GOVERNMENT OF INDIA
NARMADA WATER DISPUTES TRIBUNAL

FURTHER REPORT

OF

THE NARMADA WATER DISPUTES TRIBUNAL UNDER SECTION 5(3) OF THE INTER-STATE WATER DISPUTES ACT, 1956

IN THE MATTER OF WATER DISPUTES REGARDING THE INTER-STATE RIVER NARMADA AND THE RIVER VALLEY THEREOF BETWEEN

1. **The State of Gujarat**
2. **The State of Madhya Pradesh**
3. **The State of Maharashtra**
4. **The State of Rajasthan**

VOLUME I

NEW DELHI

1979

COMPOSITION OF THE

NARMADA WATER DISPUTES TRIBUNAL

(During the hearing of the References under Section 5(3) of the Inter-State Water Disputes Act, 1956)

Chairman

SHRI V. RAMASWAMI

Members

SHRI A.K. SINHA

SHRI M.R.A. ANSARI

GOVERNMENT OF INDIA

NARMADA WATER DISPUTES TRIBUNAL

No. 69/1/78-NWDT *New Delhi, December 7, 1979*

The Secretary to the
Government of India,
Ministry of Agriculture & Irrigation,
Department of Irrigation,
NEW DELHI.

SIR,

The Narmada Water Disputes Tribunal investigated the matters referred to it under Section 5(1) of the Inter-State Water Disputes Act 1956 and forwarded its Report with its Decision under Section 5(2) of the said Act to the Government of India on the 16th August, 1978.

Within three months of the aforesaid Decision, the Union of India and the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan filed five separate References before the Tribunal under Section 5(3) of the Inter-State Water Disputes Act 1956.

The Tribunal has prepared its Further Report giving such explanation/guidance as it has deemed fit on the matters referred to it under these five References. In Chapters I to VIII of its Further Report, Volume I, Shri V. Ramaswami the Chairman of the Tribunal and Shri M.R.A. Ansari, Member, have expressed their opinion on all the important points arising in these References. Shri A.K. Sinha, another Member, has expressed on a few of these points a somewhat different opinion which is reproduced in Volume II of this Further Report. In accordance with the majority opinion, the Tribunal has given its modified Decision in Chapter IX, Volume I of the Further Report under Section 5(3) of the Inter-State Water Disputes Act 1956 read with Section 5(4) of the same Act.

The Tribunal herewith forwards its Further Report to the Government of India under Section 5(3) of the Inter-State Water Disputes Act 1956.

Yours faithfully,

(Sd.) V. RAMASWAMI
Chairman

(Sd.) A.K. SINHA
Member

(Sd.) M.R.A. ANSARI
Member

BEFORE THE NARMADA WATER DISPUTES TRIBUNAL

ASSESSORS

1. Dr. M. R. Chopra, Retired Chairman, Central Water & Power Commission and former Vice Chancellor of Roorkee University (Whole-time).
2. Shri C. S. Padmanabha Aiyar, Retired Chief Engineer, Government of Kerala (Part-time)
3. Shri B. S. Nag, Retired Adviser, Planning Commission, Government of India, New Delhi (Whole-time).
4. Dr. Ambika Singh, Assistant Director-General, Indian Council of Agricultural Research (Part-time).
5. Dr. H. B. Hukkeri, Senior Agronomist, Indian Institute of Agricultural Research (Part-time).

REPRESENTATIVES OF THE STATE GOVERNMENTS

FOR THE STATE OF GUJARAT

Advocates

1. Shri . J. M. Thakore, Advocate General
2. Shri S. B. Vakil, Advocate, and
3. Shri M. G. Doshit, Advocate.

Other Representatives

1. Shri P. A. Raj, Secretary (Irrigation)
2. Shri N. Ramaswamy, Superintending Engineer
3. Shri M. K. Joshi, Executive Engineer.

FOR THE STATE OF MADHYA PRADESH

Advocates

1. Shri Y. S. Chitale, Senior Advocate
2. Shri M. S. Ganesh, Advocate, and
3. Shri Shekhar Bhargava, Advocate

Other Representatives

1. Shri K. L. Handa, Irrigation Adviser
2. Shri M. S. Billore, Superintending Engineer (Narmada)
3. Shri L. K. Wagh, Executive Engineer
4. Shri D. V. Sahasrabudhe, Executive Engineer

FOR THE STATE OF MAHARASHTRA

Advocates

1. Shri F. S. Nariman, Senior Advocate
2. Shri B. R. Zaiwalla, Advocate

Other Representatives

1. Shri K. K. Framji, Technical Consultant
2. Shri N . M. Jog, Deputy Secretary
3. Shri V. N. Chandratreya, Under Secretary.

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FOR THE STATE OF RAJASTHAN

Advocates

1. Shri K. K. Jain, Advocate
2. Shri B. D. Sharma, Advocate

Other Representatives

1. Shri Moti Ram, Hony. Adviser & Technical Consultant
2. Shri D. M. Singhvi, Superintending Engineer
3. Shri C. B, Mathur. Executive Engineer.

FOR THE UNION OF INDIA

Advocates

1. Smt. Shyamala Pappu, Senior Advocate
2. Shri V. P. Nanda, Advocate.

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CHAPTER I

SCOPE OF THE JURISDICTION UNDER SECTION 5(3) OF THE INTER-STATE WATER DISPUTES ACT (ACT 33) OF 1956

Reference No. 1 Of 1978 By Government Of India
Reference No. 2 Of 1978 By State Of Gujarat
Reference No. 3 Of 1978 By State Of Madhya Pradesh
Reference No. 4 Of 1978 By State Of Maharashtra
Reference No. 5 Of 1978 By State Of Rajasthan

In this Report, unless otherwise mentioned:—

(a) the expression "Report", "Original Report" or "Our Report" means the Report of this Tribunal under Section 5(2) of the Inter-State Water Disputes Act, 1956;

(b) the expression "This Report" or "This further Report" means the Report of this Tribunal under Section 5(3) of the said Act.

1.1.1 **Filing Of References 1 To 5 Of 1978.**—The Narmada Water Disputes Tribunal investigated the matters referred to it under Section 5(1) of the Inter-State Water Disputes Act, 1956 and forwarded its decision and Report to the Government of India on 16th August, 1978. The Union of India and the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan filed References Nos. 1, 2, 3, 4 and 5 of 1978 respectively under Section 5(3) of the said Act on the 16th November, 1978. In each of the References, replies were filed by the respective respondent States on 22nd January, 1979. No reply was filed by the Union of India to Reference Nos. 2 to 5 of 1978 filed by the four States. However, in its letter No. F/4/4/78-WD dated 20th January, 1979, the Union of India stated that "it did not consider it necessary to file any replies to References made by the State Governments of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan, but it reserved its right to make appropriate oral submissions on those References." It is also necessary to say that in Reference 1 of 1978, the Union of India did not file a Rejoinder to the replies filed by the four contesting States in that Reference. In Reference No. 2 of 1978, Gujarat filed a Rejoinder on 15th March, 1979. Similarly, in References Nos. 3, 4 and 5 of 1978, Madhya Pradesh, Maharashtra and Rajasthan filed their respective Rejoinders on 15th March, 1979.

1.1.2 Madhya Pradesh filed a separate Rejoinder (CMP No. 8 of 1979) on the scope and ambit of Section 5(3) of the Inter-State Water Disputes Act on 21st February, 1979. Gujarat, Rajasthan and Maharasthra filed Sur-Rejoinders (CMPs 13, 17 and 18 of 1979) to the Rejoinder of Madhya Pradesh on 15th March, 1979. The Union of India did not file a Sur-Rejoinder to the Rejoinder of Madhya Pradesh though it was afforded an opportunity of doing so.

1.1.3 **Hearing Of The References.**—The hearing of the References commenced on 9th April, 1979 and continued till 28th July, 1979.

1.1.4 Counsel for the Union of India did not address any oral argument with regard to merits of Reference No. 1 of 1978. Nor did the Counsel argue as regards the merits of References 2 to 5 of 1978 filed by the contesting States. Counsel for the Union of India did not also address any argument with regard to the jurisdiction of the Tribunal under Section 5(3) of the Inter-State Water Disputes Act, 1956.

1.1.5 On 17th April, 1979, the Union of India filed CMP No. 19 of 1979 explaining the stand it has taken in all these References. CMP No. 19 of 1979 is Annexure II.1 of Chapter II of the Further Report.

1.1.6 On 24th April, 1979, the Tribunal circulated to the party States and the Union of India copies of tentative draft directions in respect of the constitution of Construction Boards for Sardar Sarovar, Narmadasagar and Navagam Main Canal. On 14th May, 1979, all the party States and the Union of India filed CMPs 23 to 27/1979 enclosing their respective comments on the draft directions. On 18th June, 1979, the Tribunal circulated to the

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party States and the Union of India copies of an alternative scheme of constitution of Advisory Committee for Sardar Sarovar alone. On 9th July, 1979, the party States and the Union of India filed CMPs 36 to 48 of 1979 enclosing their respective comments on the new draft directions. As desired by the party States the Tribunal gave an oral hearing on this matter on 28th July, 1979. The hearing of the References 1 to 5 of 1978 was completed on this date.

SCOPE OF SECTION 5(3) OF INTER-STATE WATER DISPUTES ACT

1.2.1 The first question which arises for consideration is—What is the scope and extent of the powers of this Tribunal under Section 5(3) of the Inter-State Water Disputes Act (Act 33) of 1956?

The contention of Madhya Pradesh is that (i) the Tribunal in forwarding its Report and decision under Section 5(2) of the Act, does not render a decision which acquires the character of finality; that (ii) when the matter is again referred to the Tribunal under Section 5(3) for further consideration, the Tribunal is seized of all the matters all over again and it may give such explanation or guidance as it deems fit without any limitation on its powers to do so and that (iii) it is open to the Tribunal under Section 5(3) of the Act to review or modify the matters already decided by it under Section 5(2) of the Act.

1.2.2 The opposite viewpoint was put forward on behalf of Maharashtra. The argument was stressed on behalf of Maharashtra,—

(a) that once a report setting out the facts found by the Tribunal and giving its decision on the matters referred to it has been forwarded to the Central Government under Section 5(2) of the Act, the decision of the Tribunal cannot be altered or modified except as provided under Section 5(3);

(b) that the power of the Tribunal is limited to giving explanation or guidance on matters which have been referred to it under Section 5(3);

(c) that in giving such guidance or explanation under Section 5(3) the Tribunal cannot assume the power to review its decision or reconsider any issues afresh;

(d) but the Tribunal can give explanation by supplying details or by making the decision plain or intelligible or by removing any inconsistencies; and

(e) that the Tribunal does not possess any inherent power of amending or altering its decision apart from Section 5(3).

1.2.3. On behalf of Gujarat and Rajasthan also, the argument was stressed that the Tribunal has no jurisdiction under Section 5(3) of the Act to reconsider or review the matters already decided by it. It was submitted that the jurisdiction of the Tribunal under Section 5(3) was confined to giving of explanation which may be necessary to make the original decision intelligible or to removing any ambiguities or to correcting clerical or arithmetical mistakes or to make explicit the meaning or intention of any direction or observation in the original report.

1.2.4 The question at issue depends upon the interpretation of Section 5 of the Inter-State Water Disputes Act (Act 33) of 1956 which states:—

> "5(1) When a Tribunal has been constituted under Section 4, the Central Government shall, subject to the provision contained in Section 8, refer the water dispute and any matter appearing to be connected with, or relevant to, the water dispute to the Tribunal for adjudication.
>
> (2) The Tribunal shall investigate the matters referred to it and forward to the Central Government a report setting out the facts as found by it and giving its decision on the matters referred to it.
>
> (3) If, upon consideration of the decision of the Tribunal, the Central Government or any State Government is of opinion that anything therein contained requires explanation or that guidance is needed upon any point not originally referred to the Tribunal, the Central Government or the State Government, as the case may be, may within three months from the date of the decision, again refer the matter to the Tribunal for further consideration, and on such reference, the Tribunal may forward to the Central Government a further report

> giving such explanation or guidance as it deems fit and in such a case, the decision of the Tribunal shall be deemed to be modified accordingly."

An ordinary Civil Court cannot alter a signed judgement pronounced in open Court except as provided under Section 152 or on review under Section 114 of the Code of Civil Procedure. Section 152 provides that the Court may correct clerical or arithmetical mistakes in its judgements, decrees or orders, arising therein from any accidental slip or omission. The Court is also empowered to review its judgement under Section 114 of the Code read with Order 47 Rule 1. The inherent power of the Court to do justice is preserved under Section 151 of the Civil Procedure Code, see Janakirama Iyer v. P.M. Nilakanta Iyer (1962 Supp. 1 S.C.R. 206, 229-231).

1.2.5 But a Tribunal constituted under a special statute has no such inherent power or any power of review. (See Harbhajan Singh v. Karam Singh, (1966) 1 S.C.R. 817 and Patel Narshi Thakershi v. Pardyamansinghji Arjunsinghji A.I.R. 1970 S.C. 1273). It is a settled principle that the power to review cannot be exercised unless such a power is expressly conferred by the statute. In Drew v. Wills (1891) 1 Q.B. 450, Lord Esher, M.R. pointed out that 'no court (and I would add 'no authority') has ..... a power of setting aside an order which has been properly made, unless it is given by statute.' In another case, Hession v. Jones, (1914) 2 K.B. 421 Bankes, J pointed out that the court, under the statute, has no power 'to review an order deliberately made after argument and to entertain a fresh argument upon it with a view to ultimately confirming or reversing it and observed:

> "Then as to the inherent jurisdiction of the Court. Before the Judicature Acts the Courts of common law had no jurisdiction whatever to set aside an order which had been made. The Court of Chancery did exercise a certain limited power in this direction. All Courts would have power to make a necessary correction if the order as drawn up did not express the intention of the Court; the Court of Chancery however went somewhat further than that, and would in a proper case recall any decree or order before it was passed or entered; but after it had been drawn up and perfected no Court or Judge had any power to interfere with it. This is clear from the judgement of Thesiger L.J. in the case of in re. St. Nazaire Co. (1879) 12 Ch.D.88."

A similar view was taken by the Calcutta High Court in Baijnath Ram Goenka v. Nand Kumar Singh, I.L.R. 34 Calcutta 677. When that case was taken up before the Privy Council, Lord Atkinson in the course of the argument and in the short judgement that he delivered on behalf of the Board declared in explicit terms that the power to review was not inherent in a Court.

1.2.6 It is manifest that the jurisdiction of the Tribunal set up under the Inter-State Water Disputes Act is circumscribed and limited by the provisions of that Act. Section 9 of the Act gives the Tribunal some powers of a Civil Court and also enables it to regulate its practice and procedure. But the powers under Sections 151, 152 or under Section 114 or Order 47 Rule 1 of the Code of Civil Procedure have not been conferred on it by Parliament.

1.2.7 Section 5(1) of the Act provides for reference of a water dispute and any matter appearing to be connected with or relevant to the water dispute to the Tribunal for adjudication. Section 5(2) imposes a duty on the Tribunal to investigate the matters referred to it and forward to the Central Government a report setting out the facts as found by it and giving its decision on the matters referred to it. If there is anything contained in the decision of the Tribunal which in the opinion of either the Central Government or in the opinion of any State Governments require explanation or if in the opinion of any of them guidance is needed upon any point not originally referred to the Tribunal, the matter may again be referred to the Tribunal by the Central Government or by the State Government under Section 5(3) for further consideration. On such a reference or references, the Tribunal may forward to the Central Government a further report giving such explanation or guidance as it thinks fit. If the Tribunal gives any explanation or guidance, the decision of the Tribunal is deemed to be modified accordingly.

1.2.8. It is manifest that there is a sharp contrast between the language of Section 5(1) and (2) and Section 5(3) of the Act. Under Section 5(1) and (2) of the Act, the Tribunal is required to *adjudicate* the water dispute and give its *decision* on the matters referred to it. Under these sub-sections, the Tribunal *shall investigate* the matters referred

to it under Section 5(1) and on *adjudication* of the *dispute*, a report is to be made to the Central Government. In Ballentine's Law Dictionary (1948 edition) the word "adjudication" is defined thus : "A solemn or deliberate determination of an issue by the judicial power, after a hearing in respect to the matters claimed to have been adjudicated. See *Sams.* v. *City of New York*"[1]. In Bouvier's Law Dictionary Law Dictionary (8th edition) the word "adjudication" is defined as "A judgment; giving or pronouncing judgement in a case. Determination in the exercise of judicial power. *Street* v. *Benner*;[2] *Joseph C. Irwin & Co. v. U.S.*"[3] The adjudication of the dispute, the investigation of the matters referred to it under Section 5(1) and the making of a report containing its decision are all obligatory on the Tribunal. The Report of the Tribunal is to contain the facts as found by the Tribunal and the *decision* of the Tribunal on the matters referred to it. It is manifest that after the report contemplated by section 5(2) is forwarded to the Central Government, the adjudication process is complete. Under Section 5(3) of the Act, however, there is a provision that the Central Government or any State Government may again refer the matter for further consideration if the Central Government or the State Government is of the opinion that anything contained in the report of the Tribunal requires *explanation* or *guidance*. On receipt of such reference, the Tribunal may "forward to the Central Government a further report giving such *explanation* or *guidance* as it deems fit." It is manifest that under Section 5(3), there is no decision to be given by the Tribunal or any investigation of the matters referred to it. It is also significant to notice that on a reference under Section 5(3), it is discretionary with the Tribunal to give or not to give the explanation or guidance asked for. We are of the opinion that on a proper interpretation of Section 5(3), there cannot be a *de novo* trial before the Tribunal of the matter already decided. Nor is it to open to the Central Government or the State Government to ask the Tribunal on a reference under Section 5(3) to *re-adjudicate* any of the matters already decided by it or to modify its decision on any point already given. But the jurisdiction of the Tribunal under Section 5(3) is limited to: (i) the explanation of anything contained in the report and decision under Section 5(2) and (ii) guidance upon any point which was not originally referred to the Tribunal but referred to for the first time under Section 5(3).

1.2.9 In this connection, it is relevant to refer to Section 36A of the Industrial Disputes Act, 1947, which reads as follows:—

"36*A Power to remove difficulties*

(1) If, in the opinion of the appropriate Government, any difficulty or doubt arises as to the interpretation of any provision of an award or settlement, it may refer the question to such Labour Court, Tribunal or National Tribunal as it may think fit.

(2) The Labour Court, Tribunal or National Tribunal to which such question is referred shall, after giving the parties an opportunity of being heard, decide such question and its decision shall be final and binding on all such parties."

In *Kirloskar Oil Engines Limited, Kirkee, Poona* vs. *The Workmen & others*, 1962 Supplement, 1 Supreme Court Reports 491, it was held by the Supreme Court that Section 36A was intended to empower a Tribunal to "*clarify* the provisions of the award passed by it where a difficulty or doubt arose about their interpretation, and not *to review or modify* its own order. Any question about the propriety, correctness or validity of any provision of the award would be outside the purview of the enquiry contemplated by that section."

1.3.1 In construing Section 5(3) of the Inter-State Water Disputes Act, therefore, it is not legally permissible to read into that section the words "review", "appeal" or "re-adjudication". If there was any such parliamentary intention, the same would have been clearly expressed in that section. As an example, Section 6 of the Industrial Dispute (Banking and Insurance Companies) Act, 1949 expressly uses the expression "re-adjudication" thrice in the same section.

"6. *Powers of Central Government to refer disputes in respect of which awards or decisions have been made for re-adjudication*:

(1) Where any award or decision has been made in respect of any industrial dispute concerning any banking or insurance company by any tribunal or other

1. 31 N.Y. Misc. Rep. 559, 560 64N.Y. Supp. 681
2. 20 Fla. 700
3. 23 Cr. Cl. 149

authority constituted or appointed by a State Government or any officer or authority subordinate to such Government, then the Central Government may, notwithstanding that the said award or decision is in force, by order in writing refer under Section 10 of the said Act the dispute or any of the matter in dispute to an Industrial Tribunal constituted under the said Act for *re-adjudication* and stay the implementation of the award or decision so made or any part of such award or decision until the Industrial Tribunal to which the dispute or any of the matters in dispute is referred for *re-adjudication* has submitted its award or for such further period as the Central Government may consider necessary.

(2) After the Industrial Tribunal to which the dispute or any of the matters in dispute has been so referred for *re-adjudication* has submitted its award, under sub-Section (1) of Section 15 of the said Act, the Central Government may, by order in writing, declare that the award or decision previously made in respect of such dispute by the Tribunal or other authority constituted or appointed by the State Government or any Officer or authority subordinate to such Government or such part of that award or decision as may be specified in the order shall cease to be in operation."

1.3.2 The cardinal rule of construction of an Act of Parliament is that it should be construed according to the intention expressed in the Act itself. If the words of the statute are precise and unambiguous, then no more is necessary than to expound the words in their ordinary and natural sense. The words themselves in such a case best declare the intention of the law-giver. (Rule declared in the Sussex Peerage Claim (1844) 11 Cl. & F. 85, 143) and quoted by Lord Macnaghten in Vachar v. London Society of Compositors 1913 Appeal Cases page 107 at page 117.

1.3.4 The dictionary meaning of the word "explain" is—

(1) to make plain or intelligible; to clear of obscurity or difficulty;

(2) to assign a meaning to, state the meaning or import of; to interpret. According to Murray's Oxford English Dictionary:

Explain, v. Forms: 6 explaine, 6-7 explayne, 6-8 explane, 7-explain. (Ad.L. explanare, f. ex. (see Ex. Pref.1) + plan-us flat. Plain. Cf. OF. ex-explaner).

(3) to make plain or intelligible; to clear of obscurity or difficulty.

The power of Explaining them (Laws) when there is need. 1676 GLANVILL Exx., Confidence in philos. 6 How the pure mind can receive information from things that are not like itself... is... not to be explain'd a 1732 GAY(J) you will have variety of commentators to explain the difficult passages to you. 1875 MANNING Mission H. Ghost ii. 44 What the child cannot understand you explain my meaning.

(4) to assign a meaning to, to state the meaning or import of; to interpret.

1726 CHETWOOD Adv. Capt. R. Boyle 48 This he told Mirza in the Moorish Tongue, but explain'd it to me in English. 1744 BERKELEY Siris S 221 To define fire by heat would be to explain a thing by itself. 1878 BROWNING La Saisiaz 30 Hindrance is the fact acknowledged howso'er explained as Fate, Fortune, Providence.

According to Webster's III New International Dictionary:—

"EXPLAIN vb. ED/ING/-S (ME explanen, fr.L. Explanare to level, make plain or clear, fr.ex. I.ex. + -planarem fr.planus level, flat—more at floor) vt. la: to make manifest: present in detail: EXPOUND, DISCLOSE (Promised to—the secret of his success) b: to make or understandable: clear of complexities or obscurity: INTERPRET, CLARIFY."

The word "guide" means (1) to point out the way for; direct on a course; conduct; lead; (2) to direct (the policies, action, etc.) of; manage; regulate; govern. The word "guidance" means the act of guiding, or leading; direction (Webster's New Twentieth Century Dictionary, 2nd Edition, Vol. I page 808).

1.3.5 Having regard to the natural meaning of the words "explanation" and "guidance" in sub-Section 5(3) of the Act and having regard to its context in relation to sub-Section 5(2) of the Act, we are of the opinion that the Tribunal cannot assume the power under Section 5(3) of the Act to review any part of its decision under Section 5(2) of the Act or to reconsider the matters already decided by it. But the Tribunal is empowered to give explanation by supplying details or to make its decision plain or intelligible by removing any obscurity or difficulty or by clearing any ambiguity. It is also permissible for the Tribunal under Section 5(3) of the Act to ascribe a meaning or to interpret any finding or any direction given under Section 5(2). The Tribunal may also under Section 5(3) correct arithmetical or clerical mistakes or errors arising from accidental slip or omissions. The Tribunal is also empowered under Section 5(3) to (a) make explicit the meaning and intention of any direction in the original report and (b) to modify its original direction or give fresh direction in the nature of guidance on any matter not originally referred to the Tribunal.

1.3.6 Apart from the limited and circumscribed nature of such powers, the Tribunal has no jurisdiction under Section 5(3) of the Act to sit as a Court of Appeal from its own decision. Nor will it entertain application to modify or review any portion of it on the ground that any of the party States in the case conceives itself to be aggrieved by the decision. The principle is clearly put by Sir Maurice Gwyer in Raja Prithwi Chand Lall Choudhry vs. Sukhraj Raj and Subhanand Chowdhary vs. Apurba Krishna Mitra, 1940 Federal Court Report 78 as follows:—

> "It would in our opinion be intolerable and most prejudicial to the public interest if cases once decided by the Court could be re-opened and re-heard. 'There is a salutary maxim which ought to be observed by all Courts of last resort—*Interest reipublicae ut sit finis litum*. Its strict observance may occasionally entail hardship upon individual litigants, but the mischief arising from that source must be small in comparison with the great mischief which would necessarily result from doubt being thrown upon the finality of the decision of such a Tribunal as this': Venkata Narasimha Appa Row v. Court of Wards, (1886) 11 App. Cas. 660 at p. 664."

Again in Rajunder Narain Rae v. Bijai Govind Singh [(1) (1836) 1 Moo. P.C. 117], Lord Brougham said:

> "It is unquestionably the strict rule, and ought to be distinctly understood as such, that no cause in this case can be re-heard, and that an order once made, that is a report submitted to His Majesty and adopted, by being made an Order in Council is final and cannot be altered. The same is the case of the judgements of the House of Lords, that is, of the Court of Parliament, or of the King in Parliament as it is sometimes expressed, the only other supreme Tribunal in this country. Whatever, therefore, has been really determined in these Courts must stand, there being no power of rehearing for the purpose of changing the judgement pronounced; nevertheless, if by misprision in embodying the judgments, errors have been introduced, these Courts possess, by common law, the same power which the Courts of Record and Statute have of rectifying the mistakes which have crept in ..... The House of Lords exercises a similar power of rectifying mistakes made in drawing up its own judgements, and this Court must possess the same authority. The Lords have, however, gone a step further and have corrected mistakes introduced through inadvertence in the details of judgements; or have supplied manifest defects in order to enable the decrees to be enforced, or have added explanatory matter, or have reconciled inconsistencies ....."

1.3.7 In the legal setting and background of our interpretation of Section 5(3) of the Act, we shall now proceed to scrutinise and examine the References Nos. 1 to 5 of 1978 made by the Union of India and the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan.

CHAPTER II

REFERENCE NO. 1 OF 1978 BY UNION OF INDIA

2.1.1 In this Reference, the Union of India has sought clarification/explanation/guidance on 14 points mentioned and dealt with in this Chapter.

At the outset, it is necessary to say that Points 10 and 11 are outside the scope and ambit of Section 5(3) of the Inter-State Water Disputes Act. It is, therefore, not legally permissible for the Union of India to make a reference on these points under the guise of clarification or guidance. It is also beyond the jurisdiction of this Tribunal to entertain these points.

It is important to note that the Union of India did not file a Rejoinder to the replies filed by the four contesting States in Reference 1 of 1978 within the time granted by the Tribunal.

On 17th April, 1979 the Union of India filed CMP No. 19 of 1979 to state that (a) the Union of India does not want to press Points 10 and 11 of this Reference and (b) as regards other points, the Union of India will not present any oral arguments or file any Rejoinder to the replies of the four contesting States

On 20th April, 1979, Gujarat, Maharashtra and Madhya Pradesh filed CMPs Nos. 20, 21 and 22 of 1979 in reply to CMP No. 19 of 1978 filed by the Union of India.

The CMP 19 of 1979 filed by the Union of India is reproduced as Annexure II.1 of this Chapter.

We have, however, heard the oral arguments of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on all the points made by the Union of India in its Reference.

2.1.2 **Point 1 (Pages 1-2 Of The Reference).**—Item (i) of Clause IV of the Tribunal's Final Order reads as under:—

> "(1) The utilisable flow of Narmada *in excess* of the 28 Million Acre Feet (34,357.44 M.Cu.m.) of utilisable flow in any water year, i.e. from 1st of July to 30th of June of next calendar year is apportioned in the following ratios of allocation i.e. 73 for Madhya Pradesh, 36 for Gujarat, 1 for Maharashtra and 2 for Rajasthan;"
>
> (Emphasis supplied)

The first paragraph of item (5) of Clause IV reads as under: –

> "(5) It may be mentioned that in many years there will be surplus water in the filling period after meeting the storage requirements and withdrawals during the period. This will flow down to sea. Only a portion of it will be utilisable for generating power at Sardar Sarovar River-bed powerhouse, and the rest will go waste. It is desirable that water, which would go waste without even generating power at the last river-bed power house, should be allowed to be utilised by the party States to the extent they can."

The Union of India has drawn attention to paragraph 10.10.6 of the Report of the Tribunal, which reads as under: –

> "10.10.6 We are accordingly of opinion that irrigation use of waters of Narmada should prevail over its hydro-electric use in case of any conflict of the two uses in the circumstances of the present case."

The Union of India has stated that although the party States have been given freedom to utilise the surplus waters for irrigation, such freedom accrues to them, only after the surplus flows are utilised to generate full power at Sardar Sarovar river-bed powerhouse which appears to conflict with the principle laid down in paragraph 10.10.6 of the Report.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that it will be clear from item (5) of Clause IV that the intention of this Hon'ble Tribunal is to allow storage requirements and withdrawals for irrigation and after meeting these requirements to allow power generation at the river-bed powerhouse to the extent it is possible. The water in excess of the possible use for power generation is also allowed to be utilised by the party States to the extent they can.

Madhya Pradesh has further submitted that paragraph 10.10.6 of the Report is with reference to utilisable flow. Even the sharing of the excess utilisable flow is provided for in Clause IV Sub-clause (i). In sub-clause (5) of Clause IV directions have been given for waters which will otherwise flow down to sea. This water otherwise going waste to sea has been permitted to be used for power generation at the river-bed powerhouse to the extent it can be so used.

Madhya Pradesh has stated that no further clarification is necessary. (pages 2-3 of its reply).

Maharashtra's Reply

The installed capacity of the river-bed powerhouse will be determined according to the techno-economic considerations with the approval of the Narmada Control Authority and hence there will be an inbuilt limitation on water use for power from the excess flow through the river-bed powerhouse. Party States ought to be given freedom to decide as to how best the excess flow would be used.

Maharashtra, therefore, submits that for these reasons it is not necessary to specify the precise quantum of water that should be allowed to flow down the river-bed powerhouse of the Sardar Sarovar Dam, before water in excess thereof can be used for irrigation. (page 3 of its reply).

Gujarat's Reply

Gujarat has submitted that "it has no objection to the party States being given freedom to utilise surplus water for irrigation without the qualification that such freedom accrues to them only after the surplus flows are utilised to generate full power at Sardar Sarovar river-bed powerhouse." (pages 2-3 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the Tribunal may clarify that the water for the river-bed powerhouse would be subject to prior right of Gujarat and Rajasthan in the use of irrigation of excess waters, and the Tribunal may limit the extent of release of water for the river-bed powerhouse. (pages 6-8 of its reply).

2.1.3 **Order Of The Tribunal.**—The principle stated in paragraph 10.10.6 of the Report has been applied in determining the equitable apportionment of water between the party States. Under this apportionment the party States are entitled to a share in the waters of the Narmada irrespective of the magnitude of flows. Within its prescribed share, each party State is free to utilise its water as it deems fit, giving priority to irrigation use to the extent it is feasible. A State cannot claim water from the share of another State for irrigation use on the ground that the other State is using it for power generation as that would not be in keeping with the equitable apportionment of water.

The withdrawals referred to in the first sentence in Item (5) of Clause IV of the Final Order include the utilisable portion of their share of water in excess of 28 MAF. A situation can be visualised wherein a party State may not be able to utilise its full share of water including that of surplus water for such reasons as lack of capacity in its canals for the purpose. This unutilised portion would flow down from Sardar Sarovar through the river-bed powerhouse to its capacity and the balance would spill without generating power. Such spill water may be utilised by the other party States to the extent they can.

No change is required in the Final Order in this regard.

2.2.1 **Point 2 (Page 2 Of the Reference).**—The Union of India has submitted that:

(A) The Final Orders of the Tribunal may be self-contained to facilitate publication of the Final Orders only without the need for including other parts of the Report.

(B) The Tribunal may consider including, in their Final Orders, directions for the use during the interim period of unutilised water of a State by other States who may, possibly be in a position to make use of it for irrigation.

Madhya Pradesh's Reply

(A) Madhya Pradesh agrees with the submission of the Union of India in this regard.

(B) Regarding the use of unutilised water of a State by another State in the interim period, Madhya Pradesh has submitted that "the States can use such water in the interim period also, if the Tribunal so desires, only when it is going waste to the sea without generating power at the river-bed power house." (page 4 of its reply).

Maharashtra's Reply

(A) Maharashtra has supported the suggestion of the Union of India to make the Final Orders self-sufficient.

(B) Regarding B, it has submitted that "if any State is to be permitted to use such surplus flows (unutilised by other States) it should be specifically used in the authorised area only." It has further submitted that "water should not be deemed to be surplus until the full entitlement for maximum power generation at the Sardar Sarovar river-bed power house has been accorded priority use." (pp 4-5 of its reply).

Gujarat's Reply

(A) Gujarat has submitted that the Hon'ble Tribunal may make a self-contained Final Order as suggested by the Union of India.

(B) As regards B, it has submitted that "Gujarat and Rajasthan be permitted to utilise such surplus water for irrigation without any prescriptive rights." (pp 4-5 of its reply).

Rajasthan's Reply

(A) Rajasthan agrees with the suggestion of the Union of India to make the Final Order self-contained.

(B) As regards B, it has submitted that "the Hon'ble Tribunal may kindly include in the Final Order the directions regarding the beneficial use of unutilised waters for irrigation." (page 8 of its reply).

2.2.2 **Order Of The Tribunal.**—(A) The suggestion that the Final Order of the Tribunal may be made self-contained is acceptable.

(B) As regards the unutilised water of a State in the interim period, this is to be treated as surplus water and has to be utilised by the various party States in terms of item (5) of Clause IV of the Final Order.

2.3.1 **Point 3 (Page 3 Of The Reference).**—The Union of India has requested that the Tribunal may give explanation or guidance whether in framing the programme of operation of reservoirs at Narmadasagar and down below the Authority should keep in view not only the current requirements but also those of building up appropriate carryover in the reservoirs.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that the directions in Clause IX of the Final Order are based on ensuring 28 MAF utilisable flow at 75 per cent dependability and the carry-over capacity required for the purpose has been worked out and provided for. No clarification or modification is, therefore, considered necessary.

Maharashtra's Reply

Maharashtra has not offered any comments on this point.

Gujarat's Reply

Gujarat has agreed to the point raised by Union of India and has stated that the Authority should keep in view not only the current requirements but also those for building up appropriate carryover. (page 5 of its reply).

