if any, made by the Central government to the State from that power station would be treated as withdrawn. Intimation to this effect will be required to be given by either the generating company or the State to the Ministry of power.*
- VI. *States may also relinquish the entire unallocated power from the CGSs (except some specific allocations e.g. power which has been bundled with solar etc). Part relinquishment of share from unallocated pool of power shall not be feasible and accordingly shall not be allowed.*
- VII. *Any share for Central Generating stations, once relinquished by the State, will not be allowed to be taken back by the State under the same PPA conditions.*

xx. *NTPC would like to make following submissions in terms of above MoP guidelines:*

- A. *Relinquishment of power shall be effective after notice period of six months from the date of issuance of notice in this regard.*
- B. *As per Point 2(IV) of the said guidelines, the relinquishment of such power will be considered only after the State/DISCOMs have cleared all the past dues. The State/DISCOMs shall continue to be liable to make all the eligible payments/ dues as per the prevailing rules/regulations to the Generators whose share of power has been relinquished till final settlement. Accordingly, MPPMCL shall also be liable to pay the differential tariff after truing-up or on account of Regulatory/legal outcome, if any, for the period availing the contracted quantity from Gandhar and Kawas GPS. Further, MPPMCL has the liability to settle the balance depreciation pertaining to its allocation from Gandhar and Kawas GPS.*
- C. *MPPMCL continues to be contractually liable for payment of bills/ invoices raised by NTPC for Kawas and Gandhar GPS as per the PPA and the prevailing rules/regulations in this regard till relinquishment comes into effect.*

xxi. *It is further submitted that the power from NTPC Kawas GPS and NTPC Gandhar GPS was allocated to the State of MP by Ministry of Power, Government of India and thus the Petitioner can relinquish/surrender this allocated power subject to de-allocation by Ministry of Power, Govt of India.*

xxii. *PRAYER*

In view of above, it is most respectfully prayed that the Hon'ble Commission may be pleased to:

- (i) *conduct a thorough prudence check with respect to the submissions made by the Petitioner regarding projections of future demand of power of MP and adequacy of the tied up capacity of the Petitioner to meet the same after relinquishing/surrendering power from NTPC Kawas GPS and NTPC Gandhar GPS.*
- (ii) *duly consider the submissions made herein above by the respondent, NTPC Ltd, while deciding upon the prayers of the Petitioner.*

- 5 The Petitioner has filed rejoinder on 30.09.2021 on submission made by the Respondent in the matter.
- 6 The Commission held the hearing on 05.10.2021 and heard the arguments put forth by the counsel for the petitioner while nobody appeared on behalf of Respondent. The Commission vide daily order dated 06.10.2021 granted one week time to both the parties to file additional written submission, if any and reserved the case for order. Subsequently, the petitioner has filed its additional submission on 18/10/2021.

Commission's Observations and Findings:

- 7 Subject petition has been filed by petitioner in pursuance of the guidelines issued by the Ministry of Power vide letter dated 22.03.2021 enabling Distribution Licensees to relinquish/ surrender power from Generating Stations after completion of the term of PPA, i.e beyond 25 years from date of commissioning of the plant or a period specified in PPA and allow flexibility to the Generators to sell power in any mode after State /Discom exit from PPA.
- 8 In clause 2 (VIII) of aforesaid notification of MoP, it is mentioned that in case of Bulk Power Supply Agreement (BPSA) also, the state/ discoms may relinquish the entire allocated power from such projects which have completed 25 years since commissioning of the project. It is further mentioned that the power Supply from other projects shall continue as per the terms of the PPA. It is observed from documents placed on record that the aforesaid criteria has been met by the petitioner as the date of Commercial operation for Kawas Gas based Power Station is 01.09.1993 and for Gandhar Gas based Power Station is 01.11.1995. On request of petitioner, the Energy Deptt. of State Govt. vide letter dated 21.06.2021 has accorded administrative approval for surrender of MP's share of 140 MW and 117 MW power from NTPC's Kawas and Gandhar Gas based power stations, respectively.