Rajasthan's Reply

Rajasthan has submitted that "this should be left to the discretion of the Narmada Control Authority. (page 9 of its reply).

2.3.2 **Order Of The Tribunal.**—Guideline (ii) in Clause IX of the Final Order reads as below:—

> (ii) Surplus or deficit utilisable supplies in a water year shall be shared to the extent feasible by the party States in the same proportion as their allotted shares in (i) above.

When surplus water becomes available in a year, it must first be utilised for filling up the reservoirs to capacity, and surplus water utilised for irrigation and other purposes only after that has been ensured.

In order to clarify this position, the following sentence should be added at the end of guideline (ii) in Clause IX of the Final Order:—

> "The surplus water shall first be utilised for filling up the reservoirs to capacity and surplus water shall be utilised for irrigation and other purposes only after that has been ensured."

2.4.1 **Point 4 (Page 3 Of The Reference).**—The Union of India has asked for clarification regarding the apparent discrepancy in releases ex Maheshwar of 8.12 MAF in Clause IX of the Final Order of the Tribunal and 6.953 MAF considered as Power draft in item 4(c) of Statement 15.5.

Madhya Pradesh's Reply

Madhya Pradesh has drawn attention to point 20 of its reference, (Reference MP-1199, p.139-1, item (iii)), pointing out the apparent discrepancy. (page 5 of its reply).

Maharashtra's Reply

Maharashtra has submitted that the apparent discrepancy in the figure of regulated releases ex Maheshwar needs clarification. (page 5 of its reply).

Gujarat's Reply

Gujarat has submitted that it has pointed out the same discrepancy in its reference (Reference No. 2 of 1978 pages 1-3). (pages 5-6 of its reply).

Rajasthan's Reply

Rajasthan has not commented on this point.

2.4.2 **Order Of The Tribunal.**—It is clarified that in Statement 15.5 of the Report, the power draft at Maheshwar is taken to be the same as at Omkareshwar, namely 6.953 MAF because the inflow from the catchment between Omkareshwar and Maheshwar would be mainly during the monsoon period and may not get regulated at Maheshwar for lack of storage capacity there for the purpose. However, the releases from Maheshwar would be 8.12 MAF as in the Final Order of the Tribunal.

No change is needed in the Final Order on this account.

2.5.1 **Point 5 (page 3 Of The Reference).** The Union of India has stated as under:—

> "It has been stated under Clause XI. Sub-clause II(2), page 774, that "all buildings with their appurtenant land situated between FRL + 138.8 m (455')

and MWL +141.21 m (460') including backwater effect" shall be acquired. The expression could be interpreted to mean that the margin between RL +455' and RL +460' includes backwater effect. Perhaps the intention is to provide acquisition upto RL +460' plus backwater effect as under Sub-clause II (3), page 774, it has been stated that 'the backwater level at the highest flood level in Sardar Sarovar shall be worked out by the Central Water Commission in consultation with Madhya Pradesh and Gujarat.' This needs clarification."

Madhya Pradesh's Reply

Madhya Pradesh has drawn attention to its submissions in this regard that the maximum water level in Sardar Sarovar reservoir including backwater effect shall not exceed RL 460' under any circumstances. (page 5 of its reply).

Maharashtra's Reply

Maharashtra has drawn attention to its submission in this regard in its reference, seeking clarification whether buildings coming within the backwater effect even when above RL 460' should be acquired. (page 6 of its reply).

Gujarat's Reply

Gujarat has submitted that the directions given in Clause XI, Sub-clause II(2) may be modified to read as under:—

> "Madhya Pradesh and Maharashtra shall also acquire for Sardar Sarovar Project under the provisions of the Land Acquisition Act, 1894, all buildings with their appurtenant land, situated between FRL +138.68 m (455') and the backwater level corresponding to the highest flood level + 141.21 m(460') at the dam." (pp 7-8 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

2.5.2 **Order Of The Tribunal.**—In engineering practice MWL is referred to level in the vicinity of the dam. Progressively higher levels obtain at upstream locations in the reservoir depending upon the flow conditions. The backwater effect is at the upper end of the reservoir and its profile has to be calculated. Acquisition of buildings with their appurtenant lands have to be done upto the waterline corresponding to MWL +141.21 m (460') at Sardar Sarovar Dam taking into account the surface slope in the reservoir and the backwater effect.

The Final Order in Clause XI—Sub-clause II(2) should, for clarification, be modified to read as follows:—

> "Madhya Pradesh and Maharashtra shall also acquire for Sardar Sarovar Project under the provisions of the Land Acquisition Act, 1894, all buildings with their appurtenant land situated between FRL + 138.68 m (455') and MWL + 141.21 m (460') as also those affected by the backwater effect resulting from MWL + 141.21m (460')."

Also, the last sentence of Clause XI—Sub-clause V(2)(i) should be modified to read as under:—

> "Within three months after the receipt of the Majmuli/Taluka maps Gujarat shall mark thereon the boundary of the area situated below the FRL as also that between FRL and MWL including the area affected by back water resulting from MWL and shall return one respective set so marked to Madhya Pradesh and Maharashtra."

Further, in Clause XI Sub-clause V(2)(ii), in the last sentence substitute:—

> "as also those affected by the backwater effect resulting from MWL" for "including backwater effect".

2.6.1 **Point 6 (Page 3 Of The Reference).**—The Union of India has submitted that the Hon'ble Tribunal may be pleased to consider whether it is essential to specify that the

independent members should be appointed only in consultation with the four States, as per Clause XIV, Sub-clause 1(2) of the Final Order.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "no change in the orders of this Hon'ble Tribunal is called for." (page 6 of its reply).

Maharashtra's Reply

Maharashtra has submitted that "it is desirable to make such appointments only in consulation with the four States." (page 6 of its reply).

Gujarat's Reply

Gujarat has submitted that "it has no objection to retaining the provision as contained in the decision or to modification suggested by the Union of India." (page 8 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the order of this Hon'ble Tribunal does not require any change. (Page 9 of its reply).

2.6.2. **Order Of The Tribunal.**—It is desirable for Government of India to consult the concerned States in this matter. It may be noted that consultation does not mean concurrence.

No change is necessary in the Final Order in this regard.

2.7.1. **Point 7 (Page 4 Of The Reference).**—The Union of India has pointed out that it may lead to difficulties in the functioning of the Authority if the matters as set down in Clause XIV Sub-clause 4(2) of the Final Order are to be decided by a resolution at a meeting in which the Chairman and all the Members of the party States are to be present.

Madhya Pradesh's Reply

Madhya Pradesh has stated that "any important and urgent matter as suggested should not be decided when all the States are not represented. It may affect the absentee State adversely. No further clarification is, therefore, called for." (page 7 of its reply).

Maharashtra's Reply

Maharashtra has submitted that for important items presence of all members is essential while for routine matters quorum of five members is already specified. (pages 7-8 of its reply).

Gujarat's Reply

Gujarat has submitted that Clause XIV 4(2) may be modified to read as under:—

"On the following matters the Authority shall record its decision by a Resolution only at a meeting whether adjourned or not at which the quorum laid down in Subclause (3) is present:—

(i) Framing of Rules of Business,

(ii) Delegation of functions to a Member or Secretary or any official of the Authority;

(iii) Categorising any part of the business of the Authority as of a formal or routine nature." (page 10 of its reply).

Rajasthan's Reply

Rajasthan has stated that "there is no need for any change in the orders of this Hon'ble Tribunal." (page 10 of its reply).

2.7.2 **Order Of The Tribunal.**—The matters under Clause XIV Sub-clause 4(2) are important and decisions on these matters are best taken with full representation of party

States at the meeting. However, if any particular item under this Sub-clause cannot be disposed of at two successive meetings owing to the absence of one or more members from the party States, it shall be disposed of under Sub-clause 3 of Clause XIV.

The following proviso should be added at the end of Sub-clause 4(2) of Clause XIV of the Final Order:—

> "However, if any particular item under this Sub-clause cannot be disposed of at two successive meetings owing to the absence of one or more Members from the party States, it shall be disposed of under Sub-clause 3 of Clause XIV."

2.8.1 **Point 8 (Page 4 Of The Reference).**—The Union of India has asked for guidance regarding the modalities of taking final decisions expeditiously by the Review Committee.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that the decision of Review Committee will normally be unanimous, but in case of difference of opinion, it may be by a majority. (page 7 of its reply).

Maharashtra's Reply

Maharashtra has submitted that in its view, in case of difference of opinion the decision of Chairman, should be the decision of Review Committee. (page 8 of its reply).

Gujarat's Reply

Gujarat has drawn attention to the submission made in its reference where it has proposed that decision may be taken when Chairman and at least two Members are present. (Reference No. 2 of 1978 pages 52-53 item 17) (pp. 10-11 of its reply).

Rajasthan's Reply

Rajasthan has submitted that a decision of the Review Committee by majority should be binding on all party States. (page 10 of its reply).

2.8.2 **Order Of The Tribunal.**—It is expected that the decisions of the Review Committee will mostly be by consensus. Failing consensus the decision should be by a majority of votes of Members including the Chairman. Voting is implied in Sub-clause 14(2) of Clause XIV.

It is conceivable that the Review Committee may not be able to meet frequently and there may be considerable delay in taking up a matter for review. Pending such a review, the decision of the Authority should prevail and be operative. However, in urgent cases, the Chairman of the Review Committee may, on the application of a party State, grant stay of any order of the Authority pending final decision on review.

For these reasons, the following additions should be made in the Final Order by way of clarification. In Clause XIV, Sub-clause 14(3) of the Final Order the following addition should be made:—

> "It is expected that the decisions of the Review Committee will be by consensus.
>
> Failing consensus it shall be by majority of votes of Members including the Chairman".

In Clause XIV, Sub-clause 13 of the Final Order, the following addition should be made:—

> "In urgent cases the Chairman of the Review Committee may, on the application of the party State, grant stay of any order of the Authority pending final decision on review."

2.9.1 **Point 9 (Page 5 Of The Reference).**—The Union of India has stated that "the Hon'ble Tribunal have given their views on the appropriate intensity of irrigation, extent of command area, water requirements etc." and has requested that the Hon'ble

Tribunal may "give explanation and guidance that within the apportioned quantum of water use, the respective States may effect such modification in these planning aspects as they consider to be in their interests."

Madhya Pradesh's Reply

Madhya Pradesh has stated that it has already sought clarification on this aspect in its reference. (page 7 of its reply).

Maharashtra's Reply

Maharashtra has stated that modifications that do not affect irrigation or power interests of other State or States may be allowed to be made within the sanctioned allocations duly approved by the Authority. (page 9 of its reply).

Gujarat's Reply

Gujarat has submitted that the Hon'ble Tribunal may give such guidance and explanation as it may deem fit but these directions should be made applicable to all the party States uniformly. (page 12 of its reply).

Rajasthan's Reply

Rajasthan has submitted that States should have full freedom regarding the mode and manner of actual utilisation of water in their territory. (page 11 of its reply).

2.9.2 **Order Of The Tribunal.**—The Tribunal has apportioned the waters of the Narmada between the party States after taking into consideration a number of factors. Some of these factors may change with further detailed investigations and passage of time. The CCA may require changes, the irrigation intensities may have to be varied and the cropping pattern may get modified to suit prevailing conditions. Likewise, the water requirements for domestic, industrial and thermal power may actually be different from that envisaged at present. Furthermore, for a variety of reasons, it may become necessary to provide irrigation facilities to areas not covered by the proposals for use of Narmada waters at present. It is, therefore, reasonable to give the party States the freedom to vary within their share of water the pattern of water use and the areas to be served by such use within their respective State boundaries.

In view of what is stated above, the following paragraphs be added under Clause III of the Final Order:—

"(2) Further, it is clarified that the apportionment relates to actual withdrawals and not consumptive use.

(3) Within its share of water, each party State is free to make such changes in the pattern of water use and in the areas to be benefited within or outside the Narmada basin in its territory as it may consider necessary."

The existing paragraph under Clause III is to be numbered (1).

2.10.1. **Point 10 (Pages 5-6 Of The Reference).**—The Union of India has stated that as the patern of power generation at Sardar Sarovar would follow that of irrigation, the seasonal component of power benefit during high irrigation period would not have the same value as the firm power benefit. Also, but for irrigation under the Navagam canal, the waters available at Navagam dam site could have been utilised for power generation at a higher level at river bed powerhouse. Furthermore, since the regulation of the reservoirs is to be governed by irrigation requirement, the allocation of the cost of regulation at Narmadasagar should take that into consideration. For the above stated considerations, the Union of India has requested for lower allocation of cost of common civil works of Sardar Sarovar Dam to power.

Madhya Pradesh's Reply

Madhya Pradesh agrees with the submission of Government of India in this regard. It has submitted that the cost of the dam above RL 436 to RL 455 should only be charged to the power portion of the Sardar Sarovar Project, as the dam has to be constructed upto FRL 436 for irrigation purpose and the raising of the dam above RL 436 only is

for power generation. It has also submitted that "by applying weightage of head at the river bed power station as also pointed out by Government of India, the cost of the dam chargeable to power portion works out to 38.4% or say 38%." (pp 7-9 of its reply).

Maharashtra's Reply

Maharashtra has submitted that the change suggested by the Government of India is clearly clarificatory and relates to the proper application of the 'facilities used method.' (pp 9-10 of its reply).

Gujarat's Reply

Gujarat has submitted that the Union of India's submission envisages review of a matter already decided by the Hon'ble Tribunal. It has further submited that "In the planning envisaged in the decision of the Hon'ble Tribunal the flow of water passing through the river bed power house if converted into equivalent quantum of water passing through the canal head powerhouse would be $\frac{339}{177}$ times more for generating the same quantum of power. Computed in the manner aforesaid, apportionment of the capital cost of the dam and the appurtenant works between irrigation and power would be in the ratio of 36:64....."

Gujarat concludes that the point raised by Union of India should be rejected. (pp 12-16 of its reply).

Rajasthan's Reply

Rajasthan has submitted that no further clarification is necessary (page 11 of its reply).

2.10.2 **Order Of The Tribunal.**—The power that would be generated at Sardar Sarovar and pumped into the grid would be but a small fraction of the grid capacity. The generation of power has to be viewed not in terms of Megawatts generated in any period but in terms of energy (Megawatts hours) produced during the period and absorbed in the grid system. Viewed in this light variation in power generation from month to month has hardly any significance in value. Moreover for a considerable period after commissioning the river bed powerhouse it can be operated in conjunction with the canal powerhouse to even out fluctuations.

The share cost of common civil works chargeable to the Power portion of Sardar Sarovar complex has been calculated on the basis of use the of facilities method recommended by the Government of India in its letter No. 1(6)/62-Policy dated 17th April, 1967 (reproduced in Annexure XVII-1 of the Report). The common facility concerned in this case is the water used by the two functions viz., irrigation and power and this has been adopted as the basis for allocation of cost. The question of applying weightage on account of the lower head in one of the two powerhouses does not arise. Calculation for use of water for irrigation and power generation have been given in Annexure XVII-2 of the Report.

The regulated releases form Narmadasagar would be such that releases from Maheshwar would be uniform to the extent feasible. Releases are to be regulated in the interest of power generation and not irrigation. As such no adjustment in the apportionment of cost of common civil works at Narmadasagar in favour of power is called for. No adjustment is also called for in the matter of contribution of Sardar Sarovar to the cost of regulation at Narmadasagar.

No change is required in the Final Order on this account.

2.11.1 **Point 11 (Page 6 Of The Reference).**—In Clause IX, Sub-clause (iii) of the Final Order it has been provided that "the water available in the live storages of various reservoirs on the 30th June shall be reckoned as an inflow to be shared in the next water year."

The Union of India has submitted that the normal criteria of dependability of power from a hydro-station is 90 per cent and it is conceivable that provision of carryover storage for use in a 90 per cent year for power generation may be found feasible for some future development site. It has stated that "the clarification should safeguard against any such carryover provision also having to be drawn on in a 75 per cent year. The Hon'ble Tribunal may kindly clarify the position."

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "the provision of carryover proposed by this Hon'ble Tribunal is for a 75 per cent dependable use only and not for 90 per cent dependable use. Madhya Pradesh submits that provision of storages in the valley involves submergence and displacement of population and the investigations made so far do not indicate any possibility that it is conceivable to provide carryover storage for use in a 90 per cent year for power generation at some future development site. Madhya Pradesh, therefore, submits that it may not be appropriate to give any clarification on the basis of future imaginary development." (page 10 of its reply).

Maharashtra's Reply

Maharashtra has not offered any comments.

Gujarat's Reply

Gujarat has submitted that "It is envisaged that the power generated would be incidental to the irrigation use of water. The clarification sought by Union of India is tantamount to giving priority to use of water for power generation over that for irrigation use, a point already decided by the Hon'ble Tribunal. Gujarat submits that the point raised by the Union of India may be rejected. (pp 17-18 of its reply).

Rajasthan's Reply

Rajasthan has submitted that no clarification is needed. It has further submitted that "reservoirs are constructed with a view to store water for irrigation use and the carryover required for such use. This carryover should not be allowed to be utilised to give a higher dependability for power generation." (pp 11-12 of its reply).

2.11.2 **Order Of The Tribunal.**—While examining the utilisation of the water of the Narmada by the party States, the Tribunal has considered the availability of water in its totality in the entire river system. No apportionment of water has been made by the Tribunal by category of use and as such no stored water can be earmarked exclusively for power generation. A carryover capacity provided in a reservoir from whatever consideration should be reckoned towards the carryover capacity in the entire river basin and should be operated as such. Further, it is to be realised that when a hydro-electric power station feeds energy into a grid with a very large capacity, the notion of 90 per cent dependability loses its significance.

No change is necessary in the Final Order on this account

2.12.1 **Point 12 (Page 6 Of The Reference).**—The Union of India has requested that the Hon'ble Tribunal may kindly consider inclusion, in Clause XIV, Sub-clause 1(2) of the Final Order, of "nominees from the Power Department of the Central Government and the Electricity Boards to look after the interests of power generated in the Narmada Valley."

Madhya Pradesh's Reply

Madhya Pradesh has submitted that it agrees with the suggestion of Government of India and has referred to its Reference for clarification (MP 1199, pp 134-136) wherein it has proposed that the States of Madhya Pradesh, Gujarat and Maharashtra should each be represented on the Narmada Control Authority by two members each with the stipulated qualification, one from Irrigation Department and one from State Electricity Board or Electricity Department. It has further suggested that the Central Government should be represented by two members, one from Central Water Commission and the other from Central Electricity Authority. (pp 10-11 of its reply

Maharashtra's Reply

Maharashtra has submitted that it supports fully the views of Central Government. (page 10 of its reply).

Gujarat's Reply

Gujarat has denied that there is no representation for the Electricity Boards of the concerned Authority and has submitted that it would be open to the party States concerned to select its representative from its Electricity Board. If each State is entitled to

send two representatives, the constitution of the Authority would be unwieldy. Gujarat has further submitted that if only Madhya Pradesh, Maharashtra and Gujarat are to be empowered to nominate an additional member each on the Authority, the balance of equality among the States would be upset. (pp 18-19 of its reply).

Rajasthan's Reply

Rajasthan has submitted that "it is not necessary to increase the number of members of Narmada Control Authority. The Union of India may appoint an officer from Electricity Board or Power Department to one of the three posts of independent members, if it so desires." (page 12 of its reply).

2.12.2 **Order Of The Tribunal.**—For efficient functioning, the Authority has to be a compact body. It is sufficient for each State to have one suitable representative on the Authority. It is not necessary that each concerned Department or Board should be represented therein. It is also conceivable that there would not be sufficient work for the representatives of the States to justify their full time appointment. In order to give the party States the freedom to nominate their engineer members from the Department dealing with irrigation or power or the State Electricity Board the following words should be added after "the Irrigation Department" in the first sentence of Sub-clause 1(2) of Clause XIV of the Final Order:—

'Power Department or the State Electricity Board'.

2.13.1 **Point 13 (page 7 Of The Reference).**—The Union of India has submitted that the Hon'ble Tribunal may consider consultation with the Central Electricity Authority also in addition to Planning Commission, Central Water Commission, etc. ordered in Clause XIV, Sub-clause 8(3)(i).

Madhya Pradesh's Reply

Madhya Pradesh has spbmitted that it agrees with the suggestion of Government of India. (page 11 of its reply).

Maharashtra's Reply

Maharashtra has submitted that it fully agrees with the suggestion of Government of India. (pp 10-11 of its reply).

Gujarat's Reply

Gujarat has submitted that "it sees no objection to submitting simultaneously the copies of the project reports to the Central Water Commission, Planning Commission and Central Electricity Authority. The Hon'ble Tribunal may decide the matter as it may deem fit." (pp 19-20 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments.

2.13.2 **Order Of The Tribunal.**—The submission of the Union of India is acceptable. The words 'Central Electricity Authority' should be added in the second sentence of Clause XIV Sub-clause 8(3)(i) of the Final Order. The modified sentence will read as under:—

> "The Authority shall point out to the States concerned, the Central Water Commission, the Central Electricity Authority and Planning Commission any features of these projects which may conflict with the implementation of Order of the Tribunal."

A corresponding change should be made in Sub-clause 8(3)(i) in Chapter XVIII of the Report.

2.14.1 **Point 14 (Page 8 Of The Reference).**—The Union of India has pointed out the following typographical errors in the Report:—

In paragraph 4.1.17 read 30th June for 31st June.

In paragraph 5.3.2 read 81.357 lakh acres for 81.357 acres.

Madhya Pradesh's Reply

Madhya Pradesh has agreed that these and any other typographical errors in the Report may be rectified. (page 11 of its reply).

Maharashtra's Reply

Maharashtra has not offered any comments on this point.

Gujarat's Reply

Gujarat has submitted that the said typographical errors may be corrected. (page 20 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

2.14.2 **Order Of The Tribunal.**—The typographical errors may be corrected.

2.15.1 **Advice of Assessors.**—We have consulted our Technical Assessors Dr. M.R. Chopra, Shri Balwant Singh Nag and Shri C.S. Padmanabha Aiyar with regard to the subject matter of this Chapter. They advise us that they all entirely agree with the views expressed by us and the orders passed by us on all the points dealt with in this Chapter.

ANNEXURE II. 1

CMP No. 19/1979

BEFORE THE NARMADA WATER DISPUTES TRIBUNAL

In the matter of: Water Disputes regarding the Inter-State River Narmada and the River Valley Thereof

And

In the matter of:

The State of Gujarat ..... *Complainant*

Against

The State of Madhya Pradesh and others. ..... *Respondents*

SUBJECT—*Statement by the Union of India*

May it please this Hon'ble Tribunal,

The Union of India filed its Reference No. 1 of 1978 on 15th November, 1978, to which the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan filed their replies as per CMP Nos. 4, 1, 3 & 2 of 1979 respectively. The party States appearing before the Hon'ble Tribunal have in their replies expressed divergent views on many of the points contained in the Reference by the Union of India. Since the Union of India is anxious to continue to maintain a neutral stand on such matters and does not want to lend an impression, either directly or indirectly, that it either supports or opposes any of the party States in these matters, the Union of India has taken the decision not to present any arguments or file any rejoinder.

The Counsel for the Union of India made verbal submissions to this effect before the Hon'ble Tribunal on 11th April, 1979. As prayed by the Counsel, the Hon'ble Tribunal was pleased to grant time to the Union of India till 17th April, 1979 to file a CMP for placing on record its submission on the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan to Reference No. 1 of 1978 made by the Union of India before the Tribunal. Accordingly, in respect of each item of the Reference, the following submissions are made by the Union of India:—

Item 1

Taking note of the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 2

Taking note of the replies of the States of Gujarat, Madhya Pardesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 3

Taking note of the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 4

The Government of Gujarat and Madhya Pradesh have also made similar references. The Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 5

The Government of Maharashtra have also made a similar reference. The Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 6

Taking note of the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 7

Taking note of the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems necessary.

Item 8

Taking note of the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 9

The Government of Madhya Pradesh have made a similar reference. The Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 10

In view of the controversial nature of this issue, the Union of India does not want to appear to take sides with one or more of the States against the others. The Union of India, therefore, does not propose to give any rejoinder or present any arguments. The Union of India does not also want to press this point. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 11

Taking note of the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Union of India does not also want to press this point. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 12

Taking note of the replies of the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan on this point, the Union of India does not propose to give any rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 13

The Government of Madhya Pradesh and Maharashtra have expressed agreement with regard to this reference. The Government of Gujarat have indicated that they have no objection to submission of the copies of the Project Reports to the Central Water Commission, the Planning Commission and the Central Electricity Authority. The Union of India does not propose to give any Rejoinder or present any arguments. The Hon'ble Tribunal may pass such orders as it deems proper.

Item 14

The Union of India has only referred here to a few typographical errors. The Hon'ble Tribunal may pass such orders as it deems proper.

Settled by:

Smt. Shyamla Pappu
Senior Counsel for
the Government of India.

(Sd.) (R.V. RANTHIDEVAN)
Government of India Ministry of
Deputy Secretary to the
Agriculture and Irrigation (Department
of Irrigation).

NEW DELHI
Dated the 17th April, 1979.

CHAPTER III

REFERENCE NO. 2 OF 1978 BY THE STATE OF GUJARAT

3.1 In this reference, the State of Gujarat seeks clarification/explanation/guidance on 25 points mentioned and dealt with in this Chapter.

3.1.1 At the outset, it is necessary to state that points 1, 2, 3 and 7 are outside the scope of Section 5(3) of the Inter-State Water Disputes Act. It is not legally permissible for Gujarat to make a reference on these points under the guise of clarification or guidance.

3.1.2 Apart from this ground of rejection, we have also considered these points on their merit and have come to the conclusion that none of these points has any substance.

3.1.3 **Point 1 (pp 1-6 Of The Reference).**—(A) Gujarat has submitted that for determining the height of Sardar Sarovar Dam uniform releases from Maheshwar reservoir of 0.677 MAF per month i.e. 8.124 MAF per year have been taken while for the purpose of working out credit by Sardar Sarovar to Narmadasagar regulated releases from Maheshwar of only 6.953 MAF have been taken. Gujarat has submitted that with the reduced regulated releases of 6.953 MAF from Maheshwar, the FRL of Sardar Sarovar Dam required for irrigation only works out to 447 ft. and that for power and irrigation to 461 ft.

(B) Gujarat has submitted that in working out the carryover capacity the Tribunal has adopted a total evaporation loss of 3.44 MAF as given by Madhya Pradesh instead of 4.26 MAF which obtains according to Gujarat. If Gujarat's figure is adopted, the FRL of Sardar Sarovar for irrigation alone would come to RL 460 ft. and power and irrigation together RL 473 ft.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "Gujarat has not furnished essential details in support of its contentions about increase in full reservoir level of Sardar Sarovar due to adoption of the figures of evaporation losses and regulated releases proposed by Gujarat. Madhya Pradesh reserves its right to comment on these details as and when the same are made available by Gujarat." (Page 19-A of its reply).

Maharashtra's Reply

Maharashtra has stated that the change in the regulated releases from Narmadasagar according to Gujarat will lead to major changes in the decision of the Tribunal. Hence, it has submitted that "this cannot and in any event, oughi not to be done by this Hon'ble Tribunal in the present reference." (Page 21 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.1.4 **Order Of The Tribunal.—(a)** As stated at page 2 of the reference itself, the regulated release below Omkareshwar and Maheshwar is 6.953 MAF, there being no consumptive use ex-Maheshwar. It has been explained in paragraph 11.9.1 of the Report, as quoted at page 1 of the reference, that Madhya Pradesh would need to release at Maheshwar 8.122 MAF for the total requirement of 10 MAF at Sardar Sarovar. The difference between 8.122 MAF and 6.953 MAF represents the unregulated inflows from the catchment between Omkareshwar and Maheshwar. There is no storage capacity at Maheshwar for the purpose of regulation.

In its reference, Gujarat has assumed that the power draft of 6.953 MAF per annum at Maheshwar would be uniform in all the twelve months. This assumption is not correct. Gujarat overlooks the possibility of curtailing the releases from Omkareshwar in the filling period in order to provide uniform releases from Maheshwar to the extent feasible, taking into account the unregulated inflows from the catchment between Omkareshwar and Maheshwar. Because of this adjustment in regulation, higher releases of 0.677 MAF would obtain at Maheshwar in the non-filling period.

Further it should be pointed out that even when the power draft at Maheshwar is taken at 8.122 MAF in Statement 15.5 of the Report, the power generation attributable to Narmadasagar still remains 30 MWs and the apportionment of cost is not affected. Therefore, the figure 6.953 MAF per annum adopted as power draft is not relevant for fixing the height of the dam. The height has been determined in relation to the release of 8.122 MAF from Maheshwar. No change is required in the FRL as determined in the Report.

(B) As regards B, the main difference in evaporation loss is in respect of the loss from pumping schemes proposed by Madhya Pradesh. Gujarat contends that evaporation loss will occur in such schemes also while Madhya Pradesh has argued that there will be no evaporation loss from such schemes which draw water from the river flows directly. Gujarat had earlier made the same contention in Exhibit G-1097 which was rejected.

No further clarification is necessary and no change in the Final Order is required.

3.2.1 **Point 2 (pp 7-12 Of The Reference).**—Gujarat has made the submission "that the Hon'ble Tribunal should reconsider its Order regarding flood control and fixing of MWL by considering:—

(i) moderated flood of 16 lakh cusecs instead of 22 lakh cusecs corresponding to thousand year flood at 30.7 lakh cusecs; and

(ii) realistic time of travel of flood from the Narmadasagar to Sardar Sarovar for advance depletion of the Sardar Sarovar."

Madhya Pradesh's Reply

As regards time of travel of flood from Narmadasagar to Sardar Sarovar, Madhya Pradesh has pointed out that "the flood coming down from Narmadasagar will first raise the level at Omkareshwar to its MWL and then the peak flood will flow down from Omkareshwar. The outflows from Omkareshwar will again be retained, to a certain extent, at Maheshwar and after the level rises to the MWL at Maheshwar, the peak flood will flow down to Sardar Sarovar. In these circumstances, the time-interval of 18 to 20 hours adopted by this Hon'ble Tribunal is justified." (Page 23 of its reply).

Maharashtra's Reply

Maharashtra has pointed out that the Tribunal has in para 11.16.11 stated that "for 1970 flood (as estimated by Gujarat) with a return period of 150 years the peak outflow would be 16 lakh cusecs. The flood embankments are generally provided for floods of a return period of 100 years, risks being accepted for higher floods. Hence the submission of Gujarat to consider the moderated outflow of 16 lakh cusecs for a 1000-year flood of 30.7 lakh cusecs does not merit consideration. Further, if a moderated outflow for a 1000-year flood of 30.7 lakh cusecs (as estimated by Gujarat) is to be restricted to 16 lakh cusecs as against 22 lakh cusecs, it will mean raising of MWL substantially above +460, involving higher submergence in Madhya Pradesh and Maharashtra. Maharashtra submits that such a raising of MWL has already been rejected by the Tribunal and is totally unwarranted." (pages 23-24 of its reply).

As regards travel time of flood from Narmadasagar to Sardar Sarovar, Maharashtra has stated that even if all the gates are not opened, the time required for depletion of Sardar Sarovar would be less than 10 hours, implying that a warning of even less than 10 hours would suffice. (Page 22 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.2.2 **Order Of The Tribunal.**—In paragraph 11.16.11 of the Report, it has been stated that "in a flood of the Magnitude of 1970, estimated at 24.5 lakh cusecs by Gujarat and 18.37 lakh cusecs by Maharashtra, with outflows from Narmadasagar restricted to 10 lakh cusecs, the peak outflow from Sardar Sarovar would be about 16 lakh cusecs for the Gujarat figure of the flood and about 11 lakh cusecs for Maharashtra figure." Further it has been stated in paragraph 11.16.12 of the Report that "the return period of the 1970 flood has been stated by Maharashtra to be 88 years (Exhibit MR-142, p. 100) while Gujarat has figured out the period to be 150 years" (Exhibit G-723, p. 73). Flood embankments are generally provided for floods of a return period of 100 years, risk being

accepted for higher floods. It would be quite practicable to provide embankments for the moderated 1970 flood outflows from Sardar Sarovar mentioned in paragraph 11.16.1. A greater moderation of flood would require a higher MWL at Sardar Sarovar involving submergence of larger area under the reservoir. This is not considered justified.

As regards the travel time of flood from Narmadasagar to Sardar Sarovar, even if the time is less than 18-20 hours, there will be a significant time interval due to moderating effect of two spillways at Omkareshwar and Maheshwar or in their absence due to valley storage in the river channel in that reach. In view of this, no change in the MWL is warranted.

No change is required in the Final Order on this account.

3.3.1 **Point 3 (pp 13-19 Of The Reference).**—Gujarat has submitted that the following clause may be added at the end of Clause VII of the Final Order:—

> "Gujarat is, however, permitted to provide wider foundation for a dam with FRL 530'. The cost attributable to such wider foundation shall be borne by Gujarat in the first instance."

Gujarat's argument is that the equitable apportionment of water in Clauses III and IV is based on the data available at present for assessment of needs of Madhya Pradesh and Gujarat and that when surveys are carried out the CCA that may be available for irrigation in Madhya Pradesh may turn out to be less than that considered by the Hon'ble Tribunal. Also, if at the time of review Gujarat can positively show that irrigation of Banni and the Rann area from Narmada waters is not uneconomic, the said area would be eligible for getting its equitable share of water. Furthermore, Gujarat avers that Madhya Pradesh is neither in a position to increase the carryover capacity in its reservoirs to an aggregate of 5.48 MAF nor is able to adjust the pattern of its water use. Gujarat, thus anticipates a higher allocation of water on review after 45 years and, therefore, envisages that the height of Sardar Sarovar Dam may have to be raised. Gujarat, therefore, seeks to provide a wider foundation for a dam of height with FRL 530, that is, a dam 75 feet higher than the one now permitted to be constructed.

Madhya Pradesh's Reply

Madhya Pradesh has objected to Gujarat's suggestion and has stated that "even if it is assumed that widening of the foundations for raising the dam is required at the time of the review this can be done then without much difficulty and it is not necessary to go into the matter at this stage raising uncalled for controversy. Provision of wider foundations at Sardar Sarovar will create difficulties in resettlement of the oustees." (pp 30-31 of its reply).

Maharashtra's Reply

Maharashtra contends that "it would not only be unwise to permit such wider foundation for Sardar Sarovar dam to justify ultimately a dam for FRL 530 but it would indeed act as constant irritant and a cause for fresh disputes and hindrance in smooth and co-operative attitude of the participant States even within the period of 45 years. In any event Maharashtra cannot be expected to pay any share in the cost of the wider foundation than necessary for the FRL 455 dam, at any later date." (Page 28 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.3.2 **Order Of The Tribunal.**—The proposition of Gujarat amounts to acceptance in principle by this Tribunal at this Stage the admissibility of (a) submerging additional land in Madhya Pradesh and Maharashtra unto 2,37,178 acres, (difference between submergence of 91,500 acres at RL 455 and 3,28,678 acres at RL 530), (b) drowning of Maheshwar dam and power plant in Madhya Pradesh and (c) affecting Maheshwar town, after 45 years. This is not acceptable.

As we have already said, this point is outside the scope of the reference under Section 5(3) of the Inter-State Water Disputes Act, 1956.

No clarification is necessary and no change is required in the Final Order on this account.

3.4.1 **Point 4 (pp 20-21 Of The Reference).**—Gujarat has submitted that Clause V of the Final Order prescribing review after 45 years should be modified to cover Clauses VII, VIII, IX, X and XI of the Final Order also.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "Gujarat's proposal to make the Clauses VII, VIII, IX, X and XI also subject to review after 45 years is only hypothetical and speculative and may be rejected." (Page 33 of its reply).

Maharashtra's Reply

Maharashtra has stated that "it has also raised this point and sought for an explanation whether having regard to the changed circumstances, exigencies of the case and the realities of the situation prevailing after a period of 45 years, Clauses other than Clauses III and IV be also made subject to review after a period of 45 years." (Pages 15-16 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.4.2 **Order Of The Tribunal.**—The intention of the Tribunal was that not only Clauses III and IV but also all other consequential clauses should be made subject to review after 45 years but due to inadvertence, only Clauses III and IV were mentioned. A new Clause, Clause XVI should, therefore, be added in the Final Order to the following effect:—

Clause XVI: Period Of Operation Of Certain Clauses Of The Final Order.

In addition to Clauses III and IV (mentioned in Clause V), our Orders in Clause VII with regard to Full Reservoir Level and Maximum Water Level of the Sardar Sarovar, Clause VIII with regard to sharing of Costs and Benefits, Clause IX with regard to Regulated Releases to be made by Madhya Pradesh for the Requirement of Sardar Sarovar Project, Clause X with regard to payment to be made by Gujarat to Madhya Pradesh for such Regulated Releases, Clause XII with regard to Allocation of Cost of Sardar Sarovar Project between Irrigation and Power, Clause XIII with regard to Allocation of Irrigation Component of Cost of Sardar Sarovar Project between Gujarat and Rajasthan and Clause XIV as regards Machinery are all made subject to review at any time after a period of 45 years from the date of publication of the Decision of the Tribunal in the Official Gazette.

Clause V also requires a slight verbal change and is modified to the following effect:—

Clause V: Period Of Operation Of The Order Of Apportionment.

Our Orders with regard to the equitable allocation in Clauses III and IV are made subject to review at any time after a period of 45 years from the date of publication of the Decision of the Tribunal in the Official Gazette.

3.5.1 **Point 5 (pp. 22-27 Of The Reference).**—Gujarat has submitted that Clause IV of the Final Order may be modified by inserting therein the following Sub-clause as Sub-clause (6) so as to include the following direction:—

> "6. During the years in which Madhya Pradesh and/or Maharashtra cannot utilise the Narmada Waters upto their allocated shares, and, therefore, flows of the Narmada reaching Navagam are in excess of shares allocated to Gujarat and Rajasthan, it will be open to Gujarat and Rajasthan to utilise such surplus waters for irrigation without any prescriptive rights. No adjustments on that account shall be made ni the following water year of such use in excess of the authorised use."

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "Gujarat's contention is fallacious and incorrect and is belied by the terms of Sub-clause (5) of Clause IV." (Page 34 of its reply).

Maharashtra's Reply

Maharashtra has submitted that any caveat that such use of surplus supplies would be permissible "without creating prescriptive rights" is illusory. It contends that if at all Gujarat is permitted to use such surplus waters it should be for "excluding Banni & Ranns and Mahi, without creating prescriptive rights". Maharashtra has further pointed out that "water should not be deemed to be surplus until full entitlement for maximum power generation at the river bed power house has been accorded priority." (Page 29 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.5.2 **Order Of The Tribunal.**—Sub-clause (5) of Clause IV of the Final Order of the Tribunal states, inter alia, that "in many years there will be surplus waters in the filling period after meeting the storage requirements and withdrawals during the period..... It is desirable that water, which would go waste without even generating power at the last river bed power house, should be allowed to be utilised by the party States to the extent they can." This Sub-clause stipulates that only such water over and above their share can be utilised for irrigation by the party States as cannot even generate power. This surplus can be due to excessive inflow during the year or due to inability of Madhya Pradesh or Maharashtra to utilise their due share for whatever reason. Gujarat and Rajasthan cannot utilise any water which becomes surplus out of the share of Madhya Pradesh and Maharashtra if it can generate power at the river bed power house at Sardar Sarovar of which Madhya Pradesh and Maharashtra are the main beneficiaries.

The suggestion of Gujarat is not acceptable and no change is required in the Final Order in this regard.

3.6.1 **Point 6 (pp. 28-31 Of The Reference).**—Gujarat has suggested that when water starts going waste to sea without generating power at Sardar Sarovar, the upstream States should be permitted to use the waters over and above their allocated share only from the reservoirs which are full and spilling.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "the modification sought by Gujarat is unwarranted and unnecessary." (Page 35 of its reply).

Maharashtra's Reply

Maharashtra has submitted that (a) even though all the reservoirs in Madhya Pradesh are full and the last reservoir in Madhya Pradesh is over-flowing, Madhya Pradesh and Maharashtra should be allowed to utilise surplus water only when the Sardar Sarovar starts overflowing after generation of maximum power at the river bed power house. On the other hand, when all the reservoirs in Madhya Pradesh are not full but the Sardar Sarovar is spilling after generation of maximum power, Madhya Pradesh and Maharashtra should be at liberty to utilise the surplus waters below the last dam in Madhya Pradesh by pumping. (b) The use of such surplus waters should, however, be accounted for against the share of surplus water against the respective States in a particular year. (Page 16 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.6.2 **Order Of The Tribunal.** Sub-clause (5) of Clause IV of the Final Order runs as follows:—

> "(5) It may be mentioned that in many years there will be surplus water in the filling period after meeting the storage requirements and withdrawals during the period. This will flow down to sea. Only a portion of it will be utilisable for generating power at Sardar Sarovar river-bed powerhouse, and the rest will go waste. It is desirable that water, which would go waste without even generating power at the last river-bed power house, should be allowed to be utilised by the party States to the extent they can.
>
> Gujarat is, therefore, directed that whenever water starts going waste to sea, without generating power, Gujarat shall inform the Narmada Control Authority

(herein after referred to as the Authority), with copies to designated representatives of all the concerned States, and Gujarat shall also inform them when such flows cease. During the period of such flows, the party States may utilise them as they like, and such utilisation by the party States will not count towards allotment of supplies to them, but use of such water will not establish any prescriptive right."

The intention of the Tribunal is that when water starts spilling at Sardar Sarovar without genarating power, only such water would be utilised from an upstream reservoir as is spilling from it as otherwise it would be tantamount to utilising stored water and not water going waste.

By way of clarification the wording of the second part of the Sub-clause 5 of Clause IV of the Final Order should be modified as under:—

"Gujarat is, therefore, directed that whenever water starts going waste to sea without generating power, or based on the information received from upstream gauging stations it anticipates that water would so go waste, it shall inform the Narmada Control Authority (hereinafter referred to as the Authority) and the designated representatives of all the concerned States. Gujarat shall also inform them when such flows cease. During the period of such flows, the party States whose reservoirs are spilling and the spill water cannot be stored elsewhere, may utilise such flows from the said reservoirs as they like and such utilisation by the party States will not count towards allotment of supplies to them, but use of such water will not establish any prescriptive rights."

3.7.1 **Point 7 (pp. 32 to 52 Of The Reference).**—Regarding sharing of costs and benefits of Sardar Sarovar Power Complex by the party States, Gujarat has stated that "the compensation payable or the share of Madhya Pradesh and Maharashtra would be rational and equitable only if it is based on the actual consumptive utilisation, and not on any assumed consumptive utilisation." Gujarat submits that the shares of Madhya Pradesh, Maharashtra and Gujarat should be fixed "taking actual consumptive utilisation. The share of each State can be determined instantaneously or on the basis of actual consumptive utilisation during preceding year." It has also outlined a procedure for such determination. (Page 40 of its reference).

On the above basis Gujarat has proposed that from the second year of commissioning of Sardar Sarovar Power Complex, "the share of power of each State at any point of time during a year shall be based on actual consumptive utilisation during the preceding year and shall be determined as under:—

Gujarat	0.3716	X		
Madhy Pradesh	0.4242	X	+ 0.6750	Y
Maharashtra	0.2042	X	+ 0.3250	Y

Where X and Y are respectively the figures of net power produced at Navagam at river bed and canal head power houses during the preceding year." (Pages 44 to 46 of its reference).

It has further stated that "if the Hon'ble Tribunal is not inclined to effect a major change in the orders given in its decision, directions may be given to square up the accounts annually. Share of power of each State for the year shall be determined taking into consideration debits and/or credits based on difference between actual and assumed power drafts during the preceding year." It has worked out an example of how the difference between the actual and assumed power draft is to be reckoned in the shares of the States. (Pages 50 & 51 of its reference).

Madhya Pradesh's Reply

Madhya Pradesh has stated that "even on the application of Gujarat's principle that sharing should take into account the actual consumptive utilisation, if the said utilisation varies the total power generation would vary proportionately and such variation will be shared by the concerned States as the shares are determined on a percentage basis." (Page 37 of its reply).

Madhya Pradesh has further submitted that "it is not necessary to determine the shares of power instantaneously or on the basis of actual consumptive utilisation by the concerned States during the preceding year as the yearly variations will be automatically taken care of by sharing the power on a percentage basis." (Page 40 of its reply).

Maharashtra's Reply

Maharashtra has stated that "the claims and suggestions made by Gujarat in item No. 7 are in effect matters involving reconsideration of decisions already arrived at by the Tribunal and cannot and ought not to be permitted."

Maharashtra has also stated that "by its proposal Gujarat wishes to take the cream of the power benefits within the initial period of 35 years and at the time of review seeks to restore its rights to power from the canal head power house." (Page 32 of its reply).

Regarding squaring up of accounts annually it has stated "(As regards squaring up of accounts Maharashtra has no objection to squaring up the accounts annually, but it has the strongest objection to squaring up annually the accounts according to the example given on page 51 of the Gujarat's reference." Instead it has suggested "the actual power drawals during the year may be adjusted in the succeeding year, against the entitlement of each State." (Page 41 of its reply).

Rajasthan's Reply

Rajasthan has not made any comments on this matter.

3.7.2 **Order Of The Tribunal.**– On the basis of information furnished by the party States regarding the pace of development of consumptive use of water, the Tribunal has worked out the aggregated power that would be generated during the conventional 100 years of useful life of Sardar Sarovar dam. The shares of Madhya Pradesh, Maharashtra and Gujarat in the power generated have been computed by allocating to Madhya Pradesh and Maharashtra the full quantum of power which could have been generated at the notional Jalsindhi Project under the corresponding conditions, and allotting the balance power to Gujarat. This computation gave Madhya Pradesh a share of 57%, Maharashtra a share of 27% and Gujarat a share of 16% of power/energy generated on any day as stated in Clause VIII(1) of the Final Orders.

According to the proposal now made by Gujarat, the power generated at the canal head power-house and that at the river bed power house is to be apportioned in different ratios. The proposal of Gujarat involves a radical change from the Tribunal's approach. The Tribunal did not contemplate that the canal head power house and river bed power house should be considered separately. Further the suggestion to fix percentages in any year on the basis of generation in canal bed power house and river bed power house in the previous year ignores the hydrological variations in the yield of the river. The proposed arrangement would give to Gujarat a considerably larger share in the initial stages till irrigation is fully developed and thereafter for the remaining period of about 65 years practically none. The determination of respective shares in this case would be quite complicated and controversial.

As we have already stated, the proposal of Gujarat is outside the scope of a reference under section 5(3) of the Inter-State Water Disputes Act and even on merits, the proposal of Gujarat is not acceptable.

No change is necessary in the Final Orders on this account.

3.8.1 **Point 8 (pp. 53-57 Of The Reference).**– Gujarat has submitted that the Tribunal should specifically order by making an addition to Clause X of the Final Order, that "Gujarat shall take up and complete the construction of Sardar Sarovar Dam with FRL 455' and concurrently Madhya Pradesh shall take up and complete the construction of Narmadasagar Dam with FRL 860' in the first stage of development envisaged in para 14.4.7."

Madhya Pradesh's Reply

Madhya Pradesh has stated that "in Clause XIV, Sub-clause 8(3)(ii), this Hon'ble Tribunal has expressly provided that the Authority shall decide the phasing and shall co-ordinate construction programmes." It has submitted that there is "no necessity or warrant for modification in Clause X sought by Gujarat." (pp 40-41 of its reply).

Maharashtra's Reply

Maharashtra has stated that this "falls within the functions and duties of the Narmada Control Authority *vide* Sub-clause (8) of Clause XIV of the Final Order and Decision of the Tribunal and no further directions are necessary." (pp 16-17 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.8.2 **Order Of The Tribunal.** -In Narmadasagar project, Gujarat is mainly concerned with the timely completion of Narmadasagar dam to enable it to draw its full share of water. The construction of Narmadasagar dam has, therefore, to be synchronised with the construction of Sardar Sarovar Dam. Madhya Pradesh has in C.M.P. No. 242 of 1975 dated 8th September, 1975, stated at page 12 as under:

> "In any case, Madhya Pradesh intends to complete the construction of Narmadasagar Dam simultaneously with the completion of the Sardar Sarovar Dam or even before the Sardar Sarovar Dam is completed."

The Narmadasagar Project Report (1969), Exhibit MP-158, envisages completion of the dam in a period of 7 years including a year for pre-construction works. The Sardar Sarovar Project Report (1971), Exhibit G-177, envisages completion of Sardar Sarovar dam in a period of 8 years. This, however, was for a higher dam with FRL 530'. A period of about a year is likely to be taken up in preparing fresh project reports for the two projects and their scrutiny and processing for sanction. Allowing for any unforeseen difficulties which might crop up during the course of construction of these two projects, it should be possible to complete the two dams together within a period of 10 years from the date of publication of the Final Order and Decision of the Tribunal in the Official Gazette. The Construction of these two dams shall, therefore, be taken up and completed accordingly.

By way of clarification, the following sentence should be added at the end of Clause VII of the Final Order:

> "Gujarat shall take up and complete the construction of the dam accordingly."

Also the word 'Navagam' appearing in the Clause should be replaced by 'Sardar Sarovar'.

In the Final Order, under Clause VIII(1), add as a sub-paragraph:—

> "The party States shall make available in annual instalments their share of funds required according to the approved construction programme and take all the necessary steps to complete the Sardar Sarovar Dam within 10 years of the date of publication of the Final Order and Decision of the Tribunal in the Official Gazette."

Further, the following should be inserted in Clause X of the Final Order as subclause 1 and the existing clause numbered as sub-clause 2:—

> "(1) Madhya Pradesh shall take up and complete the construction of Narmadasagar dam with FRL 262.13m (860') concurrently with or earlier than the construction of Sardar Sarovar Dam."

3.9.1 **Point 9 (Page 58 Of The Reference).**— Gujarat has submitted that in the interest of justice and expeditious completion of land acquisition proceedings, Gujarat should be associated at all stages of the land acquisition proceedings to be taken up by Madhya Pradesh and Maharashtra.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "there is no legal or other warrant for the contention advanced by Gujarat." It has further submitted that "this Hon'ble Tribunal has no jurisdiction to make such an order as prayed for by Gujarat." (Page 42 of its reply).

Maharashtra's Reply

Maharashtra has submitted that "it is not considered necessary that Gujarat should be associated with the land acquisition proceedings." (Page 17 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.9.2 **Order Of The Tribunal.**—The Tribunal's Final Order contains comprehensive directions regarding land acquisition. The acquisition in Madhya Pradesh and Maharashtra has to be done by the officials of these States within their respective jurisdiction. It will be the function of the Narmada Control Authority to secure compliance with and implementation of the decisions and directions of the Tribunal. Therefore, it is not necessary to associate the officials of Gujarat in the land acquisition proceedings in Madhya Pradesh and Maharashtra.

No change is necessary in the Tribunal's Final Order on this account.

3.10. 1 **Point 10 (pp. 59-66 Of The Reference).**—Gujarat has submitted that the directions given by the Hon'ble Tribunal regarding compensation for lands going under submergence should be modified in view of the following:—

(i) The directions envisage concurrent use of land coming under submergence both by Gujarat and by Madhya Pradesh or as the case may be by Maharashtra in that while Gujarat would have the right to store waters over such lands all other rights arising out of such lands continue to remain vested in Madhya Pradesh or Maharashtra.

(ii) When the lands get exposed, it would be open to Madhya Pradesh or Maharashtra to allow cultivation of such lands and realise revenue therefrom. As Gujarat would be paying land revenue for the land under submergence to the respective States, it would mean that Madhya Pradesh and Maharashtra would be at liberty to levy and collect land revenue from two different persons for the same land.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that it does not admit that this Hon'ble Tribunal has over-looked or not given due regard to several considerations as alleged by Gujarat and has concluded that the directions given by the Hon'ble Tribunal are not liable to be modified. (pp. 43 to 47 of its reply).

Maharashtra's Reply

Maharashtra has stated that "the reconsideration suggested by Gujarat is totally unwarranted and amounts to the Tribunal sitting in appeal over its own decision and is totally outside the scope of Section 5(3) of the Inter-State Water Disputes Act." It has also pointed out that "the cultivation of such lands when they get exposed, and realising revenue therefrom is strictly a matter concerning the States in which the lands are situated." (pp. 44-45 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.10.2 **Order Of The Tribunal.**—As regards (i) above since storage is the only purpose for which land coming under submergence is to be acquired for Gujarat, the rights of fishing, boating and water transportation would vest in Madhya Pradesh and Maharashtra over the part of the lake within the respective States.

As regards (ii) above, since Gujarat shall have paid acquisition cost of the land which will periodically get exposed, it is reasonable that any revenue which Madhya Pradesh or Maharashtra may derive from any lessee of such lands for cultivation should be passed on to Gujarat after deducting collection charges.

In the result, the following should be added as paragraph V(6) under Sub-clause V of Clause XI of the Final Order, and the existing paragraph V(6) and subsequent paragraphs renumbered:—

> "V(6) Madhya Pradesh and Maharashtra, as the case may be, shall remit each year to Gujarat any revenue which they may derive from the cultivation of lands which get periodically exposed in Sardar Sarovar, after deducting collection charges for the same."

3.11.1 **Point 11 (Page 67 Of The Reference).**—Gujarat has submitted that in order to provide a uniform pattern of payments by one State to another and to facilitate proper financial control, it is desirable that the Hon'ble Tribunal do give specific directions as regards manner and time of making such payments by one State to another.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "this Hon'ble Tribunal has already given appropriate directions in this behalf." (Page 47 of its reply).

Maharashtra's Reply

Maharashtra has submitted that "it is not possible to foresee all possible contingencies and to give rigid directions regarding manner and time of payments by one State to another." (Page 17 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.11.2 **Order Of The Tribunal.**—It is not necessary that the Tribunal should give directions in the matter.

No change is required in the Final Order of the Tribunal in this regard.

3.12.1 **Point 12 (pp. 68-71 Of The Reference).**—Gujarat has submitted that the payment to be made for regulated releases from Narmadasagar is in effect payment for storage provided at Narmadasagar for the benefit of Gujarat. Therefore, part of the power benefits at Narmadasagar should be shared between Gujarat and Madhya Pradesh.

Madhya Pradesh's Reply

Madhya Pradesh has stated that Gujarat is to pay 17.63% of the cost of dam only and not to power complex. It has further pointed out that payment is for the benefit of regulated releases from Narmadasagar and not for any share of power generation and hence the proposal of Gujarat may be rejected. (Page 50 of its reply).

Maharashtra's Reply

Maharashtra does not wish to comment at this stage. (Page 47 of its reply).

Rajasthan's Reply

Rajasthan has not commented on the point.

3.12.2 **Order Of The Tribunal.** The payment of 17.63 per cent of the expenditure on the construction of Narmadasagar Dam which Gujarat is required to make to Madhya Pradesh is in respect of regulated releases which gives additional benefits at Sardar Sarovar and not for share cost of power generation at Narmadasagar. The submission of Gujarat in this regard is not acceptable.

No change is required in the Final Order in this regard.

3.13.1 **Point 13 (pp. 72-73 Of The Reference).**—In paragraph 17-2-4 of the Report, the Tribunal had observed that "by and large, the overall difference in cost of masonry structures on the canal would be relatively small for gradients proposed by Gujarat and that now prescribed. Also, it would require an inordinate effort to determine this difference as for doing so designs will need to be prepared for all the structures for the two cases. This cost differential should, therefore, be ignored."

Gujarat has submitted that the cost differential in respect of masonry works is likely to be sizeable and that it would not be difficult to work it out and, therefore, this cost differential should also be shared.

Madhya Pradesh's Reply

Madhya Pradesh has offered no comments on this point. (Page 51 of its reply).

Maharashtra's Reply

Maharashtra has offered no comments at this stage. (Page 47 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the change in slope would not make any significant difference in the total expenditure on masonry works. It further submits that all irrigation and power benefits of the Navagam canal system accrue exclusively to Gujarat. It prays that the cost of the common canal should be borne on cusec-mile basis by Gujarat and Rajasthan. (Pages 13-14 of its reply).

3.13.2 **Order Of The Tribunal.**—There would be about 400 masonry works on the main canal for which alternatie designs will need to be prepared to calculate the cost differential in respect of them. The alternative designs for such a large number of structures may lead to numerous points of disagreement between the concerned States. The change desired by Gujarat in paragraph 17.2.4 of the Report in the matter is not necessary.

In Sub-clause (b) of Clause XIII of the Final Order a reference has been made to Chapter XVII of the Report. In order to make this Sub-clause self-contained, it should be modified to read as under:—

"(b) The cost of Navagam canal with its design approved by Narmada Control Authority shall be shared by the two States as under:—

(i) The cost differential in respect of land, earthwork and lining for the gradients proposed by Gujarat and that now prescribed, to be borne by Rajasthan in full.

(ii) The actual cost of the canal less (i) above to be shared on cusec mile basis.

The actual cost should be shared by Gujarat and Rajasthan on cusec-mile basis in the first instance and on completion of the work the share cost shall be adjusted as indicated above. Rajasthan shall credit its share cost each year initially on the basis of budget allotment. This should then be adjusted at the end of the year to actual expenditure. The post-construction expenditure on maintenance is not to be considered as cost of construction.

Should any difference arise between Rajasthan and Gujarat on figures of cost in respect of Navagam Main Canal for purposes of sharing the cost, the matter shall be referred to the Narmada Control Authority and on such a reference its decision shall be final and binding."

3.14.1 **Point 14 (pp 74-76 Of The Reference).**—Gujarat has submitted that it should be made clear in the Final Order of the Tribunal that it would be free to determine the capacity of the main canal to satisfy its needs. It has requested that the following sentence should be added at the end of Clause VI of the Final Order:—

"Gujarat and Rajasthan shall be at liberty to decide the canal capacity required by each."

Madhya Pradesh's Reply

Madhya Pradesh has submitted that till the use for irrigation is fully developed, the water will be available for power generation at river bed power house. An unduly large capacity for the canal, would affect the contemplated power generation at the river bed, thus reducing the share of power generation of Madhya Pradesh and Maharashtra. Madhya Pradesh has further submitted that it is not necessary to give any liberty to Gujarat and Rajasthan to decide the canal capacity and the canal capacity may be restricted to monthly requirements of these States. (Page 51 of its reply).

Maharashtra's Reply

Maharashtra has submitted that Gujarat's submission should be rejected, as the possibility of Gujarat utilising a large capacity canal for diverting surplus flows to unspecified areas like Mahi Command, Banni and Ranns, cannot be overlooked, and in that case Maharashtra would have to suffer loss of power to that extent. (Page 45 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the capacity of the canal can be decided by mutual consultations between the two States concerned. The capacity and dimensions of the canal would also have to allow for full utilization of excess flows, as under the climatic and soil conditions of Madhya Pradesh, the utilization of Narmada waters would take a long time. (Page 14 to 16 of its reply).

3.14.2 **Order Of The Tribunal.**—The party States have been given the freedom to utilise their share of water, including that of surpluses, in any manner they like. While Madhya Pradesh and Maharashtra can utilise their share partly for consumptive use and partly for generation of power including that at the river bed power house at Sardar Sarovar, they cannot reasonably claim for power generation the use water over and above their share. Gujarat and Rajasthan should be free to determine their requirement of Navagam Canal capacity in the light of water which would be expected to be available within their share. By way of clarification, therefore, the following sentence should be added at the end of Clause VI of the Final Order:—

> "Gujarat and Rajasthan shall be at liberty to decide the canal capacity required by each in the light of water which would be expected to be available within their share."

3.15.1 **Point 15 (pp. 77-78 Of The Reference).**—Gujarat has submitted that in order to have uniformity in policy regarding sale of surplus power at Sardar Sarovar Power Complex by one State to another, specific direction be given by the Hon'ble Tribunal and has suggested that the rate to be charged should be the cost of generation at the Sardar Sarovar Power Complex plus 5%.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that the rate for selling of surplus power should be the highest rate of power generation in the recipient State, at stations having unit capacity of 50 MW and above, including sales tax, and other duties whatsoever in force plus 10% (pages 52-53 of its reply).

Maharashtra's Reply

Maharashtra has submitted that the rates for sale of surplus power will depend on other factors than the cost of generation and may be left to be decided by the Authority in consultation with the Central Electricity Authority. (pp 17-18 of its reply).

Rajasthan's Reply

Rajasthan has offered no comments on this point.

3.15.2 **Order Of The Tribunal.**—Clause VIII Sub-clause (2)(iv) of the Final Order provides for sale of surplus power to another participating State under mutual agreement. The exact rate at which the power is to be sold can be mutually fixed at the time of making the agreement and it is not necessary for the Tribunal to give any direction in respect of the rate.

No change is required in the Final Order of the Tribunal in this regard.

3.16.1 **Point 16 (pages 79-81 Of The Reference).**—The Final Order of the Tribunal provides in Clause XIV Sub-clause 8(3)(i) that Madhya Pradesh or Gujarat, as the case may be, shall submit to the Authority the Sardar Sarovar Project Report, the Narmadasagar Project Report, the Omkareshwar Project Report and the Maheshwar Project Report, and the Authority shall point out to the States concerned, the Central Water Commission and Planning Commission any features of these projects which may conflict with the implementation of the Orders of the Tribunal.

Gujarat has submitted that Madhya Pradesh should be required to submit to the Authority not only project reports for Narmadasagar, Omkareshwar and Maheshwar projects but for all major projects so that the Authority may be in a position to check that the required aggregate carryover capacity is provided by Madhya Pardesh in its projects.

Madhya Pradesh's Reply

Madhya Pradesh does not agree to Gujarat's suggestion that the project reports of all the major projects above Narmadasagar be submitted to the Authority for examination. It has submitted that there is already a carryover of 7.02 MAF provided for at and above Narmadasagar, and therefore there is no necessity to increase the carryover capacity or to adjust the patterns of its water use. (Page 53-54 of its reply).

Maharashtra's Reply

Maharashtra has submitted that it does not want to comment at this stage. (Page 47 of its reply).

Rajasthan's Reply

Rajasthan has offered no comments on this point.

3.16.2 **Order Of The Tribunal.**—Narmadasagar and Sardar Sarovar projects are the key projects in the development of water resources in the valley. Omkareshwar and Maheshwar projects have a bearing on the regulated releases by Madhya Pradesh for Sardar Sarovar. The Narmada Control Authority has, therefore, to see that the features of these projects do not conflict with the implementation of the Orders of the Tribunal. Other projects on the river in Madhya Pradesh would be undertaken at different times spread over a few decades and it is not considered necessary that these should also be submitted to the Authority for scrutiny.

No change in the Final Order is necessary in this respect.

3.17.1 **Point 17 (Pages 82-83 Of The Reference).**—Gujarat has submitted that in Sub-clause 14(3) of Clause XIV of the Final Order, instead of providing that the Review Committee can review the decision of the Authority at a meeting at which the Chairman and all the members of the Review Committee are present, it is desirable that the Review Committee should be able to function at a meeting at which the Chairman and at least two other members of the Review Committee are present.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that if the quorum of 'the Chairman and two other Members' as proposed by Gujarat, is provided, it may happen that the State affected by the decision of the Authority may not be represented at the time of deliberation of the Review Committee. Such a provision would defeat the very purpose of the review by the Committee. Hence no change in the directions is necessary. (Pages 54-55 of its reply).

Maharashtra's Reply

Maharashtra has submitted that it cannot agree to Gujarat's suggestion, as it is very necessary that all the members of the Review Committee should be present at every meeting, and the views of all the party States on the controversial points are heard. (Page 46 of its reply).

Rajasthan's Reply

Rajasthan has submitted that "it would be proper if a decision by the Review Committee on any subject concerning one of the States is not taken unless a representative from that State is present to put forward its point of view." It has further submitted that no change is required in the order of the Hon'ble Tribunal. (Page 16 of its reply).

3.17.2 **Order Of The Tribunal.**—The Review Committee has to take important decisions and, therefore, it is desirable that views of all the party States should be available. Sub-clause 14(2) provides that the Chief Ministers of the four party States may nominate the respective Irrigation Ministers either generally or specially as the alternate Member with full powers of voting, taking decisions etc. With this proviso it should be possible for all the States to be represented at every meeting. No change is necessary in the Final Order in this respect.

3.18.1 **Point 18 (Pages 84-87 Of The Reference).**—Gujarat has submitted that the cost of operation and maintenance of Sardar Sarovar Dam and appurtenant works should also be shared.

Madhya Pradesh's Reply

Madhya Pradesh has offered no comments on this point. (Page 55 of its reply).

Maharashtra's Reply

Maharashtra has submitted that "the sharing of cost of operation and maintenance of Sardar Sarovar Dam and appurtenant works has been already specified by the Hon'ble Tribunal in Clause VIII, Sub-clause (2)(xi) of the Final Order and Decision and no further directions are necessary." (Page 18 of its reply).

Rajasthan's Reply

Rajasthan has offered no comments on this point.

3.18.2 **Order Of The Tribunal.**—The order of the Tribunal in Clause XIV, Sub-clause 7, provides that "the costs of construction and maintenance of the storages, power installations, diversion works, headworks and canal networks shall be borne wholly by the State Government in whose territory the works are located or shared in case the benefits are shared."

In order to clarify that the operation and maintenance costs of all works whose construction cost is shared between two or more party States, would also be shared by them *pro rata*, the last sentence in Clause XIV Sub-clause 7 should be deleted and the following added as Sub-clause 7(2), the earlier paragraph being numbered 7(1):—

> "7(2) The costs of construction of the storages, power installations, diversion works, head-works and canal networks shall be borne wholly by the State Government in whose territory the work is located except for works whose cost has been ordered by the Tribunal to be shared between two or more party States. Where the capital cost is thus shared, the operation and maintenance cost shall also be shared in the same proportion."

3.19.1 **Point 19 (Pages 88-91 Of The Reference).**—Gujarat has submitted that the cost of operation and maintenance of Sardar Sarovar power complex should also be shared.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that sharing of the cost of operation and maintenance of the Sardar Sarovar power complex is provided in Clause VIII, Sub-clause 2(xi) of the Final Order of the Tribunal. (Page 55 of it's reply).

Maharashtra's Reply

Maharashtra has submitted that "no separate orders or modifications of Clause VIII (2) (xi) of the Final Order are considered necessary." (Page 18 of its reply).

Rajasthan's Reply

Rajasthan has not commented on this point.

3.19.2 **Order Of The Tribunal.**—Clause VIII, Sub-clause 2(xi) of the Final Order stipulates that "in addition to the payments vide (x) above, Madhya Pradesh and Maharashtra shall also pay to Gujarat 57 per cent and 27 per cent respectively of the operation and maintenance costs of the Sardar Sarovar power complex each year." These orders require no further explanation or clarification.

3.20. 1 **Point 20 (Pages 92-94 Of The Reference).**—Gujarat has submitted that as Rajasthan will be using the Navagam main canal for conveying its share of water from Sardar Sarovar, the operation and maintenance cost of Navagam main canal are also required to be apportioned between Gujarat and Rjasthan.

Madhya Pradesh's Reply

Madhya Pradesh has not offered any comments on this point. (Page 57 of its reply).

Maharashtra's Reply

Maharashtra has not offered any comments on this point. (Page 47 of its reply).

Rajasthan's Reply

Rajasthan has submitted that "the cost of maintenance of the common carrier channel from Navagam dam excluding cost of regulators, canal heads and any other works built exclusively for the use of Gujarat or for generating power may be shared in the ratio of Gujarat 18 and Rajasthan 1." (Page 16 of its reply).

3.20.2 **Order Of The Tribunal.**—The point raised by Gujarat regarding sharing of operation and maintenance charges of Navagam Canal is covered by the modification being made in Sub-clause 7(2) of Clause XIV of the Final Order, under point 18 of this reference. The modified Sub-clause reads as under:—

> "7(2) The costs of construction of the storages, power installations, diversion works, head-works and canal networks shall be borne wholly by the State Government in whose territory the work is located except for works whose cost has been ordered by the Tribunal to be shared between two or more party States. Where the capital cost is thus shared, the operation and maintenance cost shall also be shared in the same proportion."

3.21.1 **Point 21 (Pages 95-98 Of The Reference).**—Gujarat has asked for calculations made in respect of flood routing through Sardar Sarovar.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "it has no objection to the Tribunal giving the available information as sought by Gujarat, as this would be useful only for the MWL and backwater studies to be made by the Central Water Commission in consultation with Madhya Pradesh and Gujarat." (Page 59 of its reply).

Maharashtra's Reply

Maharashtra has submitted that the calculations are desirable to make the Final Order of the Tribunal more comprehensive. (Page 18 of its reply).

Rajasthan's Reply

Rajasthan has offered no comments.

3.21.2 **Order Of The Tribunal.**—The Tribunal has not made any detailed calculations for flood routing. The Tribunal has merely indicated that with the stipulated MWL a thousand year flood of the magnitude of 24.99 lakh cusecs estimated by Maharashtra would get moderated to about 16 lakh cusecs and that of 30.7 lakh cusecs estimated by Gujarat would get moderated to about 22 lakh cusecs. A detailed flood routing study will have to be made by Gujarat itself for designing the spillway of Sardar Sarovar dam.