- 9 Pursuant to aforesaid MoP guidelines , the petitioner has sought approval of the Commission for relinquishment/surrender of 140 MW power from Kawas Gas based Power Station and 117 MW power from Gandhar Gas based Power Stations of NTPC under the Bulk Power Supply Agreement dated 12.01.1994 executed between Petitioner & Respondent.
- 10 From the perusal of records, it is observed that NTPC Kawas Gas based Power station, could be scheduled to the extent of 14% out of its entitlement, thus leading to non-utilisation of the capacity charges to the extent of Rs 82.31 Crore in FY2019-20 & Rs 84.35 Crore in FY2020-21 respectively. Similarly, Gandhar Gas based Power Station was scheduled as low as 4% in FY2019-20 & 11% in FY2020-21 and the petitioner paid capacity charges of Rs 89.23 Crore & Rs 89.37 Crore for aforesaid period. Therefore, the Commission has taken note of petitioner's submission that the amount of capacity charges paid by the Petitioner for Kawas & Gandhar power stations over the past few years has been quite substantial. This had caused huge financial burden on the Petitioner and ultimately the consumers of electricity in the State of Madhya Pradesh.
- 11 The Commission has further observed that scheduling from above mentioned Gas stations have been low due to their very high position in the merit order of the petitioner, attributable to high variable charges and therefore power sourced from these two stations has been expensive and financially unviable to the petitioner . In addition to the above, petitioner has to incur PGCIL's transmission charges to the extent of about Rs 90 Crore per annum for sourcing power from these two stations. Upon relinquishment of power from aforesaid Generating stations as sought in this petition , petitioner has envisaged an annual saving of about Rs 260 Crore.
- 12 Considering the Respondent's request for conducting prudence check with respect to the submissions made by the Petitioner regarding projections of future demand of power of MP and adequacy of the petitioner's tied up

capacity to meet the same after relinquishing/surrendering power from NTPC Kawas GPS and NTPC Gandhar GPS, the Commission has observed on perusal of records that the State planning cell has estimated demand & availability projections for FY2021-22 to FY2029-30 by excluding the availability of 257 MW power from Kawas and Gandhar Power Plants and it was projected that for FY2021-22, the State will be in surplus of 189 MW power or 1.2% of the peak demand. Further, by FY 2029-30 state will be in a deficit of 3069 MW as against peak demand. However, this peak demand can be managed through various options. Thus, effect of relinquishment of these two plants would be minimal as compared to estimated benefit in this regard.

- 13 In addition to above, the petitioner has submitted scenario wise analysis replacing power procured from NTPC Kawas & Gandhar Gas based power Stations for FY2019-20 & FY2020-21 on monthly basis with respect to available backdown power (Scenario I) /power exchange (Scenario II) / mix of backdown power & power exchange at 50:50 ratio (Scenario III) which reveals that there would be significant saving per annum under these scenario namely I,II & III as exhibited by the petitioner in their petition.
- 14 The Commission has observed that the Petitioner has filed this petition based on the guidelines issued by the Govt. of India, Ministry of Power vide letter dated 2nd March 2021 enabling the Discoms to exit from the PPA after completion of terms of PPA beyond 25 years or the period specified in the PPA. These guidelines stipulate that the request for relinquishment of such power from central generating station would be considered only after the approval of State Commission who would ensure adequacy of power tied up with the Discoms to meet the demand of electricity for all the consumers under such Discoms. The Commission has therefore examined the alternative scenario provided by the Petitioner to compensate relinquished power, which is a meagre percentage of the total power capacity available with the State Discoms. Further, power from Kawas and Gandhar Gas based power stations

is being procured for a very short period during the year on account of its high variable cost. However, drawal for a short time does not save money for Discoms as fixed cost is still to be paid. Apart from paying yearly transmission charges of about 90 Crore, fixed charges paid for these two power plants are around Rs. 180 Crore per year. In order to reduce power purchase cost, the Petitioner has requested to allow to relinquish this power and suggested alternative arrangements which would be utilized to compensate this relinquished power.

- 15 The Commission finds merit in this proposal as the Petitioner has alternative options to meet this gap in power availability in future. This would ultimately benefit the electricity consumers of the State through retail supply tariff. In light of facts and documents placed on records and pursuant to provisions under section 86(1)(b) of the Electricity Act, 2003, the Commission therefore allows the prayer made by the petitioner and accords approval to petitioner for relinquishing of 140 MW power from NTPC Kawas Gas based Power Station and 117 MW power from NTPC Gandhar Gas based Power Stations under the Bulk Power Supply Agreement dated 12.01.1994 executed between Petitioner & Respondent subject to compliance of the provisions laid down under the notification dated 22.03.2021 of Ministry of Power, GoI.

With the above directions, the subject petition is disposed of.

(Shashi Bhushan Pathak)
Member (Law)

(Mukul Dhariwal)
Member

(S.P.S. Parihar)
Chairman