3.22.1 **Point 22 (Pages 99-100 Of The Reference).**—Clause XI, Sub-clause V(5) of the Final Order of the Tribunal reads as under:—

> "Gujarat shall pay to Madhya Pradesh and Maharashtra the amount of land revenue payable every year for the lands coming under submergence, at the rates prevailing in Madhya Pradesh from time to time."

Gujarat has pointed out that there is no reference to the rates prevailing in Maharashtra and that this paragraph may be brought in conformity with Clause XI Sub-clause III(3) of the Final Order which reads as under:—

> "Gujarat shall pay to Madhya Pradesh and Maharashtra land revenue in accordance with the respective Land Revenue Codes of Madhya Pradesh and Maharashtra in respect of all lands in their respective territories acquired for Gujarat or conveyed to it."

Madhya Pradesh's Reply

Madhya Pradesh has offered no comments on this point. (Page 59 of its reply).

Maharashtra's Reply

Maharashtra agrees that there is a typographical error and the words "and Maharashtra" need to be added. (Page 19 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.22.2 **Order Of The Tribunal.**—Sub-clause V(5) of Clause XI of the Final Order should be modified as follows:—

> "Gujarat shall pay to Madhya Pradesh and Maharashtra in accordance with the respective land Revenue Codes, the amount of land revenue, payable every year for the lands in their respective territories acquired for Gujarat or conveyed to it, at the rates prevailing in Madhya Pradesh and Maharashtra respectively from time to time."

3.23.1 **Point 23 (Pages 101 to 104 Of The Reference).** Gujarat has stated that the details in respect of total capital cost of Sardar Sarovar Complex as given in Annexure XIV-8 are not in consonance with the Final Order in Clause VIII, and that the cost debitable to Sardar Sarovar Power Complex is 56.1% of Rs. 16.82 crores (credit to Narmadasagar for regulated releases) which work out to Rs. 9.43 crores instead of Rs. 4.77 crores. It has stated that paragraphs 4 & 5 of the said Annexure require to be modified accordingly.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that 'the proposal of Gujarat is incorrect and misleading' as in this way Power Complex of Sardar Sarovar would be charged more, which in turn would be shared mainly by Madhya Pradesh and Maharashtra. (Pages 59-62 of its reply).

Maharashtra's Reply

Maharashtra has submitted that 56.1%, of the credit to Madhya Pradesh is apparently a typographic error, and 'the payment of Rs. 4.77 crores to be made by Power Complex for regulated releases work out to 28.36%'. (Page 19 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.23.2 **Order Of The Tribunal.**—Annexure XIV-8 requires modification as pointed out by Gujarat. The modified Annexure, as also Statement 14.3 with consequent modifications, are attached.

Annexure XIV-8 was prepared to figure out the costs of energy/Kwh at Sardar Sarovar power complex at different stages in order to make a comparison with the cost obtainng at Jalsindhi in the corresponding stages. This comparison is made in Statement 14.3. Even in the modified Annexure and Statement, the result is the same, namely, that the cost of energy at Sardar Sarovar complex is less than that at Jalsindhi. Thus, the Final Order is not affected.

Note—Also please see point 4 of Maharashtra.

STATEMENT 14·3

Comparison of Cost of Power Generation in Jalsindhi and Sardar Sarovar

I. Capital cost per KW of installed capacity

	Jalsindhi	*Sardar Sarovar*
Total capital cost chargeable to power	Rs. 143·7 crores	Rs. 263·39 crores
Installed capacity	7×80 MW =560 MW	5×75 MW+ 5×150 MW =1125 MW
Cost per KW installed	Rs. 2,566	Rs. 2,341

II. Cost of energy (KWH) at different stages

(a) Between 10th & 30th years i.e. from commissioning to end of 20 years thereafter	9·1 P.	8·4 P.
(b) Between 30th & 45th Years i.e. from 20 to 35 years from commissioning	26·5 P.	13·3 P.
(c) After 45 years i.e. 35 years after commissioning	29·3 P.	18·7 P.

NOTES :

1. Capital cost of Jalsindhi is as given in the updated project report Ex. MR-137 (page iv—Vol. I)

2. Installed capacity for Jalsindhi is as per Ex. MR-137 (page iv— Vol. I).

3. The energy generated at commencement and at final stage are as given in Ex. MR-137 (page ic—Vol.I) The energy generated at 30 years from start (State II) is projected for the figures given in Annexure 16·2, Vol . II—Ex. MR-137.

4. Capital cost of Sardar Sarovar FRL 455 is derived from the updated estimate for Sardar Sarovar FRL 530 *Vide* Ex. G-1087 on the following basis—

   (a) Cost of dam and appurtenent works excluding land is worked out proportional to the square of the height of the dam upto MWL from the foundation level assumed as 5 ft.

   (b) Cost of land is worked out proportional to the area submerged upto MWL.

   (c) Cost of Electrical installations including connected civil works is worked out proportional to installed generator capacity.

   (d) Capital cost in Stages II and III, takes into account the reduction afforded by amortisation of the cost of the River Bed Power House on the basis of the provision for amortisation in the cost structure of the energy.

5. The saleable energy is estimated as 95% of the energy generated in both Jalsindhi and Sardar Sarovar.

6. The annual cost of generation for different periods is estimated as 10% of the capital cost at the commencement of the stage.

7. The unit cost of energy for Jalsindhi for different periods is worked out by dividing the annual cost vide para 6 above by the average annual number of saleable units in that period.

8. The unit cost of energy for Sardar Sarovar is also worked out as in 7 above but in the period upto commencement of Stage III, an element to represent the amortisation of the capital cost of River Bed Power House is also added.

ANNEXURE XIV-8

Cost of Energy/KWH at Sardar Sarovar Power Complex At Different Stages

1. Civil Works at Unit 1 (Dam and appurtenant works)-- *allocable to power :*

Total cost of Unit 1, dam and appurtenant works, of Sardar Sarovar Dam FRL-530' as per up-dated estimate of Gujarat (G. 1087) = Rs. 262.52 crores.

Assuming that the land value included in the above is proportional to the area, and that the cost of other items is proportional to the square of the height of dam above deepest foundation level, the total cost of Unit 1, Dam and appurtenant works, for Sardar Sarovar Dam with FRL 455' has been worked out as Rs. 163·44 crores, as per details below :

(i) Cost of the dam at 460' (excluding B-land)

$$= \text{Cost of the dam at 540' (excluding B-land)} \times \left\{\frac{\text{Height of the dam above foundation at 460'}}{\text{Height of dam above foundation at 540'}}\right\}^2$$

$$= 202{\cdot}68 \times \left\{\frac{455}{535}\right\}^2$$

$$= 202{\cdot}68 \times (0{\cdot}85)^2$$

$$= \text{Rs. } 146{\cdot}60 \text{ crores}$$

(ii) Cost of B-land at 460'

$$= \text{Cost of B-land at } 530' \times \frac{\text{Submergence at } 460'}{\text{Submergence at } 530'}$$

$$= \frac{59{\cdot}84 \times 92492}{3,28,678}$$

$$= \text{Rs. } 16.84 \text{ crores}$$

Total cost of the Dam at FRL 455'

$$= 146{\cdot}6 + 16{\cdot}84$$

$$= \text{Rs. } 163.44 \text{ crores}$$

As worked out in the chapter on allocation of cost of Sardar Sarovar Dam between irrigation and power the cost allocable to power is 56·1% of Unit I Cost. This works to Rs. 9.·69 crores.

....(a)

2. Civil works and Electrical Works of Sardar Sarovar power complex.

It is assumed that the cost of civil and electrical works (under Unit-III-Power) at the canal head and river bed power houses of Sardar Sarovar Dam will vary proportionately to the total installed capacity in the respective power houses.

As per G-1087, the canal head power house will have 9 machines of 75 MW each.

With 455 FRL and 9 MAF allocation to Gujarat, the maximum power developed at canal head power house, is about 110 MW at 100% L.F. Allowing L.F. between 30% and 40% and 1 spare machine, a provision of 5 units of 75 MW each will be adequate. Pro rata cost for these 5 machines is worked out as under :—

	Cost for 9 machines of 75 MW each as per G-1087	Proportionate cost for 5 machines of 75 MW each (for the purpose of this study)
	Rs.(crores)	Rs. (crores)
Civil works of canal power house	23·19	12·88
Electrical Works	78·24	43·46
Miscellaneous	20·41	11·34
	121·84	67·68

....(b)

With regard to the RBPH, the maximum power generated will be about 545 MW. This will vanish to 0 in 35 years (i.e. 45 years from start) and so the station will have to run as a base load station in the early stages and later work as a peaking station. Assuming that, provision is made for machine capacity to run the station at about 90% L.F. at commencement, 5 machines of 150 MW, including one spare machine would be required. As in the case of the canal power house, the pro rata cost is worked out below :

	Cost for 10 machines of 150 MW each as per G-1087	Proportionate cost for 5 machines of 150 MW each
	Rs. (crores)	Rs. (crores)
PH Civil works	30·32	
Electrical works	109·52	
Miscellaneous	45·32	
	185·16	92·58
		....(c)

NOTE :

In the case of the canal head power house, since the load develops progressively with irrigation, it is quite likely that the number of machines are gradually increased from a minimum of say 2 in the beginning. For the purpose of this note, the saving in interest and operating charges etc., on account of this progressive increase in capital has been ignored and the total cost is taken into account from the very commencement.

The river bed power house will have no water for its operation when irrigation fully develops in the various States, i.e. in 45 years from the start of construction. It is, therefore, proposed that an amount to cover the amortisation of the capital cost of this power house including civil and electrical works be added to the unit cost of power developed in the Sardar Sarovar power complex during that period. The actual increase in price per unit of energy to cover the amortisation mentioned here is worked out later in this annexure.

3. Transmission line from Sardar Sarovar power complex to Gujarat State border :

It is assumed that the capital cost of this may be Rs. 2 crores. ....(d)

4. It would be necessary to make some payment to Madhya Pradesh for regulated releases from Narmadasagar. As worked out in the Chapter on credit to Narmadasagar for regulated releases, this would be Rs. 9·44 crores.* ....(e)

5. Total capital cost of Sardar Sarovar power complex will, therefore, work out to:—

(a) Rs. 91·69 crores

(b) Rs. 67·68 crores

(c) Rs. 92·58 crores

(d) Rs. 2·00 crores

(e) Rs. 9·44 crores

Total : Rs. 263·39 crores.

6. For working out the increase in the price of energy to cover amortisation of cost of river bed power house, the total cost has to be divided by the total energy sold till the power house becomes defunct. Since CHPH and RBPH are to be linked together, the total energy considered for this purpose will be the saleable energy from the two power houses from the 10th year from start to the 45th year from start.

	CHPH		RBPH	
Energy/year at 10 years from start	308	MU	4775	MU
Energy/year at 30 years from start	960	MU	1386	MU
Average energy for 10-30 years	634	MU	3080·5	MU
Energy/year at 45 years from start	960	MU	Nil	
Average energy for 30-45 years	960	MU	693	MU

Total energy from 10 to 30 years $634 \times 20 + 3080 \times 20$ = 74280 MU

*(55·1% of Rs. 16·82 crores, Ref. Page 672)

Total energy from 30 to 45 years $960 \times 15 + 693 \times 15$ . . . . . = 24795 MU

Total energy for 10 to 45 years 74280 + 24795 . . . . . = 99075 MU

Assuming saleable energy as 95% of the above :

Total saleable energy . . . . . = 94121 MU

Total amount to be amortised = Rs. 92·58 crores

$$\therefore \text{ Addl. Cost per Unit } \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot = \frac{92 \cdot 58 \times 10^7 \times 10^2}{94121 \times 10^6 \text{ paise}}$$

$$= 0 \cdot 984 \text{ paise.}$$

7. In view of the amortisation there will be a progressive decrease in capital cost. Such decrease will be taken into account every time the unit price of energy is fixed. Though such fixation may be done at any five-yearly intervals or near about, it is assumed in this annexure that price refixation is made only at the commencement of Stage I, Satage II and Stage III.

	Rs. (Crores)
Capital cost at commencement of Stage I (10 years from start) . .	= 263·39
Capital cost at commencement of stage II (30 years from start)	
$263 \cdot 39 - \frac{95}{100} \times 74280 \times 0 \cdot 984 \times 10^4$	= 263·39—69·44
	= 193·95
Capital cost at commencement of Stage III (45 years from start) . .	= 263·39—92·58
	= 170·81

8. The unit cost of energy (apart from the amortisation charge) will be the annual expenditure divided by the number of saleable units in the year.

The annual expenditure will include interest, depreciation, maintenance and operation charges and insurance. All these together can roughly be taken as 10% of capital cost. On this basis, the unit cost of energy (per KWH) during the different stages in Sardar Sarovar power complex works out as below :—

Between 10 *and* 30 *years from start*

Capital cost at commencement . . . . . = Rs. 263·39 crores

Annual cost at 10% of Rs. 263·39 crores . . . . . = Rs. 26·34 crores

Average annual saleable energy $\frac{95}{100} \times (634 + 3080 \cdot 5) \times 10^6$ units $= 3528 \cdot 775 \times 10^6$ unit

Cost per unit

$$\frac{26 \cdot 23 \times 10_1 \times 10^2}{3528 \cdot 775 \times 10^6} = 7 \cdot 464 \text{ paise.}$$

Add amortisation charge at 0·984 paise per unit

$\therefore$ Total cost/unit (7·464 + 0·984)

= 8·448 paise

or 8.4 paise

Between 30 *and* 45 *years from start*

Capital cost at commencement of the stage; . . . . . = Rs. 193·95 crores

Annual cost 10% . . . . . = Rs. 19·40 crores

Average annual saleable energy $\frac{95}{100} \times (960 + 693) = 1570 \cdot 35$ MU

Cost per unit

$$\frac{19 \cdot 40 \times 10^7 \times 10^2}{1570 \cdot 35 \times 10^6} \text{ paise} = 12 \cdot 354 \text{ paise;}$$

Add amortisation charge of 0·984 paise per unit.

$\therefore$ Total cost/unit (12·354 + 0·984) . . . . . = 13·338 paise

or say 13·3 paise

After 45 years from start

Capital cost at commencement of the stage . . . . . = Rs. 170·81 crores

Annual cost = Rs. 17·08 crores

Average saleable energy per year

$\frac{95}{100} \times 960\text{MU}$ . . . . . = 912×10^6 units

Cost pet unit

$\frac{17 \cdot 08 \times 10^7 \times 10^2}{912 \times 10^6}$ paise = 18·728 paise

or say 18·7 paise.

3.24.1 **Point 24 (Pages 105-106 Of The Reference).**—In paragraph 9.9.7 of the Report, the following sentence appears:—

> "It is also necessary to take into account the circumstance that the drainage area of Gujarat is 180 Sq. miles (0.53%) and of Madhya Pradesh 33,150 sq. miles (97.59%) and that the contribution of Gujarat at 75% dependable flow is 0.07 MAF (0.26%) and of Madhya Pradesh 26.647 MAF (98.75%)."

Gujarat has pointed out that the figures of drainage area in the above sentence require some correction and that the modified sentence should be as under:—

> "It is also necessary to take into account the circumstance that upto Sardar Sarovar Dam site, the drainage area of Gujarat is 544 sq. miles (1.60%) and of Madhya Pradesh 32,798 sq. miles (96.55%) and that contribution of Gujarat at 75% dependable flow is 0.07 MAF (0.26%) and of Madhya Pradesh 26.647 MAF (98.75%)."

Madhya Pradesh's Reply

Madhya Pradesh has submitted "that slight differences in the figures of the CA or drainage area in this case would have no effect on the conclusion drawn therefrom by this Hon'ble Tribunal and "no correction in the report is necessary." Madhya Pradesh has further submitted that "it may be appropriate to adopt the figures of catchment areas as agreed to by the party States and given in Ex.C-4". (Pages 62-65 of the reply).

Maharashtra's Reply

Maharashtra has submitted that figures agreed in Assessors' meeting and given in Ex.C-4 should be substituted for the figures given by the Tribunal (Page 20 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.24.2 **Order Of The Tribunal.**—The figures as now indicated by Gujarat in the modified sentence are acceptable. The modified sentence needs to be substituted in paragraph 9.9.7 of the Report.

It should be pointed out that the figures of drainage area as agreed by the party States and given in Ex.C-4 pertain to drainage areas up to the mouth of the river and not up to Sardar Sarovar Dam site. Those figures, therefore, have to be modified as in the revised sentence.

The Final Order is not affected.

3.25.1 **Point 25 (Pages 107-109 Of The Reference).**—Gujarat has pointed out that the following two sentences appearing at the end of Clause III(2) in Chapter XVI of the Report is an inadvertent repetition and need to be deleted:—

> "Madhya Pradesh, Maharashtra or the Union of India (as the case may be) on the other hand shall respectively nominate one Arbitrator each. The decision of the Umpire and Arbitrators shall be final and binding on the parties and shall be given effect to by them."

Madhya Pradesh's Reply

Madhya Pradesh has offered no comments on this aspect. (Page 65 of its reply).

Maharashtra's Reply

Maharashtra agrees to the deletion of the inadvertent repetition in Sub-clause III (2) in Chapter XVI of the Report and has pointed out that there is no repetition in Clause XI, Sub-clause III(2) of the Final Order. (Page 20 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this point.

3.25.2 **Order Of The Tribunal.**—The deletion as pointed out by Gujarat may be carried out.

This repetition does not occur in Clause XI, Sub-clause III (2) of the Final Order, which, therefore, requires, no change.

3.26.1 **Advice Of Assessors.**—We have consulted our Technical Assessors, Dr. M.R. Chopra, Shri Balwant Singh Nag and Shri C.S. Padmanabha Aiyar, with regard to the subject matter of this Chapter. They advise us that they all entirely agree with the views expressed by us and the orders passed by us on all the points dealt with in this Chapter.

CHAPTER IV

REFERENCE NO. 3 OF 1978 BY THE STATE OF MADHYA PRADESH

4.1 In this Reference, the State of Madhya Pradesh seeks clarification/explanation/ guidance on 27 points mentioned and dealt with in this Chapter.

4.1.1 At the outset, we should like to say that Points 1, 2, 3, 4, 5, 7, 8, 9, 19, 20, 21, 22, 23 and 24 are outside the scope and ambit of Section 5(3) of the Inter-State Water Disputes Act. It is not legally permissible for Madhya Pradesh to make a reference on these points under the guise of clarification or guidance. What Madhya Pradesh really seeks is a re-hearing *de novo* on the points finally decided by the Tribunal and it is beyond the jurisdiction of the Tribunal to entertain these points.

4.1.2 Apart from this ground of rejection, we have also considered these points on their merits and have come to the conclusion that none of the points has any substance.

4.2.1 **Point 1: (Chapter 1 pp. 1-16 Of The Reference).**—Madhya Pradesh has sought explanation and/or guidance in respect of "the basis on which this Hon'ble Tribunal has been pleased to raise the FRL of Sardar Sarovar from RL 436 for irrigation alone to FRL 453 for power generation".

Madhya Pradesh has further asked for clarification whether the generation of power at Sardar Sarovar by raising its FRL from RL 436 to RL 453 actually constitutes full compensation or restitution for loss of Jalsindhi power potential or not (pp 15-16 of M.P's reference).

Maharashtra's Reply

Maharashtra has stated at pp 60-61 of its reply, that the point raised is impermissible under Section 5(3) of the Act.

Gujarat's Reply

Gujarat has stated "that the attempt of Madhya Pradesh is to reopen issues fairly and squarely decided by the Hon'ble Tribunal" and "merits no reconsideration". (pp 12-13 of its reply).

Rajasthan's Reply

Rajasthan has submitted "that no explanation and/or guidance is required in this matter." (Page 18 of its reply).

4.2.2 **Order Of The Tribunal.**—The legal aspect of the matter raised by Madhya Pradesh has been already very clearly dealt with in paragraphs 14.1.1 to 14.3.7 of the Report and Decision of the Tribunal.

At Sardar Sarovar with FRL 436 power generation would be possible there only in about ten months in a surplus year and only to the extent of 777 Mkwh. In a deficit year made successful by use of full carryover, power generation would be possible only in about seven months in the year and the generation would be 522 Mkwh. With FRL 453, power would be generated throughout the year and to the extent of 1007 Mkwh in a surplus year and 856 Mkwh in a deficit year (Statements 4.1 and 4.2 enclosed). Unless the FRL of Sardar Sarovar is fixed at 453 there would be a loss of 230 to 350 Mkwh per year in the beneficial use of water for power generation and power will be only seasonal.

4.2.3 No further explanation is necessary and no change is required in the Final Order.

STATEMENT 4·1

Power Generation At Sardar Sarovar With FRL +436

Month	Storage at end of the month (live) MAF	Gross storage at end of the month MAF	RL Ft	Average RL Ft	Head Ft	Canal with-drawal MAF	Power MW	Energy MU	Remarks
1	2	3	4	5	6	7	8	9	10
A. *Surplus Year following a Lean Year*									
July	0·177	2·157	329	326	..	0·487	0	0	1. Figures in Col. 2 have been taken from Tribunal Report, Vol. II, Statement 11·11
August	0·905	2·885	360	344·5	..	0·576	0	0	
September	3·069	5·049	417	383·5	81·5	0·788	76·02	55	
October	4·199	6·179	436	426·5	119·5	1·007	142·44	106	
November	3.711	5·691	428	432	125	1·172	173·41	125	2. Figures in Col. 3 have been arrived at by adding to Col. 2 the figure of 1·98 MAF which comprises 1·68 MAF of dead storage corresponding to RL +307' & 0·3 MAF of silt in live storage. Silt distribution at different levels in live storage has not been considered & for the present purpose the entire silt has been assumed to be at the bottom.
December	3·209	5·189	420	424	117	1·17	162·04	121	
January	2·794	4·774	411	415·5	108·5	1.08	138·71	103	
February	2·453	4·433	404	407·5	100·5	1·0	118·96	80	
March	2·437	4·417	403	403·5	96·5	0·658	75·16	56	
April	2·398	4·378	403	403	96·0	0·657	74·66	54	
May	2·489	4·469	404	403·5	96·5	0·516	58·94	44	
June	2·810	4·790	412	408	101·0	0·389	46·51	33	
TOTAL						9.500		777	
									3. Storage at the end of June, preceding a surplus year has been taken to be 1·98 MAF.
B. *Deficit Year made successful with use of full carryover*									
July	2·974	4·954	415	413·5	106·5	0·487	61·39	46	
August	3·174	5·154	419	417	110	0·576	75·00	56	

September	3·238	5·218	420	419·5	112·5	0·788	104·94	76
October	2·919	4·899	414	417	110	1·007	131·12	98
November	2·220	4·200	399	406·5	95.5	1·172	138·04	99
December	1·529	3·509	381	390	83	1·170	114·95	86
January	0·928	2·908	361	371	64	1.080	81·82	61
February	0·404	2·384	340	350·5		1·000		
March	0·210	2·190	330	335		0·658		
April	0·000	1·980	323	326·5		0·657		
May	0·000	1·980	323	323		0·516		
June	0·000	1·980	323	323		0·389		
TOTAL						9·500		522

STATEMENT 4·2

Power Generation At Sardar Sarovar With FRL +453

Month	Storage at end of the month (live) MAF	Gross storage at end of the month MAF	RL Ft	Average RL Ft	Head Ft	Canal with-drawal MAF	Power MW	Energy MU	Remarks
1	2	3	4	5	6	7	8	9	10
A. *Surplus Year following A Lean Year*									
July	0·177	3·417	378	375·5	68·5	0·487	39·49	29	1. Figures in Col. 2 have been taken from Tribunal Report, Vol. II, Statement 11·11.
August	0·905	4·145	397	387·5	80·5	0·576	54·89	41	
September	3·069	6.309	438	417·5	110·5	0·788	103·07	74	
October	4·199	7·439	453	445·5	138·5	1·007	165·09	123	
November	3·711	6·951	447	450	143	1·172	198·39	143	2. Figures in Col. 3 have been arrived at by adding to Col. 2 the figure of 3·24 MAF which comprises 2·94 MAF of dead storage corresponding to MDDL +362′ & 0·3 MAF of silt in live storage. Silt distribution at different levels in live storage has not been considered and for the present purpose the entire silt has been assumed to be at the bottom.
December	3·209	6·449	440	443·5	136·5	1·170	189·05	141	
January	2·794	6·034	434	437	130	1·080	166·19	124	
February	2·453	5·693	428	431	124	1·000	146·78	99	
March	2·437	5·677	428	428	121	0·658	94·24	70	
April	2·398	5·638	427	427·5	120·5	0·657	93·71	67	
May	2·489	5·729	429	428	121	0·516	73·91	55	
June	2·810	6·050	434	431·5	124·5	0·389	57·33	41	
TOTAL						9·500		1007	3. Storage at the end of June, preceding a surplus year, has been taken to be 3·24 MAF.
B. *Deficit Year made successful with use of Full Carryover*									
July	2·974	6·214	436	435	128	0·487	73·79	55	
August	3·174	6·414	440	438	131	0·576	89·32	66	

September	3·238	6·478	440	440	133	0·788	124·06	89
October	2·919	6·159	435	437·5	130·5	1·007	155·56	116
November	2·220	5·460	424	429·5	122·5	1·172	169·95	122
December	1·529	4·769	411	417·5	110·5	1·170	153·04	114
January	0·928	4·168	398	404·5	97·5	1·080	124·65	93
February	0·404	3·644	384	391	84	1·000	99·43	67
March	0·210	3·450	379	381·5	74·5	0·658	58·03	43
April	0·000	3·240	373	376	69	0·657	53·66	39
May	0·000	3·240	373	373	66	0·516	40·31	30
June	0·000	3·240	373	373	66	0·389	30·39	22
TOTAL						9·500		856

4.3.1 **Point 2 (Chapter II Of The Reference pp 17-32).**—Madhya Pradesh has submitted that the following points require explanation and/or guidance:—

(i) The Hon'ble Tribunal has proceeded to examine the question of FSL of the Navagam canal on the basis of the water allocation of 9 MAF to Gujarat which itself is based on the areas commanded by the FSL 300 canal. Thus the water allocation of 9 MAF to Gujarat and the FSL of 300 for Navagam canal constitutes a reversible equation.

(ii) The determination of FSL 300 for the Navagam canal qua Rajasthan is "opposed" to the decision on the preliminary issues, the agreement dated 12th July, 1974, Rajasthan's own case in the complaint contemplating lift irrigation with a lift upto 200 feet and the principles of equitable apportionment enunciated by this Hon'ble Tribunal itself.

(iii) There is no conflict as such between use for irrigation and use for power in the present case and the factor of flow or lift irrigation is an extraneous consideration in the determination of the FSL of the canal. It is mainly a matter of economics.

(iv) The Hon'ble Tribunal has overlooked the fact that while the maximum lift involved for providing lift irrigation to the strip will be 110 ft., the average lift will be nearly half of it and that there will be comparatively much more gain due to the extra power generation by reducing the FSL from RL 300 to RL 190.

(v) Madhya Pradesh, therefore, respectfully seeks clarification and explanation that this Hon'ble Tribunal may be pleased to reconsider its decision regarding the FSL of the canal in the light of the inconsistencies and omissions pointed out above.

Maharashtra's Reply

"It is Maharashtra's contention that at this reference stage it is not open for any party State to reopen the case for the FSL of the canal." (page 64 of its reply).

Gujarat's Reply

Gujarat has submitted that equitable apportionment is a balancing process and does take into consideration realistic needs of the States and the available quantum of water supplies. It has averred that "the contention of Madhya Pradesh that inter-relationship between the water allocation of 9 MAF to Gujarat and the FSL of +300 for Navagam canal constitutes a reversible equation is incorrect." (pp 14—15 of the reply). In dealing with the economics of the lift irrigation, Gujarat has pointed out "that the calculations made by Madhya Pradesh pre-supposes feasibility of FSL 190 canal with a bed gradient of 1 in 20,000" and that the submission of Madhya Pradesh is based on an erroneous presumption. (page 23 of the reply). Gujarat has further submitted "that indeed, what Madhya Pradesh seeks is a complete hearing *de novo* of the original Reference which is not within the scope of a reference made under Section 5(3) of the Act." (page 21 of the reply).

Rajasthan's Reply

Rajasthan has stated that "proposals for full supply level of +300 for the Navagam Canal and those for an alternative FSL 190 canal were put forward before this Hon'ble Tribunal and were argued in great detail by the parties during the course of hearings..... Madhya Pradesh seeks a reconsideration of matters, which have already been fully dealt with, which amounts to re-opening of the entire case..... This is not permissible." (page 18 of the reply).

4.3.2 **Order Of The Tribunal.**—It is necessary to state that all sub-points of point 2 of Madhya Pradesh are outside the scope of Section 5(3) of the Inter-State Water Disputes Act and it is not, therefore, competent for Madhya Pradesh to raise any such point in this Reference.

Regarding sub-point (i) of Madhya Pradesh, the area proposed by Gujarat to be served by Narmada water comprises Zones I to XI, Mahi command, Banni and the Ranns. The Tribunal has held that areas in Zones I to XI need only be considered for allocation of water. Though the requirement of water for this area and for other uses in Gujarat

has been computed to be 11.694 MAF (vide para 9.9.6 of the Report), Gujarat has been allotted only 9 MAF as its share under the doctrine of equitable apportionment. The CCA in Zones I to XI is only one of the factors considered in deciding the question of equitable apportionment. Having allotted 9 MAF to Gujarat, the Tribunal examined the proposals for different levels of the canal and determined that the +300 level canal should be adopted in order to serve most of the Gujarat area by flow irrigation. The Tribunal further held that a canal of FSL 300 was absolutely necessary for implementation of the Agreement dated 12-7-1974 to allocate .5 MAF Narmada waters to irrigate Rajasthan areas. The matter has been dealt with by the Tribunal elaborately in Chapter X of its Decision and Report and there is no question of any further clarification or guidance.

As regards sub-point (ii) of Madhya Pradesh, the determination of FSL or Navagam Canal "qua Rajasthan" from the legal aspect is clearly dealt with in the Report & Decision of the Tribunal from paras 10.4 to 15.1 (pages 427-467). No further clarification is necessary.

Regarding sub-point (iii) of Madhya Pradesh, the statement of Madhya Pradesh that the factor of flow or lift irrigation is an extraneous consideration in the determination of FSL of the canal and that it is mainly a matter of economics, is not correct. In this connection, the Tribunal has stated in paragraph 10.5.5 of the report as follows:—

> "Tested in the light of this principle, we are unable to accept the argument of Madhya Pradesh and Maharashtra that in executing clause 4 of the Agreement (Exhibit C-1) dated 12th July, 1974, the four party States intended that Rajasthan areas were all to be irrigated with 0.5 MAF of Narmada water by 'the grossly uneconomical method' of lift irrigation."

The main question involved is one of law—that is the legal interpretation of Clause 4 of Agreement, Exhibit C-1 and the Decision of the Tribunal on this question cannot be permitted to be re-opened.

Regarding sub-point (iv) of Madhya Pradesh, stage pumping envisaged by Madhya Pradesh would require a number of feeder channels flowing against the country slope. These would require high banks and deep cuttings. The numerous pumping stations, with an extensive network of transmission lines, would require a large scattered maintenance staff. In practice such a dispersed pump canal system would be inefficient. It would be more satisfactory to have only one lift canal with a single pumping station at its head. It will provide more dependable irrigation. For such a lift canal, a lift of 110 feet obtains. The conditions in Gujarat where a large number of rivers and streams cross the Navagam canal are different from those obtaining on Rajasthan canal.

In view of what is stated in paragraphs above, the submission of Madhya Pradesh must be rejected. No change is required in the Final Order in this regard.

4.4.1 **Point 3 (Chapter III (a) & (c) -(pp 33-59 Of The Reference).—Madhya Pradesh** averred that as "(a) the carryover storage at and above Narmadasagar is 7.02 MAF. Therefore, only 1.27 MAF (8.29 -7.02) carryover storage needs to be provided at Sardar Sarovar instead of 2.81 MAF proposed by this Hon'ble Tribunal."

It has further stated under item (c) that "the FRL at Sardar Sarovar be reduced to RL 443 (with MDDL 386) keeping the same average head as that with FRL 455 and MDDL 363 earlier proposed by the Hon'ble Tribunal.

Madhya Pradesh has further stated that "when distribution of the carryover capacity is made *pro rata* at and above Narmadasagar and at Sardar Sarovar to the water use or allocation, water regulation which has been imposed, in fact, has been overlooked and rejected." (Page 45 of the reference).

Maharashtra's Reply

Maharashtra has not dealt with item (a) but has replied to item (c). Maharashtra has submitted that item (c) does not fall within the purview of Section 5(3) of the Inter-State Water Disputes Act, 1956. (pp 65-66 of its reply).

Gujarat's Reply

Gujarat denies that the carryover storage at and above Narmadasagar is 7.02 MAF or that only 1.27 MAF carryover storage needs to be provided at Sardar Sarovar instead of 2.81 MAF proposed by the Hon'ble Tribunal. (page 31 of its reply). Gujarat has pointed out that "Madhya Pradesh has considerably under-estimated evaporation losses and over-estimated the quantum of non-monsoon inflow during critical year, and over-estimated the regeneration during non-monsoon period". Gujarat submits that the carryover capacity available at and above Narmadasagar are thus over-estimated by Madhya Pradesh. (pp 43-44 of its reference).

Rajasthan's Reply

Rajasthan has stated that "the State of Madhya Pradesh is seeking to re-open and re-argue the entire matter again, which, it is submitted, is not permissible under Section 5, Sub-section (3) of the Inter-State Water Disputes Act, 1956." (page 19 of its reply).

4.4.2 **Order Of The Tribunal.**—The correctness or otherwise of Madhya Pradesh's contention regarding carryover capacity at Narmadasagar has no bearing on the determination of the carryover capacity at Sardar Sarovar, which is based on the *pro rata* utilisation of water by the party States. The planning of Madhya Pradesh envisages several reservoirs with varying live storages and carryover capacities. The planning of these projects may undergo change and some projects on detailed investigations may even prove to be infeasible. The Tribunal has, therefore, considered it reasonable that the carryover capacity at Sardar Sarovar should be *pro rata* to the water use there and not tied up with provision of carryover in upstream projects. The Tribunal has not given any directions regarding planning of projects upstream of Narmadasagar.

As regards Madhya Pradesh's complaint that the aspect of regulated releases ordered to be made by Madhya Pradesh has been overlooked in fixing the carryover capacity of Sardar Sarovar, we may point out that the 75 per cent dependable flow of 27.01 MAF is made up to 29.29 MAF by securing 2.28 MAF from a carryover capacity of 8.29 MAF. The proportionate quantity of 0.77 MAF ($2.28 \times \frac{2 \cdot 81}{8 \cdot 29}$) secured from a carryover capacity of 2.81 MAF provided at Sardar Sarovar has been taken into account in determining the releases of 8.122 MAF by Madhya Pradesh from 75 per cent dependable inflows. Thus, the complaint of Madhya Pradesh that the regulated releases have been overlooked in fixing the carryover capacity of Sardar Sarovar, is not correct. It should be noticed that 8.12 MAF to be released by Madhya Pradesh is not fully uniform regulated flow as Maheshwar reservoir has no storage capacity for regulation.

In view of what is stated above, no change is necessary in the Final Order in this regard.

4.5.1 **Point 4 (Chapter III(b)—pp 49-59 Of The Reference).**—Madhya Pradesh has observed that the years considered for preparing the working tables in Statement 11.11 of the Tribunal's Report have not been stated and there do not appear to be any two consecutive years of the agreed series. Madhya Pradesh has indicated 1955-56 (surplus year) and 1956-57 (lean year) as the critical years requiring maximum carryover. Based on these years Madhya Pradesh has worked out that a live storage of 2.05 MAF is adequate for carryover-*cum*-regulation as against 4.20 MAF determined by the Tribunal. (pp 50 and 53 of the reference).

Maharashtra's Reply

Maharashtra has stated that "the assumptions and method of working of Madhya Pradesh are different to those on which the Hon'ble Tribunal has arrived at its conclusions and this point would, therefore, not be permissible for consideration under Section 5(3) of the Inter-State Water Disputes Act." (page 65 of its reply).

Gujarat's Reply

Gujarat has submitted that the revised working table study given by Madhya Pradesh suffers from some basic inconsistencies (page 39 of its reply) and has concluded that the study is not reliable. (page 41 of its reply).

Rajasthan's Reply

Rajasthan has stated that "the State of Madhya Pradesh is seeking to re-open and re-argue the entire matter again, which, it is submitted, is not permissible under Section 5, Sub-section (3) of the Inter-State Water Disputes Act, 1956." (page 19 of its reply).

4.5.2 **Order Of The Tribunal.**—It is a matter of hydrological experience that inflows of no two consecutive years repeat themselves. In Statement 11.11, therefore, two synthetic years with monthly flow pattern as per the average of the 22 years observed series have been adopted, the surplus year being planned to secure a carryover of 2.81 MAF and a succeeding lean year to use up the carryover fully. The explanatory notes on the working tables are enclosed.

Madhya Pradesh has, in the working tables prepared by it for 1954-57, assumed that Maneshwar will give absolutely uniform monthly releases whether it is a surplus or a lean year and also that the quantum of release would not vary. (Statements at pp 81-83 of its reference). This is not correct as the annual releases would depend on the inflow in the year. Furthermore, as there is no storage capacity for regulation at Maheshwar the inflow from the catchment below Omkareshwar cannot be regulated to give completely uniform monthly releases.

For these reasons, the submission of Madhya Pradesh, as regards the quantum of storage for carryover-cum-regulation, cannot be accepted. Therefore, no change is necessary in the Final Order in this regard.

Explanatory Notes On Columns Of Working Table Of Sardar Sarovar
(Statement 11.11)

In preparing the Working Table for Sardar Sarovar to determine the storage required for regulation-cum-carryover, two synthetic years have been constructed; a surplus year which fully fills the carryover capacity and the succeeding lean year which becomes succesful by utilising the full carryover storage. They are not based on agreed inflow series.

The columns of the Working Table in Statement 11.11 of the Tribunal's Report are explained below: -

(A) Surplus Year After A Lean Year

In the synthetic surplus year, the yield in the valley is taken to be 37.58 MAF (29.29 + 8.29 carryover). In a year of 75 per cent dependable flow, the inflow from the entire catchment above Sardar Sarovar is 27.01 MAF and that below Maheshwar 2.96 MAF. Therefore, the proportionate yield in the synthetic surplus year below Maheshwar would be 4.12 MAF $\frac{2.96}{27.01} \times 37.58$). The use below Maheshwar is 1.852 MAF leaving a balance of 2.268 MAF.

Column 2.—Storage At Start Of Month: The surplus year has been assumed to commence with empty reservoir and end up with the carryover capacity of 2.81 MAF fully filled.

Column 3. *Release fro Maheshwar*: The yield below Maheshwar leaves 2.268 MAF after use of 1.852 MAF as shown hereinabove. The reservoir is proposed to have a full carryover of 2.81 MAF after use of 10 MAF by Gujarat and Rajasthan including evaporation loss. Therefore, the water which will pass down from Maheshwar is 10.542 MAF (10.00 + 2.81 — 2.268), which is shown as the total of Column 3. In a 75% year, 0.677 MAF $\frac{8.122}{12}$ per month is assumed as the average regulated release. The same release is assumed in the months of July and August as it would not be known during these months whether the year is a surplus or lean year. The releases from November to June are also assumed at the rate of 0.677 MAF. The balance quantity of 3.772 MAF (10.542 — 10 × 0.677) is considered as the surplus inflows which spill over Maheshwar in September and October as unregulated flows.

Column 4. –Net Inflow From Catchment Below Maheshwar: The available inflow of 2.268 MAF has been distributed monthwise in the same proportion as the inflow between Mortakka and Garudeshwar (MP-312, Volume V page 86 on the basis of 22 years average). The requirement of Maharashtra of 0.25 MAF has been assumed to be drawn in the three months of August, September and October. This assumes that utilisation by Madhya

Pradesh is so regulated as not to disturb the monthly natural pattern of flow into Sardar Sarovar.

Column 5.—Needs Of Sardar Sarovar: As worked out under Statement 11.10.

Column 6.—Storage At The End Of The Month: It is considered that the full carryover storage of 2.81 MAF is secured at the end of the year.

(B) Deficit Year Made Successful By Use Of Full Carryover

In a deficit year the yield in the valley is assumed to be 21.0 MAF (29.29 - - 8.29) and the yield available below Maheshwar *pro rata* would be 2.30 MAF (i.e. $\frac{2\ 96}{27\ 0} \times 21.00$) The net yield available below Maheshwar works out to 0.448 MAF (2.30 — 1.852 use below Maheshwar). Thus the releases needed from Maheshwar are 6.742 MAF (10—0.448 —2.81). The carryover of 2.81 available from the previous year is completely used up.

Column 2.—Storage At The Start Of The Year: Reservoir has been assumed with full carryover of 2.81 MAF.

Column 3.—Release From Maheshwar: Releases from Maheshwar in the four monsoon months are considered to be 0.677 MAF as for a normal year. At the end of the monsoon period, the available supplies are to be reviewed and the water to be let down each month determined. The releases in April, May and June are adjusted to suit the irrigation needs as there is no stored water left in Sardar Sarovar in these months.

Column 4.—Net Inflow From Catchment Below Maheshwar: This has been calculated as explained in Column 4 of Surplus Year with an availability of 0.448 MAF.

Column 5.—As worked out under Statement 11.10.

Column 6.—The full carryover storage of 2.81 assumed at the start is fully utilised leaving the reservoir empty.

4.6.1 **Point 5 (Chapter III (d) pp 60-71 Of The Reference).**—Madhya Pradesh has stated that (a) "the additional capacity between RL 453 and RL 455 at Sardar Sarovar adds to the carryover capacity which in turn increases the utilisable flow over and above 28 MAF at 75 per cent dependability and this Hon'ble Tribunal has no jurisdiction to proceed to determine the ultimate height of the Sardar Sarovar Dam assuming the utilisable flow in excess of 28 MAF in a 75 per cent dependable year.

(b) The additional water that will be stored due to the capacity of 0.2 MAF at Sardar Sarovar cannot be used by Madhya Pradesh for irrigation to the extent of 2/3rd as stated by the Hon'ble Tribunal." (Page 70 of its reference).

Madhya Pradesh has requested reconsideration of the Tribunal's decision to raise the FRL from RL 453 to 455. (Page 71 of its reference).

Maharashtra's Reply

Maharashtra has offered no comments on this aspect.

Gujarat's Reply

Gujarat has submitted that there is no warrant for a review of the decision of the Hon'ble Tribunal as regards the FRL of Sardar Sarovar. (Page 45 of the reply).

Rajasthan's Reply

Rajasthan has stated that Madhya Pradesh is seeking to re-open and re-argue the entire matter again which is not permissible. (Page 19 of the reply).

4.6.2 **Order Of The Tribunal.**—The storage capacity between RL 453 and RL 455 is 0.2 MAF. If this storage capacity is not provided, on the average 0.1 MAF water per annum which is utilisable for irrigation by the party States will be lost. Also, with FRL 453' for Sardar Sarovar, there would be a loss of about 1000 million units of energy in the initial period of 35 years of operation of the Sardar Sarovar power complex. It is necessary to emphasise in this connection that as a matter of law, there should be avoidance of waste

in the beneficial use of inter-State waters (see the principle laid down by the Tribunal, Chapter IX, para 8.61 of the Report). It should be noticed that the level +455 is below the Tail Race Level +457 of Maheshwar Project and, therefore, would not interfere with the functioning of Maheshwar Power House. This level of +455 was also adopted by Madhya Pradesh for Harinphal Reservoir in the 1972 Project Report.

As regards the point made by Madhya Pradesh at (a) above, it is necessary to emphasise that the quantum of 28 MAF of 75 per cent dependability is relevant only for allocation of water and not for fixation of the height of the dam. Modified Issue No. 6 (page 24 of Volume I of the Report) reads as under:—

> "What should be the height of the dam at Navagam across the Narmada water and what should be the level of the canal at its offtake with adequate discharge carrying capacity from the Navagam Dam?"

It is clear from the language of the issue that consideration of the height of the dam is not to be restricted to utilise only 28 MAF of 75 per cent dependability.

As regards the point made by Madhya Pradesh at (b) above, the party States would be utilising the proportionate share of 0.2 MAF by either suitable adjustment in regulation or as carryover to be shared in the next year. The share of Madhya Pradesh is about two-third.

No further clarification is necessary and no change is necessary in the Final Order in this regard.

4.7.1 **Point 6 (Chapter III(e) pp 72-74 Of Reference).**—Madhya Pradesh has requested for "clarification" that the MWL in the Sardar Sarovar inclusive of the backwater effect shall not exceed RL 460 under any circumstance. (Page 74 of reference).

Maharashtra's Reply

In reply, Maharashtra has drawn attention to its point No. 5 at page 14 of its reference, asking for clarification:

> "Whether in the obligation imposed in the above clause to acquire for the Sardar Sarovar Project (under the provisions of the Land Acquisition Act, 1894) all such buildings with appurtenant land would be included all buildings with their appurtenant land coming within the 'backwater effect' even where the buildings with appurtenant land are situated above RL 460' due to backwater effect."

Gujarat's Reply

Gujarat has submitted that "the maximum water level of reservoir is always measured at the dam site and that the backwater level would be necessarily higher than the maximum water level." (page 46 of its reply).

Rajasthan's Reply

Rajasthan has stated that Madhya Pradesh is seeking to re-open and re-argue the entire matter again which is not permissible. (Page 19 of its reply).

Union Of India

The Union of India has not filed any reply but in its reference (page 3 paragraph 5) has requested for clarification whether the expression 'including backwater effect' could be interpreted to mean that the margin between RL 455 and 460 includes backwater effect. It has stated that "perhaps the intention is to provide acquisition upto RL +460 plus backwater effect."

4.7.2 **Order Of The Tribunal.**—In engineering practice MWL refers to level in the vicinity of the dam. Progressively higher levels obtain at upstream locations in the reservoir depending upon the flow conditions. The backwater effect is at the upper end of the reservoir and its profile has to be calculated. Acquisition of buildings with their appurtenant lands has to be done upto the waterline corresponding to MWL + 141.21 m (460') at Sardar Sarovar dam taking into account the surface slope in the reservoir and the backwater effect.

The Final Order in Clause XI—Sub-clause II(2) should, therefore, for clarification, be modified to read as under:—

> "Madhya Pradesh and Maharashtra shall also acquire for Sardar Sarovar Project under the provisions of the Land Acquisition Act, 1894, all buildings with their appurtenant land situated between FRL+138.68 m (455') and MWL+141.21 m (460') as also those affected by the backwater effect resulting from MWL +141.21 m (460')."

Also, the last sentence of Clause XI—Sub-clause V(2)(i) should be modified to read as under:—

> "Within three months after the receipt of the Majmuli/Taluka maps Gujarat shall mark thereon the boundary of the area situated below the FRL as also that between FRL and MWL including the area affected by backwater resulting from MWL and shall return one respective set so marked to Madhya Pradesh and Maharashtra."

Further, in Clause XI Sub-clause V(2)(ii), in the last sentence substitute "as also those affected by the backwater effect resulting from MWL" for "including backwater effect".

The first sentence in Sub-clause IV(1) of Clause XI of the Final Order reads as under:—

> "According to the present estimates, the number of oustee families would be 7,366 spread over 173 villages in Madhya Pradesh, 467 families spread over 27 villages in Maharashtra."

Madhya Pradesh, in its reference point 6 at page 73 of the reference, has pointed out that the figures of oustee families and villages pertain to RL 460 for Sardar Sarovar Dam.

As land is to be acquired for FRL 455 and not MWL 460, these figures have to be modified. The first sentence of the Sub-clause is modified to read as under:—

> "According to the present estimates, the number of oustee families would be 6,147 spread over 158 villages in Madhya Pradesh, 456 families spread over 27 villages in Maharashtra."

The figures for RL 455 have been taken from Statement No. 2 at page 115 of Exhibit MP-1197. Those for Maharashtra have been interpolated from the information given in Statement 1 of Exhibit MR-113.

4.8.1 **Point 7 (Chapter III(f) pp 75-76 Of The Reference).**—Madhya Pradesh has made a plea for keeping the MWL of Sardar Sarovar at RL 455, the same as the FRL.

Maharashtra's Reply

Maharashtra has stated that this point falls outside the purview of Section 5(3) of the Inter-State Water Disputes Act. (Page 67 of its reply).

Gujarat's Reply

Gujarat has stated that there is full justification for increasing MWL rather than keeping the FRL and MWL at the same level. (Page 47 of its reply).

Rajasthan's Reply

Rajasthan has stated that Madhya Pradesh is seeking to re-open and re-argue the the entire matter again which is not permissible. (Page 19 of its reply).

4.8.2 **Order Of The Tribunal.**—It is undesirable to bring down MWL to the level of FRL, as that would require a much larger spillway capacity for which limitation of space would pose a problem. Also the loss of reservoir capacity between MWL 460 and FRL 455 would reduce flood moderation of high floods to the detriment of downstream areas. MWL 460 is designed to cope with a 1000 year design flood and this level is expected to be reached on rare occasions and that too for relatively short periods. It should be pointed out that the capacity between FRL and MWL is not available for storage of water. It may be mentioned that above FRL only buildings with their appurtenant lands are to be acquired and not other lands.

No change is necessary in the Final Order in this regard.

4.9.1 **Point 8 (Chapter IV(a) pp 84-102 Of The Reference).**—Madhya Pradesh has requested that "the Tribunal may please reconsider its decision regarding the method of compensating the loss of power at Jalsindhi and the share of power allocated to Madhya Pradesh in compensation of the loss of power at Jalsindhi." Madhya Pradesh states that "the interpretation of the Jalsindhi Agreement given by the Tribunal is in direct conflict with the understanding of the parties." It has further urged that "as Madhya Pradesh and Maharashtra have to share the cost and benefits of Sardar Sarovar, it is but proper that reasonable shares of power generation due to the head below Jalsindhi should also be allocated to Madhya Pradesh and Maharashtra." (page 97 of its reference).

Maharashtra's Reply

Maharashtra has submitted that the contention of Madhya Pradesh does not fall within the scope of Section 5(3) of the Inter-State Water Disputes Act. Maharashtra has further stated that "the Tribunal has interpreted the Agreement according to its plain meaning and there is no scope for adopting a different interpretation for the reasons stated by Madhya Pradesh in the guise of further consideration." (paragraph 3, page 70 of its reply).

Gujarat's Reply

Gujarat has submitted "that under the Jalsindhi agreement the bed level at the commencement and at the end of the common border appears to be a guiding criteria for sharing of power and it does not depend on full reservoir level or the tail water level as has been contended by Madhya Pradesh." (page 59 of reply).

Rajasthan's Reply

Rajasthan has stated that "the State of Madhya Pradesh is again trying to re-open the controversy and is requiring this Hon'ble Tribunal to review the matter once again." It has submitted that this is not permissible under Section 5, Sub-section (3) of the Inter-State Water Disputes Act, 1956. (page 19 of its reply).

4.9.2 **Order Of The Tribunal.**—The agreement between Madhya Pradesh and Maharashtra regarding Jalsindhi Project was made between the two States in April, 1965. Thereafter, a Project Report for Jalsindhi Project was prepared in July 1970 with FRL +355 and TRL +210 (Exhibit MR-37). Power generated by the project was to be shared by the two States in terms of Clauses 3 and 4 of the agreement which run as follows:--

> "3. The cost of the works at Jalsindhi will be shared between Madhya Pradesh and Maharashtra in the ratio of $a + \frac{b}{2} - \frac{b}{2}$ where a is equal to the fall in the river between Harinphal and the point where one bank of the river enters Maharashtra and b is equal to the fall in the river in the portion where it runs along the boundary between the two States.
>
> 4. The net benefits from the Jalsindhi Project (i.e. excluding such credits as have to be afforded to the upstream projects for the regulated supplies received at Jalsindhi from those projects and including such credits as would be afforded by the downstream projects for the regulated supplies delivered from Jalsindhi) will be shared between the two States in the same proportion as the costs."

The Revised Jalsindhi Project Report prepared in January, 1977 (Exhibit MR-137) provides for an FRL 420 and TRL 210, the TRL being the same as in the earlier Project Report. In the revised Jalsindhi Project while the scope of the project has been enlarged, the basis of sharing of power between the two States has not been modified and remains the same as in the agreement of April, 1965.

The Tribunal had examined the language of the agreement and had observed in its Report at page 626 as follows:—

> "From the wording of the Clause three, it appears that the bed level of the river at Harinphal and the bed levels at the commencement and end of the common boundary are the guiding criteria for sharing of power and it does not depend on the full reservoir level or the tail water level."

The contention of Madhya Pradesh is that this interpretation is different from the understanding of the parties to the agreement. Maharashtra denies any such understanding and agrees on the contrary with the interpretation of the Tribunal. (paragraph 3 at page 70 of its reply).

It was submitted by Madhya Pradesh that the factor 'a' in the formula in Clause 3 of the Agreement must be interpreted to mean the difference between FRL & TWL at Jalsindhi. In other words, the submission was that the expression "fall in the river" in factor 'a' should be taken to mean the difference between the FRL of the Jalsindhi Project and the bed level at Jalsindhi site. But there is nothing in the language or context of Clause 3 of the Agreement to support such an interpretation. On the contrary, the expression "river fall" used in factor 'b' of Clause 3 of the Agreement manifestly denotes the difference between the bed level of the river at the point where the river enters Maharashtra and the portion where it runs along the common boundary between the two States. There is no reason why a different meaning should be given to the same expression in factor 'a' of Clause 3 and the argument of Madhya Pradesh cannot be accepted as correct.

We have already stated that this point is outside the scope of Section 5(3) of the Inter-State Water Disputes Act and the reference of Madhya Pradesh on this point is incompetent. But even on merits, the interpretation which Madhya Pradesh now puts on the agreement, is not correct.

4.9.3 As regards the point raised by Madhya Pradesh regarding share of power generation due to the head below Jalsindhi, Madhya Pradesh has averred that "though the sharing ratio in the Jalsindhi Agreement is applied as between Madhya Pradesh and Maharashtra on the basis of fall, the said ratio is not applied to Gujarat although fair and equitable distribution would demand that logically similar ratio of fall in the respective States should be applied in the case of Gujarat also." Further, Madhya Pradesh has stated that "even if the river fall principle is not accepted by the Hon'ble Tribunal for allocating power generation below Jalsindhi, it cannot be denied that Madhya Pradesh and Maharashtra are entitled to a reasonable share of it. The entire power generation below Jalsindhi cannot be allocated to Gujarat as Sardar Sarovar is made a joint project and Madhya Pradesh and Maharashtra are to share the costs and benefits." (page 95 of the reference).

The point raised by Madhya Pradesh is outside the scope of Section 5(3) of the Inter-State Water Disputes Act.

The Tribunal has rejected the bed fall principle vide para 14.2.6 of its Report. Because of the Jalsindhi Agreement, this principle implied therein has been applied to the limited extent of determining share of power between Madhya Pradesh and Maharashtra who are parties to the agreement and bound by it.

No clarification is necessary and no change is necessary in the Final Order in this regard.

4.10.1 **Point 9 (Chapter IV(b) Of The Reference pp 103-118).**—Madhya Pradesh has requested that the Tribunal may be pleased "to reduce the share of cost of the dam at Navagam chargeable to power." (page 108 of its reference).

Madhya Pradesh has submitted that the 'facilities used' method is not the proper method to be applied in the case of Sardar Sarovar project for allocation of cost. It has averred that for irrigation in Gujarat and Raajsthan, Sardar Sarovar Dam is required with FRL 436 and that only the incremental cost of the dam from FRL 436 to FRL 455 should be charged to the power component which is incidental.

Madhya Pradesh has further stated that in the 'use of facilities' method "the head for power generation at canal Power House being less than that at the River Bed Power House the quantity of water used for power through the canal power house needs to be reduced in proportion to the respective heads to work out the equivalent quantity of water used for power."

Maharashtra's Reply

Maharashtra has stated that the incremental cost method suggested by Madhya Pradesh may be considered only if the Tribunal holds that it has powers and jurisdiction to reconsider and/or review its own Report and Decision. (page 88 of its reply).

As regards 'use of facilities' method, it has suggested that weightage should be applied as proposed by Madhya Pradesh.

Gujarat's Reply

Gujarat has stated that allocation of cost of 'facilities used method' is appropriate (page 65 of its reply). It has pointed out that "the facilities used method recommended by the Government of India nowhere stipulates that the quantity of water used for power through the canal power house needs to be appropriately reduced by working out the equivalent quantity of water required for generating power in the river bed power house." (page 65 of its reply).

Rajasthan's Reply

Rajasthan has stated that the issue cannot be reopened. (page 19 of its reply).

4.10.2 **Order of The Tribunal.**—In the Final Order of the Tribunal, item 2 (ix) of Clause VIII reads as under:—

"(ix) The capital cost of the power portion of Navagam complex shall comprise the following:—

(a) xx xx xx

(b) xx xx xx

(c) 56.1 per cent of the net cost of common facilities such as Dam and Appurtenant works i.e. Unit I of Sardar Sarovar Project, after allowing for credits, if any.

(d) 56.1 per cent of the credit given to Madhya Pradesh for the downstream benefits derived from Narmadasagar Dam."

The share cost of common works chargeable to the power portion of Sardar Sarovar complex has been based on 'use of facilities' method recommended by the Union of India in its letter No. 1 (6)/62-Policy dated 17th April 1967 as given in Annexure XVII-1 of the Report. In this method, the quantity of water utilised for each purpose has been adopted as the criterion in distributing the cost of common works. There is no provision for giving any weightage based on the different heads for power generation. Calculations for use of water for irrigation and power generation have been given in Annexure XVII-2 of the Report.

The Sardar Sarovar Dam is a component of the Sardar Sarovar multipurpose project which would provide both irrigation and power benefits. The 'use of facilities' method for allocation of common costs for multipurpose projects, recommended by Government of India has been adopted for allocation of cost of Sardar Sarovar Dam to Different functions. The submission of Madhya Pradesh for use of incremental cost method is not acceptable.

As regards the submission of Madhya Pradesh for giving weightage for higher head available at river bed as against head available at the canal head, item 1(4) in the letter of Government of India referred to in paragraph 4 above reads as under:—

> "(4) The capacity of the reservoir or the quantities of water used for different functions, suitably weighted by consideration of adjustments made in pattern of releases in the interest of these functions, should be the basis for allocation of common costs. Such distribution of costs among various functions has to be done for each unit like dam, canal, weir, etc. separately and not for the project as a whole."

It should be noticed that the Government of India's letter of 17th April 1967 envisages weightage for any adjustments made in the pattern of releases for different functions and not for different heads available at two power stations. The 'facilities use' method adopted by the Tribunal does not also envisage any weightage based on the head used for power generation. Therefore, the suggestion made by Madhya Pradesh is not acceptable.

We have already stated that the reference of Madhya Pradesh on this point is outside the purview of Section 5(3) of the Act and is, therefore, incompetent.

No further clarification is necessary and no change is required to be made in the Final Order in this respect.

4.11.1 **Point 10 (Chapter V(i) pp 119-122 Of the Reference).**—Madhya Pradesh has submitted that "this Hon'ble Tribunal may be pleased to clarify that it is open to Madhya Pradesh to increase and or re-adjust its CCA and water use under the various categories major, medium, minor, micro, minor and pumping schemes for irrigation, whether inside or outside the Narmada basin, within the total water allocation of 18.25 MAF given to Madhya Pradesh by this Hon'ble Tribunal." (page 122 of its reference).

Maharashtra's Reply

Maharashtra has averred that diversion of water to unspecified areas would amount to loss of power, the more so when the water is to be diverted to areas outside the Narmada basin. (page 89 of its reply).

Gujarat's Reply

Gujarat has stated that it has "no objection if this Hon'ble Tribunal permits Madhya Pradesh to increase and/or re-adjust its CCA and water use under the various categories, major, medium, minor, micro minor and pumping schemes within the total water allocation of 18.25 MAF given to Madhya Pradesh by this Hon'ble Tribunal, so long as regulated releases from Narmadasagar as prescribed by the Hon'ble Tribunal are not affected." (page 70 of its reply).

Rajasthan's Reply

Rajasthan has submitted "that a party State should have freedom to use the water allocated to it anywhere in its territory for irrigation purpose only. The water cannot be allowed to be taken outside the basin for purpose of generating power." (page 20 of its reply. Chapter V(2) quoted by Rajasthan should be V(1) and V(3).

4.11.2 **Order Of the Tribunal.**—The Tribunal has apportioned the waters of river Narmada between the party States after taking into consideration a number of factors. Some of these factors may change after further detailed agronomic investigations and with passage of time. The CCA may require changes, the irrigation intensities, may have to be varied and the cropping pattern may get modified to suit the prevailing conditions. Likewise, the water requirement for domestic, industrial and thermal power may actually be different from what is envisaged at present. Furthermore, for a variety of reasons, it may become necessary to provide irrigation facilities to areas not covered by the proposals for use of Narmada waters at present. It is, therefore, reasonable to give the party States the freedom to vary within their allocated share of water the pattern of water use and the areas to be served by such use within their respective State boundaries.

In view of what is stated above, the following paragraph should be added under Clause III of the Final Order:—

"(2) Further, it is clarified that the apportionment relates to actual withdrawals and not consumptive use.

(3) Within its share of water, each party State is free to make such changes in the pattern of water use and in the areas to be benefited within or outside the Narmada basin in its territory as it may consider necessary."

The existing paragraph under Clause III is to be numbered (1).

4.12.1 **Point 11 (Chapter V(2) pp 123-124 Of the Reference).**—Madhya Pradesh has submitted that "this Hon'ble Tribunal may be pleased to clarify that it is open to Madhya Pradesh to lift water from the Sardar Sarovar reservoir for the aforesaid existing and proposed irrigation schemes within the equitable share of 18.25 MAF of Madhya Pradesh. It is further submitted that this Hon'ble Tribunal may be pleased to clarify that the costs of Sardar Sarovar Dam will not be borne by these said schemes."

Maharashtra's Reply

Maharashtra has not offered any comments. (page 89 of its reply).

Gujarat's Reply

Gujarat has submitted that this aspect has been raised by Madhya Pradesh and dealt with by Gujarat, and that the Tribunal has not accepted the submissions of Madhya Pradesh. Gujarat has also drawn attention to its submission that the proportionate cost of Sardar Sarovar would have to be borne by Madhya Pradesh. (pp 71-72 of its reply).

Rajasthan's Reply

The comment given by Rajasthan at top of page 20 of its reply does not pertain to this aspect but to points 10 and 12 of Madhya Pradesh at pages 119-122 and page 124 of its reference.

4.12.2 **Order Of The Tribunal.**—The lands which are being irrigated by any existing irrigation scheme by lifting water from the main river or its tributaries in the Sardar Sarovar reach cannot be denied the use of irrigation water merely due to part of the main river and portions of its tributaries getting submerged in the reservoir. Nor can new schemes in this reach of the river be precluded. If water is drawn from Sardar Sarovar for use in Madhya Pradesh or Maharashtra, a *pro rata* contribution towards the share of irrigation component of the cost of Sardar Sarovar Dam as also towards its annual maintenance shall be made. The *pro rata* contribution shall be in proportion of such quantitative use of water to 9.5 MAF. The water drawn from Sardar Sarovar shall reckon against the share of water of the State in whose territory water so drawn is utilised.

For these reasons, we consider that a clarification is necessary, and that a sub-clause (a) (ii) should be added under Clause XIII in Chapter XX as under, and the existing sub-clause (a) numbered as a(i):—

"(a) (ii) Madhya Pradesh and Maharashtra shall contribute a *pro rata* share to the irrigation component of the cost of Sardar Sarovar Dam as also towards its operation and annual maintenance, for water drawn from Sardar Sarovar for use in their territory. The *pro rata* share shall be in proportion of the quantity of water so drawn to 9.5 MAF. The amount so contributed shall be credited to Gujarat and Rajasthan in the ratio of 18:1."

Also, the following should be added under Clause IX as a sub-paragraph at the end of item (vii):—

"The water drawn from Sardar Sarovar for use in Madhya Pradesh and Maharashtra, as the case may be, shall reckon against the share of water of that State."

4.13.1 **Point 12 (Chapter V(3) Page 124 Of the Reference).**—Madhya Pradesh has sought clarification that "it is open to Madhya Pradesh to divert water outside the Narmada basin in Madhya Pradesh out of its equitable share."

Maharashtra's Reply

Maharashtra has stated that in the first place this matter does not fall within the scope of Section 5(3) of the Inter-State Water Disputes Act, 1956. Even othewise, the Tribunal "has only allowed CCA of 5.70 lac acres outside the Narmada basin, for the three diversion projects." "Hence diversion of Narmada waters over and above this area is not permissible." (pp 88-89 of its reply).

Gujarat's Reply

Gujarat has submitted that "it has no objection to the Hon'ble Tribunal giving general direction and permitting all the States to utilise its equitable share in the manner each State thinks fit." (page 73 of its reply).

Rajasthan's Reply

Rajasthan has stated that "a party State should have freedom to use the water, allocated to it anywhere in its territory for irrigation purpose only. The water cannot be allowed to be taken outside the basin for purpose of generating power." (page 20 of its reply).

4.13.2 **Order Of The Tribunal.**—This point has been discussed and dealt with under point 10 of Madhya Pradesh's reference.

4.14.1 **Point 13 (Chapter V(4) pp 125-126 Of The Reference)**—Madhya Pradesh has requested for clarification that "Gujarat should credit to Madhya Pradesh each year the proportionate share of the expenditure on account of post construction operation and maintenance of Narmadasagar Dam."

Maharashtra's Reply

Maharashtra has not commented on the point.

Gujarat's Reply

Gujarat has stated that "unless Gujarat is given a share in the power benefits that would accrue from the Narmadasagar project, it cannot be called upon to bear any expenditure on post construction operation or maintenance of Narmadasagar dam." (page 74 of its reply).

Rajasthan's Reply

Rajasthan has made no comment.

4.14.2 **Order Of the Tribunal.**—The Final Order of the Tribunal in Clause XIV Sub-clause 7, provides that "the costs of construction and maintenance of the storages, power installations, diversion works, headworks and canal networks shall be borne wholly by the State Government in whose territory the works are located or shared in case the benefits are shared."

In order to clarify that the operation and maintenance costs of all works whose construction cost is shared between two or more party States, would also be shared by them *pro rata*, the last sentence in Clause XIV Sub-clause 7 should be deleted and the following should be added as 7(2), the earlier paragraph being numbered 7(1):—

> "7(2) The costs of construction of the storages, power installations, diversion works, head-works and canal networks shall be borne wholly by the State Government in whose territory the work is located except for works whose cost has been ordered by the Tribunal to be shared between two or more party States. Where the capital cost is thus shared, the operation and maintenance cost shall also be shared in the same proportion."

4.15.1 **Point 14 (Chapter V(5) Of the Reference pp 126-128).**—Madhya Pradesh has interpreted Clause XI, Sub-clause IV(1), IV(2)(v) and IV(7) of the Tribunal's orders as meaning that Gujarat must pay the cost of making lands cultivable and irrigable and that the aggregate cost thereof should be charged to the irrigation component of the Sardar Sarovar Project. For same reasons Madhya Pradesh requests that the land to be made available to oustees in Madhya Pradesh should also be made irrigable at the expense of Gujarat.

Maharashtra's Reply

Maharashtra has not offered any comments on the point.

Gujarat's Reply

Gujarat has stated that the submission made by Madhya Pradesh is nothing but re-arguing of its case and should, therefore, be rejected. (page 76 of its reply).

Rajasthan's Reply

Rajasthan has offered no comments on the point.

4.15.2 **Order Of the Tribunal.**—Sub-clause IV(7) of Clause XI of the Tribunal's Order reads as follows:—

> "Every displaced family from whom more than 25% of its land holding is acquired shall be entitled to and be allotted irrigable land to the extent of land acquired from it subject to the prescribed ceiling in the State concerned and a minimum of 2 hectares (5 acres) per family. This land shall be transferred to the oustee family if it agrees to take it. The price charged for it would be as mutually agreed between Gujarat and the concerned State."

It is clear from this part of the order that (a) the oustees have to be settled on irrigable land and (b) that the oustees have to pay for the irrigable land a price which is mutually agreed between Gujarat and the concerned State. As in all other irrigated areas, Madhya Pradesh and Maharashtra, as the case may be, shall be levying water rates for irrigation done by the oustees. These States should, therefore, bear the cost of providing irrigation facilities within their territory.

For clarification of the point raised by Madhya Pradesh, the following clause should be added to the first sentence of sub-clause IV(7) of Clause XI of the Final Order:—

"the irrigation facilities being provided by the State in whose territory the allotted land is situated."

4.16.1 **Point 15 (Chapter V 6) Of Reference pp 128-129).**—Madhya Pradesh has averred that the power generation at the falls on the branch canals of Navagam Canal and at the river crossings should also be shared in the same proportion as in the case of Navagam River Bed Power House and Navagam Canal Power House.

Maharashtra's Reply

Maharashtra has stated that it is fair and appropriate that the power generated at the falls on the Navagam Canal System should be shared in the same proportion as is determined by the Hon'ble Tribunal for share of power at the canal head power house. (page 52 of its reply).

Gujarat's Reply

Gujarat has pointed out that a similar submission made by Maharashtra had been dealt with by Gujarat in its Sur-Rejoinder XVIII(2) pages 174-175 and that the submission of Maharashtra has been rejected by the Tribunal. (page 77 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on the point.

4.16.2 **Order Of the Tribunal.**—It has already been clarified under points 10 and 12 of Madhya Pradesh that within its share of water, each party State is free to make changes in the pattern of water use and in the areas to be benefited within or outside the Narmada basin in its territory as it may consider necessary. Gujarat on taking its share of water into Navagam Canal is completely free to put it to any use it may like. Should it generate power on the branch canals or at river crossings on the Navagam canal, that power is not shareable with any other party State.

The claim of Madhya Pradesh is not sustainable. No further clarification is necessary.

4.17.1 **Point 16 (Chapter V(7) pp 129-133 Of The Reference).**—Madhya Pradesh has stated that out of power generated at Sardar Sarovar, the major share would be that of Madhya Pradesh and that Maharashtra would also get a substantial share of it. It has submitted that the construction, maintenance and operation of the powerhouses of Sardar Sarovar Dam should, therefore, be entrusted to Madhya Pradesh and Maharashtra and the representative of Madhya Pradesh, the major beneficiary State, should head the organisation. Further it has stated that considering the nature of Sardar Sarovar Project, a Control Board on the lines of an inter-State Control Board set up for other projects in the country is necessary.

In particular, Madhya Pradesh has submitted that the Hon'ble Tribunal may be pleased to clarify:—

"(a) That the construction, maintenance and operation of the Sardar Sarovar Dam and the river bed and canal power houses, shall be supervised by a Control Board in which the four States are represented, and

(b) that the representative of Madhya Pradesh shall head the organisation managing the construction maintenance and operation of the power houses."

Maharashtra's Reply

Maharashtra has stated that "the normal practice in such cases is to have Joint Control Boards of construction authority representing the concerned States." (pp 51-52 of its reply).

Gujarat's Reply

"Gujarat submits that no inter-State Control Board is necessary for supervision of construction, operation and maintenance of the Sardar Sarovar Dam and power houses. Gujarat submits that even in the case of Narmadasagar Dam a part of the cost of which is to be borne by the Sardar Sarovar, construction thereof is not envisaged to be supervised by an inter-State Control Board." (page 80 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comment on this matter.

4.17.2 **Order Of The Tribunal.**—The Tribunal has ordered the setting up of an inter-State administrative authority to be called Narmada Control Authority vide Clause XIV Sub-clause I of its Final Order Sub-clause 15 of that Clause, however, reads as under:—

"Sub-clause 15: *Construction Outside Jurisdiction Of Authority.*

> The construction of the works and the planning of the Projects will be carried out by each State through its own agencies and in the manner such State deems proper without any interference by the Authority or the other States, save and except to the extent as prescribed in the Orders of the Tribunal."

It is an accepted practice to set up Control Boards (more appropriately called Construction Boards) for all inter-State projects and large projects. This is in consonance with the policy recommended by the Irrigation Commission (1972) in paragraph 12.50 of its report which reads as under:—

> "12.50 A large irrigation project involves many different activities and it is essential not only to co-ordinate the activities at the site but also those involving the departments of the State at headquarters. Such co-ordination is even more important in inter-State projects. To handle the many problems of co-ordination involved in construction, Control Boards have been set up in many projects.
>
> We consider that all large inter-State projects and any State project costing Rs. 500 million or more should have a Control Board. Even for projects costing less than Rs. 500 million but which are of a complicated nature, a Control Board would be desirable. To be effective, Control Boards should be delegated the maximum powers and should in turn be liberal in delegating powers to the Chief Engineers of projects in the interest of efficiency.
>
> In States where several projects are under construction, a single Control Board with Standing Committees for each project would suffice. This would help to promote the best use of man-power and equipment.
>
> Where a major project receives special financial assistance from the Union Government, the Centre should be adequately represented on the Control Board."

It is desirable that construction of large works within the jurisdiction of a State should be entrusted to an organisation of that State, as otherwise the construction organisation is apt to face administrative difficulties. The Narmadasagar Project should thus be constructed by an organisation of Madhya Pradesh Government and the Sardar Sarovar Project by that of Gujarat Government. These organisations may borrow experts from other States and Central Government if they feel the need of strengthening these organisations with outside help.

But the four party States have financial commitment in respect of Unit I-Dam and Appurtenant works of Sardar Sarovar Project and three of them, namely, Gujarat, Maharashtra and Madhya Pradesh have such commitment in respect of Unit III—Power Complex

of the project. With a view to ensuring efficient, economical and early execution of these units of the project, and taking into account the financial commitments of the party States, it is desirable and necessary that a Construction Advisory Committee should be constituted for the purpose.

On behalf of Gujarat, it was argued that the constitution of Construction Advisory Committee for Sardar Sarovar would be outside the jurisdiction of the Tribunal at the present stage of the proceedings. This argument has been controverted by Madhya Pradesh and Maharashtra who submitted that the constitution of a Construction Advisory Committee for Sardar Sarovar was essential for the proper implementation of the Decision of the Tribunal under Section 5(2) of the Inter-State Water Disputes Act and was a matter which was within the scope of Section 5(3) of the Act.

In our opinion, there is no substance in the argument of Gujarat. The issue regarding the constitution of Construction Advisory Committee for Sardar Sarovar has been validly raised by Madhya Pradesh and Maharashtra in their respective References Nos. 3 and 4 of 1978 and was a matter which was within the scope of Section 5(3) of the Act.

The question has arisen because of the circumstances that as a result of the decision of the Tribunal under Section 5(2) of the Act, the costs and benefits of Sardar Sarovar Project are to be shared by different States and the proposal for the constitution of a Construction Advisory Committee is specifically intended for the proper implementation of the Tribunal's decision under Section 5(2) of the Act and for ensuring that the optimum benefits of the project are ensured to the concerned States as contemplated in that decision. The question of constitution of Construction Advisory Committee for Sardar Sarovar was also not a point originally referred to the Tribunal under Section 5(2) of the Act. The point is not mentioned in the original letter of Gujarat No. MIP-5565/C-10527/K dated 6th July, 1968 nor in the Reference of the Central Government No. 12/6/69-WD dated 6th October, 1969. The question of directions regarding constitution of Construction Advisory Committee is, therefore, in the nature of "guidance needed upon a point not originally referred to the Tribunal" and would legitimately fall within the scope of the jurisdiction under Section 5(3) of the Act.

In view of the necessity for constituting the Sardar Sarovar Construction Advisory Committee, Sub-clause 15 of Clause XIV of the Final Order needs modification as indicated below and a new Sub-clause 16 should be inserted. The existing Sub-clauses 16 and 17 of Clause XIV should be renumbered 17 and 18. Sub-clause 8 of Clause XIV should also be modified as indicated hereinafter.

SUB-CLAUSE 15 : *Construction Outside Jurisdiction Of The Authority*

The planning and construction of the projects will be carried out by each State through its own agencies, save and except to the extent prescribed in Sub-clause 16 of Clause XIV.

SUB-CLAUSE 16 : *Supervisory Function Of Authority Over Construction Of Sardar Sarovar Project*

(1) The four party States have financial commitment in respect of Unit I—Dam and Appurtenant Works of the Sardar Sarovar project and three of them, namely, Gujarat, Maharashtra and Madhya Pradesh have such commitment in respect of Unit III—Power Complex of the project. With a view to ensuring efficient, economical and early execution of these units of the projects, and taking into account the financial commitments of the party States, it is desirable and necessary that a Construction Advisory Committee should be constituted for the purpose.

We, therefore, order that such an Advisory Committee to be called the Sardar Sarovar Construction Advisory Committee should be set up within three months from the date of publication of the Decision in the Official Gazette.

(2) The Construction Advisory Committee shall have a whole-time Secretary of the rank of Chief Engineer to be appointed by Union of India and such other staff as may be necessary.

(3) The Committee shall comprise

(i) The Secretary to the Government of India, in charge of Irrigation—Chairman.

(ii) Chairman, Central Water Commission (CWC), or a Member of the CWC representing him in case the Chairman is unable to attend a meeting.

(iii) Chairman, Central Electricity Authority (CEA) or a Member of the CEA representing him in case the Chairman is unable to attend a meeting.

(iv) Chairman, Narmada Control Authority (NCA) or an Independent Member of NCA representing him in case the Chairman is unable to attend a meeting.

(v) Joint Secretary (Financial Adviser) in the Union Ministry of Agriculture & Irrigation (Department of Irrigation).

(vi) Secretaries in charge of Finance Department of Governments of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan.

(vii) Secretaries in charge of Irrigation Department of Governments of Gujarat and Rajasthan.

(viii) Secretaries in charge of Power Department of Madhya Pradesh, Maharashtra and Gujarat.

(ix) Secretaries in charge of Revenue Department or any other Department concerned with land acquisition, of Madhya Pradesh, Maharashtra and Gujarat.

(x) General Manager or Chief Engineers of Gujarat in charge of the project and Chief Engineers of Madhya Pradesh, Maharashtra and Rajasthan concerned with the project.

(xi) Chairman, State Electricity Boards of Madhya Pradesh, Maharashtra and Gujarat.

(xii) Financial Adviser, Sardar Sarovar Project.

The Chairman may co-opt any other Member for any particular meeting.

(4) The Sardar Sarovar Construction Advisory Committee shall:—

(i) scrutinise the project estimates prepared for these works, advise necessary modifications and recommend the estimates for the administrative approval of the concerned Government;

(ii) examine and make recommendations on all proposals pertaining to technical features and designs as may be referred to it by any of the party States, and where necessary consult experts for the purpose;

(iii) examine and make recommendation on the programme of construction of different parts of the project in a co-ordinated manner, keeping in view the funds available, the economics of the project and the desirability of obtaining quick results;

(iv) examine the requirement of funds for the construction of works and other purposes according to the approved programme and make necessary recommendations;

(v) examine and recommend, from time to time, the delegation of such powers, both technical and financial, as it may deem necessary for the efficient execution of the project, to the General Manager/Chief Engineers, Superintending Engineers, Executive Engineers and Sub-Divisional Officers engaged in the execution of the project;

(vi) examine and, where necessary, recommend specifications for various classes of work;

(vii) examine and make recommendation on all sub-estimates and contracts, the cost of which exceeds the powers of sanction of the General Manager/ Chief Engineers;

(viii) review progress reports, both for works and expenditure from the General Manager/Chief Engineers and recommend, where necessary, steps to be taken to expedite the work.

(5) The headquarters of the Construction Advisory Committee will be fixed by the Committee.

(6) The Construction Advisory Committee will frame rules regarding procedure and delegation of power for the purpose of carrying out its business.

(7) The recommendations of the Construction Advisory Committee shall be conveyed to the Governments concerned by the Committee and copies sent to the Review Committee and Narmada Control Authority for information.

(8) The recommendations of the Construction Advisory Committee shall normally be accepted by the State Governments concerned. In the event of any disagreement, the matter shall be referred to the Review Committee and the decision of the Review Committe shall be final and binding on all the concerned States.

(9) The Construction Advisory Committee will be dissolved after three years of the completion of construction of Units I and III of the Sardar Sarovar Project. The post-construction management of Units I and III will be by Gujarat under the supervision of the Narmada Control Authority.

(10) The expenditure of the Construction Advisory Committee will be borne by the four States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan equally.

To avoid any possible conflict of jurisdiction with the Narmada Control Authority, a sub-paragraph will be added at the end of the Sub-clause 16(8) of Clause XIV of the Final Order as under:—

> "In all matters relating to the construction of the Sardar Sarovar Dam and appurtenant works (Unit I) Power House and generating machinery (Unit III) and transmission lines to feed power to Madhya Pradesh, Maharashtra and Gujarat upto the next sub-station in each case, the Narmada Control Authority will carry out such functions as do not specifically devolve upon the Construction Advisory Committee set up under Sub-clause 16, Clause XIV."

4.18.1 **Point 17 (Chapter V(8) pp 132-134 Of Its Reference).**—Madhya Pradesh has submitted that in the event of water being not available in the storages of Madhya Pradesh, it would not be possible for it to provide necessary insurance as contemplated in Sub-clause (V) of Clause IX of the Final Order. By way of clarification, Madhya Pradesh has suggested the following words should be inserted in the Clause at appropriate place: —

> "To the extent water is available in the storages in Madhya Pradesh after taking into account the proportionate requirements of Madhya Pradesh."

Maharashtra's Reply

Maharashtra has not offered any comments on this aspect, (Page 89 of its reply).

Gujarat's Reply

Gujarat has objected to Madhya Pradesh's suggestion and has stated "If the direction in the Order of the Tribunal as regards regulated releases is to be modified as suggested by Madhya Pradesh, the question of FRL of the Sardar Sarovar would require reconsideration and further Madhya Pradesh would not be entitled to any payment for the regulated releases." (Page 83 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this aspect.

4.18.2 **Order Of The Tribunal.**—The suggestion of Madhya Pradesh is acceptable. The following words should be added at the end of the first sentence of Sub-clause (V) of Clause IX:—

> "subject to water being available in the storages in Madhya Pradesh after taking into account the proportionate requirements of Madhya Pradesh."

Sub-clause (V) of Clause IX as modified would read as under:—

> "The Authority shall ensure by so directing the release by Madhya Pradesh that there is at all times sufficient utilisable water in Sardar Sarovar to meet the requirements of the next ten days, subject to water being available in the storages in Madhya Pradesh after taking into account the proportionate requirements of Madhya Pradesh. For this purpose, Gujarat and Rajasthan would intimate their requirements of the 10 daily period well in advance."

4.19.1 **Point 18 (Chapter V(9) Of the Reference, pp 134-136).**—Madhya Pradesh has submitted that the Narmada Control Authority shall nave to deal with the regulation of water for irrigation as well as for power generation and sharing of the power at Sardar Sarovar Dam. As such, the States of Madhya Pradesh, Gujarat and Maharashtra should each be represented also by a member from the State Electricity Board or Electricity Department. It has further suggested that members appointed by the State Governments concerned should also be full-time members. Further, there should be only two members representing the Central Government from Central Water Commission and Central Electricity Authority.

Maharashtra's Reply

Maharashtra has stated that it supports tne views of the Union of India that nominees from the power department of Central Government and the Electricity Boards of the concerned States should be included in the Authority. (Page 53 of its reply).

Gujarat's Reply

Gujarat has stated that "there is no warrant for any modification in the direction of the Hon'ble Tribunal with regard to representation of the States on the Narmada Control Authority." ".....each State should have equal representation and the provision that Central Government should have larger representation should be maintained." "Subject to the representatives possessing the requisite qualification as may be laid down by the Hon'ble Tribunal the discretion of the State as to whom to appoint as its representative or representatives should be left unfettered." (Page 85 of its reply).

Rajasthan's Reply

Rajasthan has stated "It is for the State concerned to appoint as member any eligible person whom they may choose. The question of increasing number of members also does not and cannot arise. Rajasthan does not believe that there would be enough work for the representatives of the States justifying their appointment on the whole time basis." (Page 20 of its reply).

4.19.2 **Order Of The Tribunal.**—For efficient functioning, the Authority has to be a compact body. It should suffice for each State to have a suitable representative on the Authority. It is not necessary that each concerned department or Board should be represented therein. Also, there would not be sufficient work for the representatives of the States to justify their full time appointment. In order to give the party States the freedom to nominate their engineer members from the department dealing with irrigation or power or the State Electricity Board, the following words should be added after the Irrigation Department in the first sentence of sub-clause 1(2) of Clause XIV of the Final Order:—

'Power Department or the State Electricity Board'.

4.20.1 **Point 19 (Chapter V(10) pp 136-139 Of The Reference).**—Madhya Pradesh has submitted that the Hon'ble Tribunal may be pleased to clarify.—

(a) that the power generated at Sardar Sarovar Project shall be fed at various appropriate points in the grid sub-stations of Madhya Pradesh, Maharashtra and Gujarat mutually agreed to between the three States;

(b) that each of the three States shall tabulate and maintain record of its actual utilisation of power from Sardar Sarovar Project on a weekly or monthly basis;

(c) that in the event of overdrawal of power by one or two out of the three States, in excess of its allotted share, the overdrawing recipient State or States shall pay to the other State or States for the energy used in excess of its/their allotted shares a sum of money calculated on the basis of the highest rates of power supply plus any taxes in the overdrawing recipient State or States plus 10 per cent;

(d) that such rates shall be for the stations which have unit capacity of 50 MW or above; and

(e) that in respect of maximum demand, a penal rate mutually agreed to between the three States, on non supply of the allotted shares due to overdrawal shall be paid by the overdrawing State or States to the other State or States.

(Pp 138-139 of its reference).

Maharashtra's Reply

Maharashtra has submitted that the Authority which is represented by all the party States will decide the issue in its entirety and take proper decision. It has stated that the Hon'ble Tribunal may give suitable directions to the Narmada Control Authority to ensure the sharing of benefits when and if connections are made to the National grid. (Page 54 of its reply).

Regarding feeding different sub-stations, Maharashtra has averred that the transmission line beyond the border of Gujarat upto the grid sub-stations or sub-station should be constructed by Madhya Pradesh/Maharashtra at their own cost, and that it should not be a charge on Sardar Sarovar power complex. (Page 55 of its reply).

Maharashtra has stated that "each State should tabulate and maintain record of its actual utilisation of capacity and energy from Sardar Sarovar complex, the overdrawal of capacity being watched over a period of a day and that of energy on a weekly or monthly basis." (Page 55 of its reply).

Regarding penal rates for overdrawal of power, Maharashtra has suggested that such penal rates should be applicable only when the overdrawing State encroaches upon the shares of other States. It has suggested concessional rates below cost of generation when the share of a particular State, which is unable to consume its allotted share for any reason, is used by another State. (Page 56 of its reply).

Gujarat's Reply

Gujarat has submitted that it would be for the concerned States to link up the transmission line to either the sub-station or to the Grid. It has also submitted that there should be no difficulty in sharing the power on the lines suggested by the Tribunal.

Regarding overdrawal of power, Gujarat has submitted "the question of one State drawing power in excess of its allotted share would occur only if another State is unable to develop load, and is unable to consume its allotted share of power. In such a contingency the excess power drawn by the former State would really be surplus power and should be treated as such."

Regarding penal rates for overdrawal of power, Gujarat has submitted that any State using such surplus power, as stated above, should pay cost price plus 5%. (Page 58 of its reply).

Rajasthan's Reply

Rajasthan has made no comment on this matter.

4.20.2 **Order Of The Tribunal.**—As regards Point 19(a) of the reference of Madhya Pradesh, it has been ordered in Claulse VIII(2)(v) of the Final Order that the transmission lines beyond Gujarat's border shall be constructed and maintained by Madhya Pradesh and Maharashtra in their respective States. Madhya Pradesh has, however, pointed out that on Sardar Sarovar Power Complex getting linked up with the National Power Grid, "it would be rendered difficult if not impossible, to follow the directions of this Hon'ble Tribunal in actual practice regarding share of the power as per prescribed percentages from day to day." This submission is not correct. If in future the Sardar Sarovar Complex is connected with the National Grid, it may be necessary to provide for three independent feeder lines emanating from this Power Complex, one each going to each of the three States. The Tribunal has already ordered two—one such feeder line to Maharashtra and the other feeder line to Madhya Pradesh. The third feeder line may be from Sardar Sarovar Complex to the EHV station of Gujarat. The tie-up to the National Grid may be at these sub-stations in the three States where these feeders link up. Even when the tie-up is made to the National or Regional grid, it is technically feasible by installing appropriate equipment to adjust the allocated proportion of these three States on a daily basis under Clause VIII (2)(iv).

As regards (b) of the reference, this is a matter of detail to be dealt with by the Narmada Control Authority as per Clause XIV Sub-clause 8(2)(ii) of the Final Order.

As regards (c), (d) and (e) of the Reference, Clause VIII(2)(iv) of the Final Order envisages sale of power at mutually agreed rates between the participating States. In case of disagreement on the rate payable for transfer of power, the matter should be referred to the Narmada Control Authority for its decision, which shall be final.

In the light of the above clarification, the following clause should be added at the end of Clause VIII(2)(viii) of the Final Orders:—

> If and when Sardar Sarovar Power Complex gets linked with the Regional or National Power Grid the operation of the Sardar Sarovar Power Complex will be governed by such altered system conditions. But in that event the Narmada Control Authority should arrange to take such steps as are necessary to enable the three States of Gujarat, Madhya Pradesh and Maharashtra to get their entitlement of power and energy from the Sardar Sarovar Power Complex according to these orders.

4.21.1 **Point 20 (Chapter V(11) Of the Reference pp 139A 139I).**—Madhya Pradesh has submitted for further consideration as under:—

(i) There is an anomaly in the application of the principle of Columbia Treaty to the present case as the Hon'ble Tribunal has not allocated to Madhya Pradesh half of the additional power and irrigation benefits at Sardar Sarovar due to regulated releases from Narmadasagar.

(ii) The Hon'ble Tribunal has indicated two methods for assessing the quantum of credit due to regulated releases but has not given any reason for accepting the method which gives lesser extent of the credit.

(iii) The Hon'ble Tribunal has given directions that the releases by Madhya Pradesh from Maheshwar will be 8.12 MAF in a 75% dependable year but in the calculations for working out the credit, releases to the extent of 6.953 MAF from Maheshwar are only taken into account. Further even with the releases of 8.12 MAF from Madhya Pradesh the calculations show that the use at Sardar Sarovar due to the releases will only be 1.691 MAF or only about 1/5th of the quantum of releases from Madhya Pradesh.

(iv) The releases for power at Narmadasagar are assumed as 8.604 MAF for the purpose of working out the carryover capacity at and above Narmadasagar which in turn forms the basis for distribution of the carryover storage in the valley and forms one of the factors in determining the height of the Sardar Sarovar Dam. However, while calculating the credit due to regulated releases the inflows are so worked out that the releases from Narmadasagar work out to 8.08 MAF only.

Maharashtra's Reply

Maharashtra has not offered any comments on this aspect. (Page 89 of its reply).

Gujarat's Reply

In regard to (i) Gujarat has stated that "there is no inconsistency, omission or anomaly in the Orders of the Tribunal as is sought to be suggested by Madhya Pradesh." (Page 90 of its reply).

In regard to (ii) Gujarat has stated that "it is not open to any of the States to question the wisdom of the Hon'ble Tribunal as to why the particular method was adopted." (Page 91 of its reply).

In regard to (iii), Gujarat has stated that "Madhya Pradesh has not pointed out any discrepancy, or omission in the calculations." (Page 93 of its reply).

In regard to (iv), Gujarat has submitted that "difference in the regulated releases taken for the purpose of carryover capacity and the regulated releases is only 0.514 MAF which is negligible in comparison to 8.604 MAF." (Page 94 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this aspect.

4.21.2 **Order Of The Tribunal.**—The point raised by Madhya Pradesh is outside the scope of section 5(3) of the Inter-State Water Disputes Act and must be rejected on that ground alone. But even on merits the point has no substance. The principle applied by the Tribunal is not identical with that adopted in the Columbia Treaty. Para 15.4.1 of the Report states:—

> "15.4.1 Principle Applicable.—
>
> We consider that the principle of payment for downstream benefits somewhat similar to that recognised by United States of America—Columbia Treaty of 1961 applies in the present case. It follows, therefore, that as a matter of law, Madhya Pradesh is entitled to payment for downstream benefits (i) for regulated releases of Narmada waters from Narmadasagar Project for the benefit of Sardar Sarovar Dam and (ii) for flood control benefits, if any, obtained by Gujarat due to construction of upstream reservoirs in Madhya Pradesh. We shall now proceed to indicate how the principle is to be worked out in the present case."

Madhya Pradesh had in its argument claimed half of the additional power and irrigation benefits at Sardar Sarovar as mentioned in paragraph 15.3.1 of the Report. This was not accepted by the Tribunal.

As regards (ii) above, Madhya Pradesh has planned Narmadsagar as a key project in the valley to derive the maximum benefit from it and from Omkareshwar and Maheshwar. Sardar Sarovar also derives benefit from it. The credit which Sardar Sarovar should afford to Narmadasagar is based on the distribution of the cost of Narmadasagar between the various benefits it would bestow. Calculations were also made to check up whether in the alternative Gujarat could not secure the same benefit at a cheaper cost by building a higher Sardar Sarovar Dam.

As regards (iii) above, it is clarified that in Statement 15.5 of the Report the power draft at Maheshwar is taken to be the same as at Omkareshwar, namely, 6.953 MAF as the inflow from the catchment between Omkareshwar and Maheshwar would be mainly during the monsoon period and may not get regulated at Maheshwar for lack of storage capacity there for the purpose. Even if a figure 8.12 MAF was to be considered instead of 6.953 MAF, it would make no difference in the credit for regulated releases.

As regards (iv) above, Madhya Pradesh has assumed that the carryover capacity at and above Narmadasagar has been the basis for fixing the carryover capacity at Sardar Sarovar. This assumption is not correct. The carryover capacity at Sardar Sarovar has been fixed in proportion to the use of water from that reservoir in relation to the total use of 28 MAF. The figure of 8.604 MAF is not relevant for determining the regulated releases.

For these reasons, no change is necessary in the Final Order in this regard.

4.22.1 **Point 21 (Chapter VI(1) pp 140-151 Of The Reference).**—Madhya Pradesh has submitted that the Hon'ble Tribunal may be pleased to reconsider the assessment of the CCA of Zones I to XI of Gujarat under FSL 300 Canal. (Page 151 of the reference).

Regarding CA Madhya Pradesh has pointed out that the CA of Gujarat of Zones I to XI should be 57.327 lakh acres instead of 63.527 lakh acres adopted by the Tribunal. The reduction of 6.2 lakh acres (63.527—57.327 lakh acres) has been suggested on account of following:—(Page 142 of its reference).

(1)	Deduction of area over-estimated from forests, barren and unculturable land instead of from all classes of land.	= 2.63 lakh acres
(2)	Due to mis-classification of Talukawise nine fold land utilisation statistics	= 3 57 lakh acres
	TOTAL.	6.2 lakh acres

Regarding CCA Madhya Pradesh has made the following submissions:—

(i) The Tribunal is not justified in including area irrigated by ground water (2.14 lakh acres) in the CCA when Gujarat had itself excluded such areas.

(ii) There is difference of 0.063 lakh acres in the figure adopted for the area irrigated by tanks and other sources.

(iii) The addition of pastures and other grazing lands to the CCA of Gujarat is not justified being totally beyond the claim made by Gujarat.

(iv) The areas unsuitable for irrigation should be 13.443 lakh acres instead of 9.064 lakh acres adopted by the Tribunal. (Pp. 142-143 of its reference).

Maharashtra's Reply

Maharashtra has not offered any comments on this aspect. (Page 89 of its reply).

Gujarat's Reply

Gujarat has submitted that it has already dealt with the contention of Madhya Pradesh regarding over-estimation of areas and reconciliation in the figures for forests barren and unculturable lands. (Page 97 of its reply). Regarding mis-classification, Gujarat has submitted that it has already replied to this in its Written Reply No. 8 and that there is no substance in the averment of Madhya Pradesh that Gujarat should be deemed to have accepted a deduction of 3.57 lakh acres from its CA. (Page 100 of its reply). Regarding areas irrigated by groundwater, pastures and grazing lands, Gujarat has submitted that there cannot be two different standards for making deduction from CCA, one in case of Gujarat and another in the case of Madhya Pradesh. (Page 102 of its reply). Regarding land unsuitable for irrigation, Gujarat has stated that only 7.68% of the command would be unsuitable for irrigation (Page 107 of its reply).

Rajasthan's Reply

Rajasthan has submitted that reopening of the case sought by Madhya Pradesh is not permissible. (Page 21 of its reply).

4.22.2 **Order Of The Tribunal.**—The point raised by Madhya Pradesh is outside the ambit of Section 5(3) of the Inter-State Water Disputes Act and should be rejected on this ground alone. On merits also, this point has no substance.

Regarding the determination of CA, the Tribunal has already considered the submissions of Madhya Pradesh in paragraphs 5.4.7, 5.4.10, 5.6.1, 5·6·2, 5·6·4 of the Report, and given its decision.

As regards CCA, the difference of 0.063 lakh acres pointed out in the area irrigated by tanks and other sources, is small and is, therefore, ignored.

Regarding inclusion in the CCA of Gujarat, the area irrigated with groundwater and areas of pastures and grazing lands objected to by Madhya Pradesh, it is important to state that the same yardstick has been applied to the two States irrespective of the claims made by the State.

The Mahi command has been excluded from the command of Navagam Canal. Therefore, 0.284 lakh acres pertaining to pastures in Mahi command should also be excluded from the command of Navagam Canal.

As regards the submission of Madhya Pradesh in Item (iv) that the area unsuitable for irrigation in Zones I to XI of Gujarat should be 13.443 lakh acres and not 9.064 lakh acres, the matter has already been fully considered by the Tribunal in arriving at its decision.

The reduction of 0.063 lakh acres (item ii) and 0.213 (75% of 0.284) lakh acres (item iii) from the CCA of 50.02 lakh acres would be marginal and is likely to be more than countervailed by the likely increase pointed out in paragraph 10.13.3 of the Report.

As figures of CA or CCA have not been indicated in the Final Order, no change is necessary in the Final Order in this regard.

4.23.1 **Point 22 (Chapter VI(2) pp 152-164 Of The Reference).**—Madhya Pradesh has submitted that the Hon'ble Tribunal may be pleased to consider that CCA of 30.94 lakh acres under major projects proposed to be irrigated by Madhya Pradesh in the Master Plan 1972 is already on the conservative side, and that the assessment by this Hon'ble Tribunal of 29.26 lakh acres needs to be reconsidered. (Page 164 of its reference).

Regarding the culturable area of major projects, it has submitted that the deduction of 2.507 lakh acres on account of culturable fallows, area under water and difference in Tawa and Sukta projects is unjustified. (Page 152 of its reference).

It has further submitted that the deduction of 4.326 lakh acres from the basic culturable area and a further deduction of 1.1436 lakh acres on account of development works are not justified. (Pages 162-163 of its reference).

Maharashtra's Reply

Maharashtra has not offered any comments on this aspect. (Page 89 of its reply).

Gujarat's Reply

Gujarat has submitted that "it has dealt with the CA and CCA of major projects proposed by Madhya Pradesh in Gujarat's Sur-Rejoinder No. 1. Gujarat has pointed out that CCA of major projects cannot be determined on the details submitted by Madhya Pradesh." (Page 110 of its reply).

Rajasthan's Reply

Rajasthan has submitted that reopening of the case sought by Madhya Pradesh is not permissible. (Page 21 of its reply).

4.23.2 **Order Of The Tribunal.**—The point raised by Madhya Pradesh is outside the scope of Section 5(3) of the Inter-State Water Disputes Act and should be rejected on this ground alone.

Regarding deduction of 2.507 lakh acres from the cultural area, the submissions of Madhya Pradesh have already been discussed at paragraphs 5.13.5, 5.13.8 and 5.13.9 of the Report. No change is required in the culturable area of Madhya Pradesh.

Regarding the deduction of 4.326 lakh acres and 1.1436 lakh acres from the basic culturable area the submissions made by Madhya Pradesh have already been discussed in paragraphs 5.13.12 to 5.13.15.

No change is necessary in the Final Orders in this regard.

4.24.1 **Point 23 (Chapter VI(3) pp 165-172 Of The Reference).**- Madhya Pradesh has submitted that the CCA under medium and minor projects proposed to be irrigated in the Master Plan—1972 (39.76 lakh acres) is on the conservative side and that "the assessment of the said CCA by this Hon'ble Tribunal of 33.09 lakh acres needs to be reconsidered." (Page 172 of its reference).

It has averred that the reduction of 3.17 lakh acres made by the Tribunal in the CCA of medium schemes is unjustified. (Page 167 of its reference). The contention of Madhya Pradesh is that the Tribunal's projection on the basis of medium schemes existing and under construction is not justified since the said medium schemes are isolated schemes only. Regarding pumping schemes, it has stated "This Hon'ble Tribunal has concluded that 10 per cent of the areas served by medium and minor schemes i.e. about 3 lakh acres would be more reasonable. (Vol. I page 206 para 5.14.14) It is submitted that the said conclusion is not justified by the actual development and projected trend." (Pp 171-172 of its reference).

Maharashtra's Reply

Maharashtra has not offered any comments on this aspect. (Page 89 of its reply).

Gujarat's Reply

Gujarat has submitted that Madhya Pradesh has virtually reiterated its case.

Gujarat has also submitted that "when the surveys are carried out and data are available, the CCA that may be available for irrigtion in Madhya Pradesh may turn out to be less than that considered by the Hon'ble Tribunal." (Page 112 of its reply).

Rajasthan's Reply

Rajasthan has submitted that re-opening of the case sought by Madhya Pradesh is not permissible. (Page 21 of its reply).

4.24.2 **Order Of The Tribunal.**—The point raised by Madhya Pradesh is outside the scope of Section 5(3) of the Inter-State Water Disputes Act.

In Statement 5.16 in the Report, it has been pointed out that on the basis of information supplied by Madhya Pradesh for medium schemes, existing or under construction, the percentage of CCA to GCA comes to 51.61 per cent. Allowing for improvement in future schemes, the Tribunal has increased it to 60 per cent.

As regards pumping schemes, from the details supplied by Madhya Pradesh for three years 1973-76, as given in Statement 5.14 in the Report, it is seen that the CCA under pumping schemes was only 9000 acres. This low performance does not lend support to the claim made by Madhya Pradesh

No change in the CCA adopted by the Tribunal is necessary. The Final Order also does not require any change on this account.

4.25.1 **Point 24 (Chapter VI(4) pp 173-174 Of The Reference.**—Madhya Pradesh has submitted that the requirement of industrial and domestic water supply of Madhya Pradesh may be taken as 2.076 MAF and that of Gujarat as 0.548 MAF instead of 1.52 and 1.06 MAF respectively, assessed by the Hon'ble Tribunal. (Page 179 of the refernce).

Madhya Pradesh has averred that it had "estimated its requirement of domestic and industrial water supply from Narmada as 2.076 MAF on the basis that 1.519 MAF would be available from surface water and the remaining 0.556 MAF would be met from the alternative source of ground water. It has pointed out that since the Hon'ble Tribunal has not taken into account alternative source of ground water while working out the irrigation water requirement of Gujarat and Madhya Pradesh, it should not be taken into account in the case of industrial and domestic requirement also of Madhya Pradesh." (Page 176 of its reference).

Madhya Pradesh has further submitted that the Hon'ble Tribunal has projected the claimed requirement of Gujarat of 0.87 MAF for the year 2001 to 1.343 MAF for the year 2021, for which there is no justification. (Page 175 of its reference).

Madhya Pradesh has stated that the domestic water requirement of Gujarat, if calculated at 45 gallons per head per day as done by Madhya Pradesh, instead of 50 gallons adopted by Gujarat, will work out to 0.832 MAF. Deducting 0.284 MAF available from other sources as assessed by the Tribunal, the net water requirement of Gujarat works out to 0.548 MAF. (Pages 177-178 of its reference).

Maharashtra's Reply

Maharashtra has not commented on this point.

Gujarat's Reply

Gujarat has submitted that there cannot be two different yardsticks for assessing the water requirements, one for Gujarat and another for Madhya Pradesh. If the water requirements of Madhya Pradesh refer to the year 2021, the water requirements of Gujarat also should refer to the same year. (Page 113 of its reply).

Gujarat has also submitted that it is not only Madhya Pradesh which is required to meet part of its industrial and domestic requirements from ground water, Gujarat is also required to do so. (Page 114 of the reply).

As regards per capita consumption, Gujarat has submitted that Madhya Pradesh has overlooked the fact that the claim of Madhya Pradesh for domestic purposes includes water requirement not only for the cities and towns but also for villages unlike Gujarat which has claimed water requirement for cities and towns only. (Page 114 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the re-opening of the case already fully argued is not permissible.

4.25.2 **Order Of The Tribunal.**—The point raised by Madhya Pradesh is outside the purview of Section 5(3) of the statute and should be rejected.

What the Tribunal had to consider was the requirement of Narmada water for industrial and domestic use. Narmada water cannot economically be taken to all the villages in the valley and, therefore, many of the villages have to depend on the local ground water resources for the purpose. The figure of 2.076 MAF indicated by Madhya Pradesh includes 0.556 MAF of ground water. Deducting this figure of ground water, the requirement of Narmada water for the purpose was accepted as 1.52 MAF.

It is reasonable that the water requirement of both Madhya Pradesh and Gujarat should be assessed for the same year. The objection of Madhya Pradesh in this regard is not sustainable.

As regards *per capita* consumption, since Gujarat's requirement is only for cities and towns and that of Madhya Pradesh includes villages, the latter's requirement has to be at a lower *per capita* rate.

In view of what is stated, no further clarification is necessary and no change is necessary in the Final Order in this regard

4.26.1 **Point 25 (Chapter VI(5) pp 179-A-179G Of The Reference).**– Madhya Pradesh has submitted that the adoption b ythe Hon'ble Tribunal of irrigation intensity of 85 per cent and transit loss of 50 per cent for Gujarat against 65 per cent and 33.3 per cent respectively recommended by the Agronomic Assessor, Dr. Ambika Singh, requires re-consideration. (Page 179A of the reference).

Madhya Pradesh has further submitted that "even on the basis of CCA of 50.02 lakh acres, as determined by the Hon'ble Tribunal, but with irrigation intensity of 65% and transit losses at 33.3% of field requirement Gujarat's total irrigation water requirement works out to 7.426 MAF.

Madhya Pradesh, therefore, respectfuly seeks clarification if this Hon'ble Tribunal may be pleased to reconsider its decision regarding the water requirements of Gujarat on the lines indicated above." (Page 179G of its reference).

Maharashtra's Reply

Maharashtra has not commented on the point.

Gujarat's Reply

Gujarat has submitted that it has fully dealt with the report of Dr. Ambika Singh in Exhibit G/1288. Gujarat has further pointed out that it has "fully justified the transit losses at 50 per cent of field head requirements by reference to MP/312, MR/131 and MR/114" (Pp 115-116 of its reply).

Rajasthan's Reply

Rajasthan has stated that these aspects have already been argued in detail before the Hon'ble Tribunal and that the re-opening of the case is not permissible. (Page 21 of its reply).

4.26.2 **Order Of The Tribunal.**—The points raised are outside the scope of Section 5(3) of the Inter-State Water Disputes Act.

All these matters have been fully argued before the Tribunal and given proper consideration by the Tribual. A re-consideration of these *de novo* is not permissible.

No change is necessary in the Final Order in this regard.

4.27.1 **Point 26 (Chapter VI(6) pp 179-H to 179-T Of The Reference).**—Madhya Pradesh has stated that the assessment of the utilisable water from en route rivers crossing Navagam Canal needs to be revised to 0.766 MAF as against 0.282 MAF considered by the Tribunal. It has furnished details of its claim in the abstract at Annexure I of its reference, as below: --

	Diversions	Claimed by Madhya Pradesh	According to Tribunals Report	(MAF) Difference
A	*From Normal Flows*			
I	Narmada basin	0·0216	0·004	0·0176
II	Dhadhar basin	..	..	..
III	Mahi basin	0·3614	0·050	0·3114
IV	Sabarmati basin	0·191	0·153	0·0380
V	Rupen basin	0·010	0·001	0·009
VI	Saraswati basin	..	..	..
VII	Banas basin	0·024	0·024	Nil
VIII	Rel basin	..	..	..
IX	Rivers or Stream crossed by branch canal in Saurashtra region	0·050	0·050	Nil
		0·658	0·282	0·376
B	Regeneration from upstream utilisation	0·106	Nil	0·106
		0. 764	0·282	0·482
	rounded to	0·766		0·484

Madhya Pradesh has stated further that the Hon'ble Tribunal has not considered the possibility of diverting the waters of some of the en route rivers even though Gujarat itself has indicated such diversion in its Master Plan. (Page 179-H of its reference).

Maharashtra's Reply

Maharashtra has not commented on the point.

Gujarat's Reply

Gujarat has submitted that "the assessment of 0.282 MAF for the water available from the en route rivers for use in the Narmada command made by the Hon'ble Tribunal does not need any revision." (Page 123 of its reply).

As regards Madhya Pradesh's submissions that the Hon'ble Tribunal has not considered the possibility of diverting the waters of some of the en route rivers even though Gujarat itself has indicated such diversions in its Master Plan of en route rivers, Gujarat has submitted that the availability referred to by Madhya Pradesh pertains to availability through level crossing proposed by Gujarat in its Master Plan (Exhibit G/462). Gujarat has submitted that the technical consideration for level crossing and consequential diversion of water is dealt with at length by the Hon'ble Tribunal vide paras 7.3.10 to 7.3.12. (Pages 120-121 of its reply).

Rajasthan's Reply

4.27.2 **Order Of The Tribunal.**—The point raised by Madhya Pradesh is outside the scope of a reference under Section 5(3) of the Inter-State Water Disputes Act.

4.27.2 **Order Of The Tribunal.**—The point raised by Madhya Pradesh is outside the scope of a reference under Section 5(3) of the Inter-State Water Disputes Act.

On merits also, the claim of Madhya Pradesh is not sustainable.

The additional availability claimed by Madhya Pradesh in the abstract at Annexure-I of its reference is discussed basinwise below:—

A *From Normal Flows*

I	*Narmada Basin*	Quantity in MAF
(i)	Flows from Kothi, Sukhli and Sangam Khadi	0·0078
(ii)	Flows from Kotars from Ashwin sub-basin	0·0040
(iii)	Flows from Unch including Maniyad river	0·0020
(iv)	Kotars at Ch. 63450 and 65762 of Navagam Main Canal	0·0038
	Total of Basin	0·0176

These schemes have not been considered feasible on account of unsuitable levels or insignificant storage capacity.

III	*Mahi Basin*	Quantity in MAF
(i)	Free catchment area between Karad and Navagam Canal crossing	0·0327
(ii)	From catchment area of Goma river upto Navagam Canal	0·0171
(iii)	Meshri river upto Navgam Canal crossing	0·0310
(iv)	Kotars of Kan river	0·0016
(v)	Utilisable flows below Wanakbori (As per Annexure III)	
	(a) Use at proposed Lachhanpura Weir	0·160
	(b) Use at proposed Vasad Weir	0·069
		0·3114

The scheme at (i) has already been considered in para 7.6.16 of the Report and not found feasible. Scheme at (ii) has been considered in para 7.4.4, and in para 7.6.16 of the Report and not found feasible. Scheme at (iii) has been considered as serial No 18 under the scheme proposed by Madhya Pradesh in para 7.4.4 of the Report and not accepted. Regarding the Kotars of Kan river at (iv) the water of only one Kotar having a catchment area of 6.5 square miles is proposed for diversion. As it is a very small stream with no significant contribution, it is ignored.

Regarding (v) concerning the unutilised flows passing Wanakbori, their use at Lachhanpura and Vasad Weirs has already been considered in para 7.6.17. It may be mentioned that flow passing Wanakbori weir would be available for short periods and cannot be depended upon. The dependable flows would have been diverted at Wanakbori. The claim of Madhya Pradesh for the use of a portion of the flows passing Wanakbori is not sustainable.

IV	*Sabarmati Basin*	Quantity in MAF
	Shedi river including Luni upto crossing of Navagam Canal	0·0380

This has already been rejected in para 7.7.2 of the Report.

V *Rupen Basin*

Madhya Pradesh has pointed out that in conversion of 418 Mcft into MAF there is an error in conversion. The figure should be 0.010 instead of 0.001. The difference is 0.009 MAF which is to be taken into account.

B *Regeneration*

Madhya Pradesh has worked out the utilisation from irrigation schemes on en route rivers crossing Navagam Canal to be 46.099 from Mcft (1.058 MAF) vide Annexure-I and has pointed out that 10% of the quantum used i.e 0.106 MAF would be available as regenerated flows. These are examined basinwise below:—

I *Narmada Basin*

(a) Men sub-basin: The regeneration of 0.003 MAF need to be allowed as a level crossing downstream of Bilgaon storage dam has been accepted.

(b) Heran sub-basin : The regeneration of Lalpur storage site (Heran Project) will be picked up at Rajwasna weir, the command of which has already been excluded from the

CCA of Navagam Canal as discussed in para 7.9.6 of the Report. This regenerated water is thus not available for Navagam Command.

(c) Orsang sub-basin: The regenerated flows of Kikawada (Sukhi) and Jamla Projects will be picked up at Jojwa weir, the command of which has been excluded from Navagam command vide para 7.9.6 of the Report. This, therefore, is not available for Navagam Canal.

II. *Dhadhar Basin*

A regeneration of 0.084 MAF has been claimed. As pointed out in paragraph 7.6.6 of the Report, a credit for it can be taken only if the feasibility of the barrage scheme is established.

III *Mahi Basin*

There is no pick up point downstream of Karad Dam as stated in paragraph 7.6.16 of the Report. Regeneration from all schemes above Wanakbori weir will be picked up by the weir and would not, therefore, be available for use in Navagam Command.

IV *Sabarmati Basin*

(a) Watrak sub-basin : The regenerated flows of Waidy Irrigation Scheme will be picked up at Watrak Reservoir and used outside Navagam Command. Regeneration from the remaining three schemes namely (i) Watrak Reservoir Project, (ii) Mazam Irrigation Scheme and (iii) Meshwa Reservoir, amounting to 780 Mcft (0.017 MAF) can be considered as available for Navagam Command.

(b) Hathmati sub-basin: The regeneration of Hathmati and Guhai Reservoir Projects will be picked up at Fatehwadi weir, the command area of which is excluded from Navagam Command vide para 7.9.6 of the Report. This regenerated flow is, therefore, not available for use in Navagam Command.

V *Rupen Basin*

The regeneration of 0.0177 MAF on account of irrigation use from Dharoi irrigation scheme has already been taken into account vide paragraph 7.7.9 of the Report.

IX *Rivers Of Sourashtra Region*

As no suitable pick up points are available on these rivers, and as also regeneration is very small, the same is not taken into account.

Thus, the additional quantum of water that needs to be considered as available for Navagam Canal command is:

Due to arithmetical error in Rupen basin	—0·009 MAF
Due to additional regeneration :	
Men sub-basin	0·003 MAF
Watrak sub-basin	0·017 MAF—0·020 MAF
Total	0·029 MAF

This has to be added to 0.282 MAF earlier assessed. This additional quantity of 0.029 MAF is too small to make any difference in the allocation of 9 MAF to Gujarat which has been made from a number of considerations. The difference may, therefore, be ignored.

As the figures of availability of water from en route rivers do not appear in the Final Order, no change is necessary in the Final Order on this account.

4.28.1 **Point 27 (Chapter VII pp 180-187 Of The Reference).**—Madhya Pradesh has stated that as the decision of the Tribunal as published in the official gazette by the Central Government would be given effect to by the parties to the dispute, the decision should be clear, complete and selfcontained and should not contain a reference to any particular chapter or paragraph of the Report.

Maharashtra's Reply

Maharashtra has supported the suggestion and has submitted that "instead of making reference to the contents of the Report, the relevant portion of the Report may be annexed to the Final Order so as to make it self-contained." (page 56 of its reply).

Gujarat's Reply

Gujarat has stated that it "shares the view of Madhya Pradesh that the Final Order and Decision of the Hon'ble Tribunal should be complete and self-contained." (page 126 of its reply).

Rajasthan's Reply

Rajasthan has submitted that "the Hon'ble Tribunal may be pleased to modify the Final Order and decision to make it complete and self-contained without any reference to the discussions and calculations in the body of the Report." (page 21 of its reply).

4.28.2 **Order Of The Tribunal.**—The suggestion is accepted.

The reference to CMPs 201 and 234 of 1977 may be deleted from Sub-clause 17 (to be renumbered 18) of Clause XIV. This Sub-clause, as now amended, will read as follows:—

> "The Union of India has consented to participate in the machinery to be established by the Order of the Tribunal, if so directed and to do its best to implement the decision of the Tribunal. Accordingly, we direct the Union of India to participate in the machinery set up the Order of the Tribunal to implement the directions of the Tribunal specifically under clauses 1(2), 4, 12(6), 13, 14 and generally to implement all the other directions so far as the Union of India is concerned."

4.29.1 **Advice Of Assessors.**—We have consulted our Technical Assessors Dr. M. R. Chopra, Shri Balwant Singh Nag, Shri C. S. Padmanabha Aiyar and Dr. S. B. Hukkeri with regard to the subject matter of this Chapter. They advise us that they all entirely agree with the view expressed by us and the orders passed by us on all the points dealt with in this Chapter.

CHAPTER V

REFERENCE NO. 4 OF 1978 BY STATE OF MAHARASHTRA

5.1 In CMP No. 42 of 1978, Maharashtra has stated that the powers conferred on this Tribunal under Section 5(3) of the Inter-State Water Disputes Act are limited to giving explanation or guidance and the Tribunal has no jurisdiction to reconsider or re-hear matters already decided in its original Report. In Appendix I of the CMP, Maharashtra has set out a list of nine points which fall strictly within the circumscribed limits of Section 5(3) of the Act. In Appendix II, Maharashtra has set out a further list of six points which according to it are outside the limit of Section 5(3) of the Act. In Chapter I of this Report, we have already expressed our view with regard to the scope and ambit of Section 5(3) of the Act and agreed with the interpretation placed on this Sub-section by Maharashtra. We do not therefore propose in this Chapter to deal with any of the points mentioned by Maharashtra, in Appendix II of CMP 42 of 1978 which are admittedly outside the scope of Section 5(3) of the Act.

5.1.1 **Point 1 (Pages 4-6 Of The Reference).**—Maharashtra has submitted that the following explanation is necessary:

(a) Whether or not in determination of the utilisable quantum of waters of the Narmada at Navagam Dam site on the basis of 75 per cent dependability assessed at 28 MAF evaporation losses from reservoirs have been assumed at (—) 4 MAF, regeneration has been assumed at (+) 2 MAF and quantum from carryover has been assumed at (+) 3 MAF.

(b) If answer to question (a) above is in the negative, then an explanation is solicited regarding the magnitude of the three components, viz., evaporation losses, regeneration and from carryover.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "in determining 28 MAF, utilisable flow at 75 per cent dependability, evaporation losses as 4 MAF, regeneration as 2 MAF and quantum from carryover as 3 MAF has not been assumed. It is true that if the quantum of evaporation losses and regeneration varies from what has been assumed by the Tribunal the quantum of utilisable flow will be affected. But this is taken care of is the Tribunal Order Clause IV Sub-clause (1) & (2) where the excess and deficit in the utilisable flow is directed to be shared in the proportion of the allocations made to the party States." (Page 67 of its reply).

Gujarat's Reply

Gujarat has stated that the determination of the utilisable quantum of waters at 28 MAF by the Tribunal is in terms of Agreement dated 12th July, 1974 (Ex.C/1) and not the agreement between the party States at the official level conference. Gujarat has also submitted that Maharashtra's application seeking explanation is outside the purview of Section 5(3) of the Act. (pp 5-6 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the figure of 28 MAF appears to have been arrived at on the basis of the decision arrived at Delhi in 1966 and in view of this no explanation is necessary. (Page 22 of its reply).

5.1.2 **Order Of The Tribunal.**—It is stated in paragraph 11.2.1 of the Report that the figures adopted for evaporation, regeneration and carryover by the official level conference in 1966 had not been derived from any detailed studies and that the actual figures could be different. In fact, the figures would vary from year to year and would also depend on the final shape of the various projects taken up in the valley. It is only the total effect of the three factors, namely, evaporation, regeneration and carryover which determines the utilisable quantity of water in a year and which has been assessed at 28 MAF with 75 per cent dependability.

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As regards (b) above, it is not possible to quantify with any degree of precision the evaporation losses, regeneration and carryover that would obtain in any year. However, for calculating the carryover capacity required in the whole valley, approximate figures for evaporation and regeneration have been adopted in Statement 11.6 of the Report.

No further clarification is necessary.

5.2.1 **Point 2 (Pages 7-10 Of The Reference).**—Maharashtra has requested for clarification of the following:—

(a) Whether it is intended that the respective shares of Madhya Pradesh, Gujarat, Rajasthan and Maharashtra for the areas as mention therein are to be utilised as given in the Report; or

(b) Whether the respective shares of each of the four party States could be utilised outside the limits specified without any constraints as to areas?

Maharashtra has stated that use of water in unauthorised areas would substantially reduce the power draft through the river bed power house, thus reducing the availability of power. It has prayed that the consequential loss of power may be restituted.

Maharashtra has further requested that it should be clarified and explained that the respective entitlements mentioned in Clause III(c) and Clause III(d) of the Final Order are for use by Rajasthan and Maharashtra in their respective territories.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "if Maharashtra could show that the loss of power at the river bed power house due to use of water in unauthorised areas by Gujarat is quite significant then it is justified that such a loss is made good by Gujarat." It has also stated that "the releases from the river system and the projects in Madhya Pradesh for use at Sardar Sarovar for irrigation and power generation stipulated in the decision of the Tribunal will not be affected and, therefore, there cannot be any reduction in the power generation at the river bed power house, on account of variation in the areas to be irrigated in Madhya Pradesh." (pp 68-69 of its reply).

Regarding use by Maharashtra and Rajasthan it has stated "there should be no objection to give such clarification sought by Maharashtra. Maharashtra appears to be guarding against the possible exchange of the share of Rajasthan for use in Gujarat areas and getting corresponding quantity of water from Mahi for use in Rajasthan. If Rajasthan is allowed to make such an exchange then there will be no justification for the FSL 300 Canal". (Page 69 of its reply).

Gujarat's Reply

Gujarat has submitted that the Tribunal has not allocated Narmada waters for irrigation to the party States for irrigating any specific areas, and "that so long as Madhya Pradesh or Gujarat utilise Narmada water for consumptive use within their respective allocated shares, there should be no question of power generation at Navagam being affected adversely." (Page 9 of its reply).

Regarding use by Maharashtra and Rajasthan, it has stated that "the addition of the words in the Final Order as suggested by Maharashtra can be interpreted to mean that the transmission and other losses for making available the share of Maharashtra and Rajasthan are not to be borne by the said States." (Page 11 of its reply).

Rajasthan's Reply

Rajasthan has submitted that "a State should have full freedom to use the water allocated to it by this Hon'ble Tribunal in the most efficient manner and to the best advantage in any part of its area for irrigation purpose."

Regarding use by Maharashtra and Rajasthan, it has stated that the language of the Order of this Hon'ble Tribunal is clear and there is no ambiguity about it.

5.2.2 **Order Of The Tribunal.**—The Tribunal has apportioned Narmada waters between the party States after taking into consideration a number of factors. Some of these factors may change with further detailed investigations and passage of time. The

CCA may require changes, the irrigation intensities may have to be varied and the cropping pattern may require to be modified to suit prevailing conditions. Likewise, water requirement for domestic, industrial and thermal power may actually be different from that envisaged at present. Furthermore, for a variety of reasons, it may become necessary to provide irrigation facilities in areas not covered by the proposals for use of Narmada Waters at present. It is, therefore, reasonable and desirable to give the party States the freedom to vary within their allocated share of water the pattern of water use and the areas to be served by such use within their respective State boundaries.

Since the States are to be free to make such use of their share of water as they deem fit within their respective territories, the question of loss of power and restitution for it does not arise.

In view of what is stated in paragraphs above, the following paragraph should be added under Clause III of the Final Order: —

> "(2) Further, it is clarified that the apportionment relates to actual withdrawals and not consumptive use.
>
> (3) Within its share of water, each party State is free to make such changes in the pattern of water use and in the areas to be benefited within or outside the Narmada basin in its territory as it may consider necessary."

The existing paragraph under Clause III is to be numbered (1).

5.3.1 **Point 3 (Page 11 of The Reference).**- Maharashtra has submitted that not only Clause III and IV but also other Clauses of the Final Order and Decision of the Tribunal should be made subject to review after a period of 45 years from the date of the Order of the Tribunal

Madhya Pradesh's Reply

Madhya Pradesh has submitted that there will be no need to make any changes in the other Clauses of the Orders of this Hon'ble Tribunal. (Page 70 of its reply).

Gujarat's Reply

Gujarat has drawn attention to its reference where it has submitted that along with Clauses III and IV, the Orders of the Tribunal contained in Clauses VII, VIII, IX, X and XI shall also be subject to consequential review. (Page 12 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the Order of this Hon'ble Tribunal is clear and no explanation is required.

5.3.2 **Order Of The Tribunal.**—The question raised by Maharashtra has been dealt with under Point 4 of Gujarat and we have given necessary directions under that Point. (See Paragraph 3.4.2 of Chapter III of the Report).

5.4.1 **Point 4 (Pages 12-13 Of The Reference).**—Maharashtra has stated that Paragraph 15.8.3 of the Report and Statement 15.5 of the Report show that the power component of the credit to Narmadasagar by Sardar Sarovar is Rs. 4.77 crores which is 28.36 per cent of the total amount of the credit to Narmadasagar for regulated releases from it. In Clause VIII Sub-clause (ix) of the Final Order, the capital cost of the power portion of Navagam complex includes, as item (d), 56.1 per cent of the credit given to Madhya Pradesh for the downstream benefits derived from Narmadasagar Dam. Maharashtra has solicited an explanation whether 56.1 per cent should be read as 28.36 per cent.

Madhya Pradesh's Reply

Madhya Pradesh has submitted that it agrees with the submission of Maharashtra. (Page 70 of its reply).

Gujarat's Reply

Gujarat has stated that Annexure XIV(3) of the Report needs to be corrected to be in consonance with the Final Order in Clause VIII (Page 13 of its reply).

Rajasthan's Reply

Rajasthan has submitted that the averments made by Maharashtra are misconceived. (Page 24 of its reply).

5.4.2 **Order Of The Tribunal.**—The cost chargeable to Sardar Sarovar Unit I-Dam and appurtenant works comprises (a) its own cost and (b) the amount it has to credit to Narmadasagar for regulated releases. This total cost consisting of (a) and (b) has been apportioned between irrigation and power and the share of power comes to 56.1 per cent *vide* Clause XII of the Final Order. Thus, this percentage in respect of share of power applies equally to (a) the cost of the Dam and (b) the amount to be credited to Narmadasagar.

No change is necessary in the Final Order. However, Annexure XIV-8 and Statement 14.3 require modification. The modified Annexure and Statement are given at Para 3.23.2 of Chapter III, Reference No. 3 of Gujarat.

Annexure XIV-8 was prepared to figure out the cost of energy/Kwh at Sardar Sarovar Power Complex at different stages in order to make a comparison with the cost obtaining at Jalsindhi in the corresponding stages. This comparison is made in Statement 14.3. Even in the modified Annexure and Statement, the result is the same, namely, that the cost of energy at Sardar Sarovar complex is less than that at Jalsindhi. Thus the Final Order is not affected.

5.5.1 **Point 5 (Page 14 Of The Reference).**—Commenting on Clause XI, Sub-clause II(2) Maharashtra has stated that since backwater effect would be above MWL 460, the following explanation is solicited: —

> "Whether in the obligation imposed in the above Clause to acquire for the Sardar Sarovar Project (under the provisions of the Land Acquisition Act, 1894) all such buildings with appurtenant land would be included all buildings with their appurtenant land coming within the 'backwater effect'--even where the buildings with appurtenant land are situate above RL 460' due to back water effect."

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "according to the necessary implication of the Final Order of this Hon'ble Tribunal, the maximum water level in the Sardar Sarovar inclusive of the backwater effect shall not exceed RL 460' under any circumstances." (Page 71 of its reply).

Gujarat's Reply

Gujarat has suggested that the direction given in Clause XI Sub-clause II(2) may be modified to read as under: —

> "Madhya Pradesh and Maharashtra shall also acquire for Sardar Sarovar Project under the Land Acquisition Act, 1894, all buildings with their appurtenant land situate between FRL + 138.68m (455') and the back water level corresponding to the highest flood level of + 141.21m (460') at the Dam." (Page 14 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this aspect.

5.5.2 **Order Of The Tribunal.**—In engineering practice MWL refers to level in the vicinity of the dam. Progressively higher levels obtain at upstream locations in the reservoir depending upon the flow conditions. The back water effect is at the upper end of the reservoir and its profile has to be calculated. Acquisition of buildings with their appurtenant lands has to be done upto the waterline corresponding to MWL + 141.21m (460') at Sardar Sarovar Dam taking into account the surface slope in the reservoir and the back water effect.

The Final Order in Clause XI—Sub-clause II(2) should, for clarification, be modified to read as under:—

"Madhya Pradesh and Maharashtra shall also acquire for Sardar Sarovar Project under the provisions of the Land Acquisition Act, 1894, all buildings with their appurtenant land situated between FRL + 138.68m (455') and MWL + 141.21 m (460') as also those affected by the backwater effect resulting from MWL + 141.21 m (460')."

5.6.1 **Point 6 (Pages 15-17 Of The Reference).**—Maharashtra has observed as under:—

"While Madhya Pradesh and Maharashtra have to contribute 84 per cent of the cost of the power complex of Sardar Sarovar Project, they have no active role in the control of the construction, maintenance and/or operation of the power complex."

It has sought explanation and guidance as under:—

"(a) In what manner will Gujarat State ensure to the contributing States of Maharashtra and Madhya Pradesh (whose joint contribution to the power complex of the Sardar Sarovar Project is 84 per cent) that the construction, maintenance and operation of the Power Houses and appurtenant works (including the machinery and all installations, as well as transmission lines in Gujarat State) would be done in a manner so as to conform to the computations on which the shares of the respective States are decided and are dependent?

(b) What safeguards or machinery be provided in the event of Gujarat State failing to adhere to the programme of construction of the Power Houses and the appurtenant works (including the machinery and all installations, as well as the transmission lines in Gujarat) as per the phased programme of power generation mentioned in Para 14.4.11 of the Report?

(c) Should the phased programme not also be part of the operative Order—and stated in a Schedule to Clause VIII of the Final Order and Decision of the Tribunal?

(d) What safeguards or machinery should be provided to ensure adequate maintenance and operation of the Power houses and appurtenant works by Gujarat?

(e) In what manner and under what conditions would Gujarat compensate the contributing States in the event of failure to construct, maintain or operate the Power Houses and appurtenant works in the manner aforesaid?

(f) What authority would determine whether or not such construction, maintenance and operation is in accordance with the phased programme mentioned in the Report and give appropriate directions to Gujarat for compensation to the complaining State/States?

(g) In which most appropriate way it could be ensured that the construction, maintenance and operation of the power houses and the appurtenant works (including the machinery and all installations, as well as transmission lines in Gujarat State) will be done so as to ensure the flow of benefits as stipulated in the Report? The normal practice in such cases is to have joint Control Board or construction authority representing the concerned States.

(h) In the event of any State (Gujarat, Madhya Pradesh or Maharashtra) not contributing its share of funds required for the actual construction works of the Sardar Sarovar Project in any particular year—resulting in delay in the construction programme and the benefits therefrom—should not appropriate directions be given so that it is ensured that construction programme is adhered to in that particular year?"

Madhya Pradesh's Reply

Madhya Pradesh has stated, "It is necessary that the construction, maintenance and operation of the power complex of Sardar Sarovar is done jointly by the beneficiary States of Madhya Pradesh and Gujarat." It has also drawn attention to its reference (Point 16 pp 129-131 of Madhya Pradesh's reference) where it has submitted that the representatives from the Electricity Boards of Madhya Pradesh and Maharashtra, who are the principal beneficiary States, should be included in the organisation which manages the construction,

maintenance and operation of Power Houses at Sardar Sarovar and that the representative of Madhya Pradesh, as the major beneficiary State, should head the organisation. (Pp 71-72 of its reply).

Gujarat's Reply

Gujarat has submitted that "the Authority has been armed with sufficient powers to ensure that the decision of the Tribunal is properly implemented. Gujarat submits that the apprehension expressed by Maharashtra with regard to the construction, operation and maintenance of the Sardar Sarovar Dam and the Sardar Sarovar Power Complex are unfounded." (Pp 17-18 of its reply).

Rajasthan's Reply

Rajasthan has not offered any comments on this aspect.

5.6.2 **Order Of The Tribunal.**—The question raised by Maharashtra has been dealt with under Point No. 16 of Madhya Pradesh and we have given the necessary directions under that point. (See Para 4.17.2 of Chapter IV of this Report).

5.7.1 **Point 7 (Pages 18-20 Of The Reference).**—Maharashtra has solicited the following explanation:—

(a) Whether in the event of the cost of the foundation treatment determined by the Consulting Committee of Engineers and Geologists is found to be substantially in excess of Rs. 4.80 crores, Maharashtra and Madhya Pradesh are obliged to share the cost of the foundation treatment in excess of Rs. 4.80 crores; and

(b) Should not any directions be included in the Final Order and Decision, to direct Gujarat to bear the cost of foundation treatment of Sardar Sarovar Dam substantially in excess of Rs. 4.80 crores, particularly in view of the fact that the choice of dam site No. 3 for Sardar Sarovar Project has been decided and accepted by the Tribunal only on considerations of irrigation benefits to Gujarat and Rajasthan?

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "the unsuitability of the dam site of Sardar Sarovar has been already pointed out by Madhya Pradesh and Maharashtra and any extra cost in the foundation treatment must be borne by the State of Gujarat." (Page 72 of its reply).

Gujarat's Reply

Gujarat has submitted that "the contention of Maharashtra is not that anything contained in the Decision of the Tribunal requires explanations or that guidance is needed upon any point not originally referred to the Tribunal." Gujarat submits that "in effect and substance Maharashtra has sought reconsideration of question already raised and argued by the parties and decided by the Hon'ble Tribunal" and that "such reconsideration is not competent under the provisions of the Act." (Pages 19-20 of its reply).

Rajasthan's Reply

Rajasthan has submitted that "no explanation is required."

5.7.2 **Order Of The Tribunal.** It is common experience that on all large dam projects, the actual cost differs from the estimated cost and is mostly in excess of the latter. The increase in cost is not uniform on all items of work but varies, often widely, from item to item. It may be appreciably larger in proportion on items which have elements of uncertainty and surprise as in the case of foundation excavation and treatment. In apportioning the cost of constructing a dam between the sharing parties, however, it is the total cost of the dam that is taken into account and not individual items of work.

No further clarification is necessary. No change is necessary in the Final Order of the Tribunal in this regard.

5.8.1 **Point 8 (Pages 21-25 Of The Reference).**—Maharashtra has requested for explanation and guidance on the following matters:—

(a) Whether in pursuance of the liberty given in last sentence of Para 10.15.1, it would be permissible for Gujarat and Rajasthan to so change the bed gradients so as to make the same different from the bed gradient of 1 in 12,000 upto the offtake of Saurashtra branch at mile 180 and 1 in 10,000 thereafter upto Gujarat —Rajasthan border?

(b) Whether the gradients of Navagam Canal decided by the Tribunal can be so changed by Gujarat and Rajasthan by mutual agreement as to get the level higher than the contemplated level of 131 ft. at Rajasthan border, and hence higher command, especially when according to the Tribunal, it has not been convincingly established that Navagam Canal with a flat gradient would function satisfactorily without the risk of siltation?

(c) Whether the gradients of the Navagam Canal can be so changed by Gujarat and Rajasthan by mutual agreement as to get the level at Rajasthan border, lower than the contemplated level of 131 ft., and thus irrigate the area by lift contrary to Clause 4 of the Agreement dated 12th July, 1974 as interpreted by the Tribunal?

(d) Whether in pursuance of the liberty given in the last sentence of *Para* 10.15.1 (*Page* 467), it would be permissible for Gujarat and Rajasthan to agree to the Rajasthan area not covered by flow by the Navagam Canal to be irrigated by flow from the Mahi-Kadana Complex, contrary to Clause 4 of the Agreement dated 12th July, 1974 as interpreted by the Tribunal?

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "it should not be permissible for Gujarat and Rajasthan to agree to change the gradient to such an extent that the Rajasthan area does not get covered by flow by the Navagam Canal, thereby allowing Rajasthan to irrigate these areas by flow from the Mahi-Kadana Complex. Madhya Pradesh submits that such a change will be against the very basis on which FSL 300 for the Navagam Canal has been allowed by this Hon'ble Tribunal." (Page 74 of its reply).

Gujarat's Reply

Gujarat has submitted that "it would be permissible for Gujarat and Rajasthan, by mutual agreement to change the bed gradients from those stipulated in the Tribunal's orders and to take the full supply level at Gujarat—Rajasthan border at a level higher or lower than RL 131 as the same would not adversely affect the rights or interests of other party States." It has also submitted that neither the interpretation of Clause 4 of the Agreement dated 12th July, 1974 nor the decision of the Tribunal "can be considered as adjudications of the rights of Gujarat and Rajasthan, such as they may be to provide for flow irrigation from the Mahi-Kadana Complex to Rajasthan areas not covered by flow irrigation by the Navagam Canal". (Pp. 22-23 of its reply).

Rajasthan's Reply

Rajasthan has stated that the Hon'ble Tribunal has permitted the States to change the canal slopes by mutual agreement if they so desire and that it is not understood what further explanation or guidance is needed by Maharashtra.

As regards (b) above, any change of slope will only be with a view to raising the full supply level of the canal at the border so that more area can be commanded by flow.

As regards (c) above, Rajasthan has in its submission before the Hon'ble Tribunal explained that lift irrigation is to be avoided as far as possible as it is much more expensive. It is not clear how Maharashtra apprehends that any lowering of the canal will ever be contemplated.

As regards (d) above, "the Agreement dated 12th July, 1974 does not deal with Mahi waters at all, which is the subject matter of a separate agreement. It is submitted that Rajasthan is free to utilise the waters of the river Mahi in any area as it considers to its best advantage." (Pp. 24-25 of its reply).

5.8.2 **Order Of The Tribunal.**—Once water, within the due share of Gujarat and Rajasthan, enters Navagam Canal with its FSL fixed at +300 at its head regulator, its subsequent deployment ceases to be the concern of Madhya Pradesh or Maharashtra. Although the Tribunal has prescribed a bed gradient for the canal, it is open to Gujarat and Rajasthan to alter it by mutual consent so that water reaches the border between the two States at the approximate level of RL 131.

As regards (d) above, Rajasthan having received its apportioned water at the border is free to utilise it in any manner it chooses. It is also free to irrigate areas not irrigable by Narmada water with water from any other source it can arrange.

No further clarification is necessary. No change is required in the Final Order in this regard.

5.9.1 **Point 9 (Pages 26-28 Of The Reference).**—The State of Maharashtra has submitted as follows:—

(a) In view of the fact that there is likely to be significant change in the use of facilities at different period, particularly after a period of 35 years;

(b) In view of the fact that after a period of 35 years the same water will be used both for irrigation as well as for generating power, but only through the canal bed power house; and

(c) In view of the fact that the Khosla Committee, although using the "Facilities Used Method" and quantity of water utilised, made a substantive change in the method inasmuch as it transferred for equivalent generation of power, the water used by the canal bed power house to the river bed power house;

the following guidance is solicited viz.—

(i) Whether after a period of 35 years when the river bed power house will be defunct, relief should not be given to Maharashtra out of the costs paid towards the Sardar Sarovar Dam and the appurtenant works for the power complex of the project;

(ii) Whether necessary provision should not be made for such relief by appropriate directions in the Final Order of the Hon'ble Tribunal: and

(iii) What guidance or directions should be given for review in terms of Clause (6) of the letter of the Government of India which has been accepted for apportioning the cost of the multipurpose project between power and irrigation?

Madhya Pradesh's Reply

"Regarding the submission of Maharashtra that after a period of 35 years the river bed power house will be defunct, Madhya Pradesh submits that the river bed power house will continue generating power (a) during good years when water will be surplus to the irrigation requirement (Clause IV(5) Page 763), (b) when Gujarat lets down water for its downstream use (Clause IX (vii) Page 771) and (c) if the three States, Madhya Pradesh, Maharashtra and Gujarat agree to let down water through the river bed power house by diverting part of their irrigation requirements. Madhya Pradesh submits that it is true that the river bed power house will be mostly defunct after a period of about 35 years, and therefore, the cost of that power house will have to be recovered by amortization as indicated by this Hon'ble Tribunal. (Pages 630 to 635 of the Report Vol. II)". (Pages 75-76 of its reply).

Gujarat's Reply

Gujarat has submitted that "the guidance sought by Maharashtra is in the context of the contingency of the river bed power house ceasing to function 35 years after the completion of the construction of the Navagam Dam". Gujarat states that "it is on that very basis that the Hon'ble Tribunal has considered the question of the sharing of the cost of Sardar Sarovar power complex." Gujarat has stated that what Maharashtra seeks is not any explanation or guidance but a re-consideration or review of the decision of this Hon'ble Tribunal on the question of the sharing of cost by the party States of the Sardar Sarovar power complex, which would not be competent.

Rajasthan's Reply

Rajasthan has submitted "that the guidance solicited by the State of Maharashtra is misconceived" and that "no such guidance is necessary or need be given."

5.9.2 **Order Of The Tribunal.**—As regards (i) and (ii), it should be noticed that after a period of over 35 years, although in a normal or deficit year there will be no water flowing down from Sardar Sarovar for generating power at the river bed power house, yet there would be some surplus years when power would be generated there. This power house, therefore, is not likely to be defunct for a long time. In any case, when it does become defunct, credit for the residual cost would be apportionable between the three States, Madhya Pradesh, Maharashtra and Gujarat, in the prescribed proportion. Maharashtra does not become entitled to any other relief.

As regards (iii) above, a review would be admissible only if there is a change in the stipulated use of water for irrigation and power, that is, if the interest of irrigation is sacrificed in favour of power or vice versa. This is neither contemplated nor provided for. The variation in the use of water for irrigation and power from period to period has been allowed for in the calculations given in Annexure XVII. 2 in the Report.

No further clarification is required. No change is necessary in the Final Order of the Tribunal in this regard.

5.10.1 **Advice Of Assessors.**—We have consulted our Technical Assessors Dr. M .R. Chopra, Shri Balwant Singh Nag and Shri C. S. Padmanabha Aiyar with regard to the subject matter of this Chapter. They advise us that they all entirely agree with the views expressed by us and the orders passed by us on all the points dealt with in this Chapter.

CHAPTER VI

REFERENCE NO. 5 OF 1978 BY THE STATE OF RAJASTHAN

6.1.1 In this Reference the State of Rajasthan seeks clarification/explanation/guidance on five points mentioned and dealt with in this Chapter.

6.1.2. **Point 1 (Pages 1-27 Of The Reference).**—Paragraph 7.6.18 of the Report reads as under:—

> "7.6.18 In the light of what has been stated in the foregoing paragraphs, an area of 6.33 lakh acres pertaining to Mahi project should be excluded from the command of Navagam Canal. Also, 2160 mcft (0.050 MAF) should be considered available from the Mahi for use in the canal command."

Rajasthan has averred that the above "findings of the Tribunal indicate that it has given a decision on the use and distribution of waters of river Mahi, which, it is submitted was not a subject matter before the Hon'ble Tribunal for adjudication." (page 13 of its reference).

Gujarat's Reply

Gujarat has submitted that "Rajasthan has not produced any material in support of its submission that the planning of Mahi Right Bank Canal Project Stage I was on the basis that only the water which would be available from the catchment in Gujarat would be utilised by the weir" and "Rajasthan has never raised any objection to the Mahi Right Bank Canal Project Stage I or to the use of Mahi waters for areas in Gujarat." Gujarat has submitted that the submission made by Rajasthan should be rejected, and has stated that "such reconsideration is not competent under the provisions of Section 5(3) of the Inter-State Water Disputes Act." (Pages 10-11, 15 and 24 of its reply).

It has further submitted that "the reference to Mahi waters made by the Hon'ble Tribunal in its Report is only for the limited purpose of allocating 27.25 MAF of Narmada Waters between Madhya Pradesh and Gujarat and not for adjudicating claims of Gujarat and Rajasthan in Mahi waters." (page 43 of its reply).

Madhya Pradesh's Reply

Madhya Pradesh has submitted that the agreement between Gujarat and Rajasthan of March 1966 (R/90) is only a bilateral agreement. It does not and cannot entitle Rajasthan to make a claim on Narmada waters over and above the 0.5 MAF allocated to it by the agreement dated 12th July, 1974 (page 107 of its reply).

It has further submitted that "the findings of this Hon'ble Tribunal regarding the Mahi command under question are clear and there is no case, for giving any clarification or modification as sought by Rajasthan." (page 113 of its reply).

Maharashtra's Reply

Maharashtra has stated that "the said agreement of 1966 provides for areas in Mahi basin to be fed from the Narmada waters and this part of the agreement is invalid, illegal and therefore not workable. Any arrangement concerning utilisation of Narmada waters has to be by an agreement between *all* the concerned States of Madhya Pradesh, Maharashtra and Gujarat and not by an agreement between Gujarat and Rajasthan alone.

The clauses in the agreement regarding transferring at a later date the Mahi areas to the Navagam canal command are thus not valid and binding on the concerned States who were not a party to the Agreement; and neither the party States in the Narmada water dispute nor the Narmada Water Disputes Tribunal is bound in any way to take cognizance of these clauses of the agreement. Rajasthan's whole argument based on these clauses of this agreement is untenable and invalid." (page 112 of its reply).

6.1.3 **Order Of The Tribunal.**—Paragraph 7.6.18 of the Report has to be viewed in the context of the appraisal which the Tribunal was making of the requirement and availability of water for the party States from *alternative sources*. The figures for Mahi

river have been discussed in the Report for purpose of reasoning on the issue of alternate sources and there is no decision of the Tribunal on the apportionment of water of the Mahi river between the concerned States.

The Tribunal has, in dealing with Points 10 and 12 of the Reference of Madhya Pradesh clarified that within its allocated share of water each party State is free to make such changes in the pattern of water use and in the areas to be benefited within or outside the Narmada basin in its territory as it may consider necessary.

In view of the above clarification no change is necessary in the Report.

6.2.1 **Point 2 (Pages 28-34 Of The Reference).**—Rajasthan has averred that the apportionment of cost of Navagam Canal between Rajasthan and Gujarat should be on cusec-mile basis alone on the slope fixed by the Tribunal instead of Rajasthan being required to bear the incremental cost due to a flatter gradient prescribed by the Tribunal than that proposed by Gujarat in addition to sharing of the cost on cusec-mile basis for the gradient proposed by Gujarat.

Gujarat's Reply

Gujarat has submitted that Rajasthan has in the name of seeking clarification really sought reconsideration or review of the allocation of costs of Navagam Canal between Gujarat and Rajasthan. (page 49 of its reply).

It has further submitted that "the submission of Rajasthan does not take into consideration the fact that the waters from dam at Navagam cannot reach Rajasthan unless it satisfies the irrigation needs of the area crossed by the Navagam Canal before reaching Rajasthan. Gujarat, therefore, submits that the prayer of Rajasthan should be rejected." (page 52 of its reply).

Madhya Pradesh's Reply

Madhya Pradesh has offered no comments on this point as it considers that the sharing of the cost of the Navagam Canal is the concern of Gujarat and Rajasthan. (page 125 of its reply).

Maharashtra's Reply

Maharashtra has offered no comments on this point.

6.2.2 **Order Of The Tribunal.**—The Tribunal has prescribed a flatter gradient for the canal than that proposed by Gujarat mainly to secure flow irrigation in most of Rajasthan's command area. With the gradient proposed by Gujarat, the area served in Rajasthan would be 1.62 lakh acres by flow and 2.05 lakh acres by lift. With the gradient prescribed by the Tribunal, the corresponding figures would be 3.16 lakh acres by flow and 0.51 lakh acres by lift. The accrual of benefit to Rajasthan and its liability to pay for such benefit has to go hand in hand. The contention of Rajasthan is, therefore, not acceptable. No change is necessary in the Final Order on this account.

6.3.1 **Point 3 (Pages 35-36 Of The Reference).**—Rajasthan has suggested that Gujarat and Madhya Pradesh should inform the Narmada Control Authority whenever surplus water in the filling period is anticipated based on gauge readings at Punasa and upstream of Navagam instead of when water actually starts going waste to the sea.

Gujarat's Reply

Gujarat has submitted that "it will perhaps be difficult to anticipate whether there will be surplus water in the filling period on the basis of gauges being observed at Punasa and upstream of Navagam." It has further submitted that "the Hon'ble Tribunal may consider the submission of Rajasthan as it deems fit." (page 53 if its reply).

Madhya Pradesh's Reply

Madhya Pradesh has submitted that "Rajasthan's plea in the matter may be rejected."(page 127 of its reply).

Maharashtra's Reply

It is Maharashtra's submission that surplus water in filling period or spills below the last reservoir in Madhya Pradesh does not connote water surplus to the system, as it is only when Sardar Sarovar dam is spilling after generation of full power that there is excess for utilisation by the States. (page 114 of its reply).

6.3.2 **Order Of The Tribunal.**—Whenever gauge readings at Punasa or at gauging stations downstream of it give a reliable indication that water is likely to spill at Sardar Sarovar Dam to an extent which would result in wastage to sea, it would be in order to take anticipatory action in utilising to the extent feasible water that would otherwise go waste to sea. The first sentence of the second paragraph of Clause IV, Sub-clause 5 in the Final Order should therefore be modified to read as under:—

> "Gujarat is, therefore, directed that whenever water starts going waste to sea without generating power or based on the information received from upstream gauging stations, it anticipates that water would so go waste, it shall inform the Narmada Control Authority (hereinafter referred to as the Authority) and designated representatives of all the concerned States."

6.4.1 **Point 4 (Page 37 Of The Reference).**—Rajasthan has sought clarification that excess utilisation by Gujarat and Rajasthan owing to inability of Madhya Pradesh to use its share should not require any adjustment in the following year as no shortage would have been caused to Madhya Pradesh.

Gujarat's Reply

Gujarat has submitted that such excess utilisation should not be required to be adjusted in the following year. (page 55 of its reply).

Madhya Pradesh's Reply

Madhya Pradesh has submitted that under Clause IV (5) of the Final Order use of surplus water going waste to sea by the States including Gujarat and Rajasthan is provided for. Madhya Pradesh will not be free to use Narmada Waters as it likes. It has pointed out that "no further provision in the Final Order of this Hon'ble Tribunal is, therefore, called for." (page 128 of its reply).

Maharashtra's Reply

Maharashtra has submitted that "the Tribunal cannot sit in appeal over its own decision and that what Rajasthan seeks to do is not permissible under the statutory scheme of the Inter-State Water Disputes Act, 1956" and has further submitted that "any withdrawals by a State in excess of its authorised share, for any reason at any time, should be accounted for and adjusted in the following year." (page 115 of its reply).

6.4.2 **Order Of The Tribunal.**—If for any reason Madhya Pradesh is unable to use its share of water in any year and that water cannot be stored in any reservoir thereby spilling at Sardar Sarovar, such surplus water shall be disposed of as in Clause IV (5) of the Final Order as modified under Point 6 of Reference of Gujarat. Therefore, no further change is necessary in the Final Order.

6.5.1 **Point 5 (Pages 38-39 Of The Reference).**—Rajasthan has sought clarification as to the manner in which utilisation is to be measured and excess and shortage adjusted in the case of Maharashtra.

Gujarat's Reply

Gujarat has submitted that the measurement of utilisation by the various States and adjustment of excesses and shortages are to be done as per detailed procedure that may be prescribed by the Narmada Control Authority. (Page 56 of its reply).

Madhya Pradesh's Reply

Madhya Pradesh has submitted that Maharashtra cannot make use of the carryover capacity in the valley, except for power generation at Sardar Sarovar power house.

Madhya Pradesh has further submitted that the method of measuring utilisation from medium, minor and pumping schemes has been laid down by the Hon'ble Tribunal and no further directions are necessary. (page 128 of its reply).

Maharashtra's Reply

Maharashtra has submitted that it proposes to utilise its share of water by constructing small storage works and pumping schemes, and guidelines for water accoun ing for minor irrigation works and pumping schemes have been set out by the Tribunal and therefore there should be no difficulty in accounting for the utilisation in Maharashtra. (page 105-106 of its reply).

6.5.2 **Order Of The Tribunal.**—Item (vi) of Clause IX of the Final Order lays down the procedure for figuring out the utilisation of water in a year by the party States and that includes Maharashtra.

The excess and shortage in a year has to be shared by Maharashtra, like other party States, as provided under item (ii) of Clause IX of the Final Order, which reads:—

> "(ii) Surplus or deficit utilisable supplies in a water year shall be shared to the extent feasible by the party States in the same proportion as their allotted shares in (i) above."

Owing to constraint of location, it is possible that the extent of excess or shortage in Maharashtra may not correspond to that in the rest of the river valley. It is for this reason that the sharing has been ordered within limitation of "to the extent feasible."

No change is necessary in the Final Order on this account.

6.6.1 **Advice Of Assessors.**—We have consulted our Technical Assessors, Dr. M. R. Choptra, Shri Balwant Singh Nag and Shri C. S. Padmanabha Aiyar with regard to the subject matter of this Chapter. They advise us that they all entirely agree with the views expressed by us and the Orders passed by us on all the points dealt with in this Chapter.

CHAPTER VII

ORDER AS TO COSTS AND OTHER INCIDENTAL MATTERS

7.1.1 **Order As To Costs.**—Directions for costs with regard to the reference under Section 5(1) of the Inter-State Water Disputes Act, 1956, were given in Chapter XIX of the Original Report. We propose to give similar directions for costs with regard to the references under Section 5(3) of the said Act. For this purpose, we direct that in Clause XV of the Final Order the following modifications be made:—

(a) The existing Clause XV will become Clause XV, Sub-clause (i);

(b) At the end of the said Sub-clause (i) of Clause XV, the following sentence be added:—

These directions relate to the references under Section 5(1) of the Inter-State Water Disputes Act, 1956;

(c) After Sub-clause (i) of Clause XV, the following Sub-clause (ii) should be added:—

"(ii) The States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan shall bear their own costs of appearing before the Tribunal in the references under Section 5(3) of the said Act. The expenses of the Tribunal in respect of the aforesaid references shall be borne and paid by the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan in equal shares".

7.2.1 **Acknowledgements.**—In the first place, we desire to express our high appreciation of the valuable advice and assistance given by our Assessors, Dr. M. R. Chopra, Shri Balwant Singh Nag, Shri Padmanabha Aiyar, Dr. Ambika Singh and Dr. Hukeri.

We must also express our indebtedness to all the learned Counsel appearing on behalf of the party States and the Union of India for the very careful and elaborate arguments they have addressed in this case.

We should also like to place on record our appreciation of the excellent work done by the officers and staff, both on the technical and administrative side. Shri P. R. Bose, Secretary of the Tribunal and Shri N. K. Sarma, Technical Director have been conspicuous in the discharge of their respective duties with great merit and dedication. It would be invidious to mention individuals from among the members of our staff but the Tribunal would like to place on record its high appreciation of the high quality of the work and single minded devotion displayed by each and every member of the staff.

CHAPTER VIII

The modifications deemed to be made in the Report of the Tribunal (except the Final Order) forwarded under Section 5(2) of the Inter-state Water Disputes Act, 1956, as a result of the explanation/guidance given by the Tribunal under Section 5(3) of the said Act are set forth below:—

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Chapter III

In Table 3·1	Item 2	Col 4, *substitute* "640" *for* "594"
,, ,, ,,	,,	Col. 5, *substitute* "640" *for* "594"
,, ,, ,,	Item 3	Col. 4, *substitute* "N.A." *for* "2270"
,, ,, ,,	,,	Col. 4, *substitute* "N.A". *for* "2021"
,, ,, ,,	,,	Col. 4, *substitute* "N.A". *for* "80"
,, ,, ,,	,,	Col. 4, *substitute* "N.A." *for* "30"
,, ,, ,,	,,	Col. 5, *substitute* "3820" *for* "4401"
,, ,, ,,	Total	*substitute* "37,610" *for* "38,145"
,, ,, ,,	*Add* footnote :	"The statewise areas are as per figures agreed to by the States before the Tribunal (Ex. C-4)".
In Table 3·3		*substitute* "85,858" *for* "85,859"
,, ,, ,,		*substitute*, "1,658" *for* "1,538"
,, ,, ,,		*substitute* "9,894" *for* "11,399"
,, ,, ,,		*substitute* "97,410" *for* "98,796"
In the footnote to Table 3·3		*Delete* "Report of the Irrigation Commission, 1972, Vol. III, Part I page 323".
		Add "as Per figures agreed to by the States before the Tribunal (Ex. C-4)".
In Table 3·16		*substitute* "1·765" *for* "2·33"
,, ,, ,,		*substitute* "10·035"" *for* "10·60"
In the footnote to Table 3·16		*Delete* "Irrigation Commission Report Vol. III, Part I, page 337."
		Add "As per figures agreed to by the States before the Tribunal (Ex C-4)".

Chapter IV

In Paragraph 4·1·17	*substitute* "30th June" *for* "31st June".

Chapter V

In Paragraph 5·3·2	*substitute* "81·357 lakh acres" *for* "81·357 acres".
In Paragraph 5·8·1	*substitute* "7·5037" for "7·44"
,, ,, ,,	*substitute* "1·174" *for* "11·110".
,, ,, ,,	*substitute* "6·300" *for* "6·236".
,, ,, In the tabulation of CA of Gujarat.	*substitute* "6·300" *for* "6·236"
,, ,, ,,	*substitute* "52·227" for "57·291".
In Paragraph 5·8·3	*substitute* "3·894" *for* "4·178".
,, ,, ,,	*substitute* "2·920" *for* "3·133" (at two places)
In Paragraph 5·8·3	*substitute* "57·227" *for* "57·291".
,, ,, ,,	*substitute* "60·147" *for* "60·424"
In Paragraph 5·8·8	*substitute* "60·147" *for* "60·424".
,, ,, ,,	*substitute* "9·022" *for* "9·064".
,, ,, ,,	*substitute* "51·125" for "51·360"
In Paragraph 5·8·9	*substitute* "51·125" *for* "51·36" (at two places).
,, ,, ,,	*substitute* "1·329" *for* "1·34".
,, ,, ,,	*substitute* "49·796" *for* "50·02"
In Paragraph 5·9·1	*substitute* "49·796" *for* "50·02" (at two places)

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In Statement 5·5, Item 3	*substitute* "2·92" *for* "3·133".
,, ,, ,,	*substitute* "0·236" *for* "0·253"
,, ,, ,,	*substitute* "4·862" *for* "4·872"
In Statement 5·5 Item 4	*substitute* "0·729" *for* "0·739"
,, ,, ,,	*substitute* "4·133" *for* "4·147"
In Statement 5·5 Item 5	*substitute* "0·107" *for* "0·149"
,, ,, ,,	*substitute* "4·026" *for* "3·998"
In Statement 5·6 Item 2(d)	*substitute* "1·174" *for* 1·110"
,, ,, ,,	*substitute* "6·300" *for* "6·236" (at two places)
,, ,, ,,	*substitute* "57·227" *for* "57·291"
,, ,, ,, Item 3	*substitute* "3·894" *for* "4·178"
,, ,, ,,	*substitute* "2·92" *for* "3·133"
,, ,, ,,	*substitute* "60·147" *for* "60·424"
,, ,, ,, Item 4	*substitute* "60·147" *for* "60·424"
,, ,, ,,	*substitute* "9·022" *for* "9·064"
,, ,, ,,	*substitute* "51·125" *for* "51·360"
,, ,, ,, Item 5	*substitute* "1·329" *for* "1·340"
,, ,, ,,	*substitute* "49·796" *for* "50·02"

Chapter VI

In Paragraph 6·5·3	*substitute* "49·796" *for* "50·02"
,, ,, 6·5·9	*substitute* "49·796" *for* "50·02"
,, ,, ,,	*substitute* "10·878" *for* "10·927"

Chapater VIII

In Paragraph 7·9·8	*substitute* 1, 17,370 "*for* "1,11,070"
,, ,, ,,	*substitute* "7,50,370" *for* "7,44,070"

Chapter IX

In sub-para of Paragraph 9·9·6	*substitute* "10·878" *for* "10·927
,, ,, ,,	*substitute* "11·655" *for* "11·694
,, ,, ,,	*substitute* "31·065" *for* "31·1
In Paragraph 9·9·7	*substitute* "11·655" *for* "11·694
,, ,, ,,	*substitute* "62·5" *for* "62·41"
,, ,, ,,	*Insert* "upto Sardar Sarovar dam site" between the words "that" and "the"
,, ,, ,,	*substitute* "544" *for* "180"
,, ,, ,,	*substitute* "1·60%" *for* "0·53%"
,, ,, ,,	*substitue* "32,798" *for* "33,150"
,, ,, ,,	*substitute* "96,55%" *for* "97·59%"

At the end of Paragraph 9.10.8 (Item (i) *Insert* new sub-paragraph :—

"Further, it is clarified that the apportionment relates to actual withdrawals and not consumptive use".

" " (Item (5) *Delete* sub-paragraph :—

"Gujarat is, therefore .....presumptive rights".

Add a sub-paragraph :—

"Gujarat is, therefore, directed that whenever water starts going waste to sea without generating power, or based on the information received from upstream gauging stations, it anticipates that water would so go waste, it shall inform the Narmada Control Authority (hereinafter referred to as the Authority) and designated representatives of all the concerned States. Gujarat shall also inform them when such flows cease. During the period of such flows, the party States, whose reservoirs are spilling and the spill water cannot be stored elsewhere may utilise such flows from the said reservoirs as they like and such utilisation by the party States will not count towards allotment of supplies to them, but use of such water will not establish any prescriptive rights."

At the end of Paragraph 9.10.8 after Item (5)—*Add* as Item (6):—

"(6) Within its share of water, each party State is free to make such changes in the pattern of water use and in the areas to be benefited within or outside the Narmada Basin in its territory as it may consider necessary".

In Paragraph 9.11.9 *substitute* "the date of publication of the Decision of the Tribunal in the Official Gazette" for "the date of the Order of the Tribunal".

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Chapter X

In Paragraph 10.15.1, *add* at the end "Gujarat and Rajasthan shall be at liberty to decide the canal capacity required by each in the light of water which would be expected to be available within their share".

In the last Paragraph *substitute* "10.16.1" *for* "10.15.1"

In Annexure X-5 in the footnote, *substitute* "paragraph 10.10.10" for "Page 24 of note on FSL of Canal" (at two places).

Chapter XI

In Paragraph 11.16.13 *substitute* "Sardar Sarovar" *for* "Navagam".

In Paragraph 11.16.13 *add* a sentence "Gujarat shall take up and complete the construction of the dam accordingly" after the sentence ending with 'Maximum Water Level + 460".

In Statement 11.11, Below the footnote *add* the following:—

"Explanatory notes on columns of Working Table of Sardar Sarovar:

In preparing the Working Table for Sardar Sarovar to determine the storage required for regulation-cum-carryover, two synthetic years have been constructed; a surplus year which fully fills the carryover capacity and the succeeding lean year which becomes successful by utilising the full carryover storage. They are not based on agreed inflow series.

The columns in the Working Table are explained below:—

A—Surplus year after a lean year—

In the synthetic surplus year, the yield in the valley is taken to be 37.58 MAF (29.29 + 8.29 carryover). In a year of 75 per cent dependable flow, the inflow from the entire catchment above Sardar Sarovar dam is 27.01 MAF and that below Maheshwar 2.96 MAF. Therefore, the proportionate yield in the synthetic surplus year below Maheshwar would be 4.12 MAF $\frac{2.96}{27.01} \times 37.58$). The use below Maheshwar is 1.852 MAF leaving a balance of 2.268 MAF.

Column 2, Storage at start of month:—The surplus year has been assumed to commence with empty reservoir and end up with the carryover capacity of 2.81 MAF fully filled.

Column 3, Release from Maheshwar:—The yield below Maheshwar leaves 2,268 MAF after use of 1.852 MAF as shown hereinabove. The reservoir is proposed to have a full carryover of 2.81 MAF after use of 10 MAF by Gujarat and Rajasthan including evaporation loss. Therefore, the water which will pass down from Maheshwar is 10.542 MAF (10.00 + 2.81--2.268) which is shown as the total of Col. 3. In a 75% year, 0.677 MAF $\frac{8.22}{12}$ per month is assumed as the average regulated release. The same release is assumed in the months of July and August as it would not be known during these months whether the year is a surplus or a lean year. The releases from November to June are also assumed at the rate of 0.677 MAF. The balance quantity of 3.772 MAF (10.542—10 × 0.677) is considered as the surplus inflows which spill over Maheshwar in September and October as unregulated flows.

Column 4, *Net inflow from catchment below Maheshwar*:—The available inflow of 2.268 MAF has been distributed monthwise in the same proportion as the inflow between Mortaka and Garudeshwar (MP-312, Volume V Page 86 on the basis of 22 years average). The requirement of Maharashtra of 0.25 MAF has been assumed to be drawn in the three months of August, September and October. This assumes that utilisation by Madhya Pradesh is so regulated as not to disturb the monthly natural pattern of flow into Sardar Sarovar.

Column 5, *Needs of Sardar Sarovar*:—As worked out under Statement 11.10.

Column 6, *Storage at the end of the month*:—It is considered that the full carryover storage of 2.81 MAF is secured at the end of the year.

B—Deficit year made successful by use of full carryover

In a deficit year the yield in the valley is assumed to be 21.0 MAF (29.29—8.29) and the yield available below Maheshwar *pro rata* would be 2.30 MAF (i.e. $\frac{2.96}{27.01} \times 21.00$). The net yield available below Maheshwar works out to 0.448 MAF (2.30—1.852 use below Maheshwar). Thus the releases needed from Maheshwar are 6.742 MAF (10—0.448—2.81). The carryover of 2.81 available from the previous year is completely used up.

Column 2, *Storage at the start of the year*:—Reservoir has been assumed with full carryover of 2.81 MAF.

Column 3, *Releases from Maheshwar*:—Releases from Maheshwar in the four monsoon months are considered to be 0.677 MAF as for a normal year. At the end of the monsoon period, the available supplies are to be reviewed and the water to be let down each month determined. The releases in April, May and June are adjusted to suit the irrigation needs as there is no stored water left in Sardar Sarovar in these months.

Column 4, Net inflow catchment below Maheshwar:—This has been calculated as explained in Column 4 of Surplus Year with an availability of 0.448 MAF.

Column 5—As worked out under Statement 11.10.

Column 6—The full carryover storage of 2.81 assumed at the start is fully utilised leaving the reservoir empty."

Chapter XIV

In Paragraph 14.9.1 Item (8)—*add* at the end "If and when Sardar Sarovar power complex gets linked with the Regional or National Power Grid, the operation of the Sardar Sarovar power complex will be governed by such altered system conditions. But in that event the Narmada Control Authority should arrange to take such steps as are necessary to enable the three States of Gujarat, Madhya Pradesh and Maharashtra to get their entitlement of power and energy from the Sardar Sarovar power complex according to these orders.

In Paragraph 14.9.1, Item (10) *substitute* "The party States shall make available in annual instalments their share of funds required according to approved construction programme and take all the necessary steps to complete the Sardar Sarovar dam within ten years of the date of publication of the Final Order and Decision of the Tribunal in the Official Gazette." for the sentence "This amount shall be paid in annual instalments until the capital works are completed."

Statement 14.3, Revised as in Chapter III of Further Report.

Annexure XIV-8, Revised as in Chapter III of Further Report.

Chapter XV

In Paragraph 15.2.3, *add* at the end of item (ii) "The surplus water shall first be utilised for filling up the reservoirs to capacity and surplus water shall be utilised for irrigation and other purposes only after that has been ensured".

In Paragraph 15.2.3, Item (v), *add* at the end of first sentence "subject to water being available in the storages in Madhya Pradesh after taking into account the proportionate requirements of Madhya Pradesh."

In Paragraph 15.2.3, Item (vii, *add* sub-para at the end "The water drawn from Sardar Sarovar for use in Madhya Pradesh and Maharashtra, as the case may be shall reckon against the share of water of that State".

After Paragraph, 15.8.3, *insert* a new paragraph "15.8.4 Madhya Pradesh shall take up and complete the construction of Narmadasagar dam with FRL 262.13m (860 ft) concurrently with or earlier than the construction of Sardar Sarovar dam."

Chapter XVI

In Paragraph 16.4.1 Clause II(2), *substitute* "as also those affected by the backwater effect resulting from MWL 460 ft." for "including backwater effect".

In Paragraph 16.4.1 Clause III(2), *Delete* last two sentences "Madhya Pradesh..... by them."

In Paragraph 16.4.1 Clause IV(1) *substitute* "6147" for "7366"
,, "158" for "173"
,, "456" for "467"

In Paragraph 16.4.1 Clause IV(7), *add* at the end of the first sentence "the irrigation facilities being provided by the State in whose territory the allotted land is situated".

In Paragraph 16.4.1 Clause V(2)(i), *in* the last sentence substitute "the area affected by backwater resulting from MWL" for "backwater effect".

In Paragraph 16.4.1 Clause V(2)(ii), *substitute* "as also those affected by the backwater effect resulting from MWL" for "including backwater effect".

In Paragraph 16.4.1 Clause V(5), in place of the existing Clause *substitute* "Gujarat shall pay to Madhya Pradesh and Maharashtra in accordance with the respective Land Revenue Codes, the amount of land revenue, payable every year for the lands in their respective territories acquired for Gujarat or conveyed to it, at the rates prevailing in Madhya Pradesh and Maharashtra respectively from time to time."

In Paragraph 16.4.1 after Clause V(5), *insert* new Clause "V(6): Madhya Pradesh and Maharashtra, as the case may be, shall remit each year to Gujarat any revenue which they may derive from the cultivation of lands which get periodically exposed in Sardar Sarovar, after deducting collection charges for the same."

In Paragraph 16.4.1 *substitute* "V(7)" for "V(6)"
,, ,, ,, *substitute* "V(8)" for "V(7)"
,, ,, ,, *substitute* "V(9)" for "V(8)"
,, ,, ,, *substitute* "V(10)" for "V(9)"
,, ,, ,, *substitute* "V(11)" for "V(10)"
,, ,, ,, *substitute* "V(12)" for "V(11)"

Chapter XVII

After Paragraph 17.2.7, *insert* new paragraph "17.2.8 Madhya Pradesh and Maharashtra shall contribute a *pro rata* share to the irrigation component of the cost of Sardar Sarovar dam as also towards its operation and annual maintenance, for water drawn from Sardar Sarovar for use in their territory. The *pro rata* share shall be in proportion of the quantity of water so drawn to 9.5 MAF. The amount so contributed shall be credited to Gujarat and Rajasthan in the ratio of 18 : 1".

In Paragraph 17.3.1 substitute "17.2.8" for "17.2.7"

Chapter XVIII

In Paragraph 18.6.1 Clause 1(2), *add* "Power Department or the State Electricity Board" between the words "Irrigation Department" and "appointed".

In Paragraph 18.6.1 end of Clause 4(2), *add* "However, if any particular item under this clause cannot be disposed of at two successive meetings owing to the absence of one or more members from the party States it shall be disposed of under Clause 3."

In Paragraph 18.6.1 Clause 7, *delete* last sentence "The costs of construction..... are shared".

In Paragraph 18.6.1 Clause 7, Number the existing paragraph as Clause 7(1).

In Paragraph 18.6.1 Clause 7, *insert* new Clause "7(2) The costs of construction of the storages, power installations, diversion works, head-works and canal networks shall be borne wholly by the State Governments in whose territory the work is located except for works whose cost has been ordered by the Tribunal to be shared between two or more party States. Where the capital cost is thus shared, the operation and maintenance cost shall also be shared in the same proportion."

In Paragraph 18.6.1 Clause 8(3)(i), *add* "the Central Electricity Authority" between the words "Central Water Commission" and "and Planning Commission".

In Paragraph 18.6.1 Clause 8(5), *delete* at the end "and within reasonable time."

In Paragraph 18.6.1 Clause 13, *add* at the end "In urgent cases the Chairman of the Review Committee may on the application of the party State, grant stay of any order of the Authority pending final decision on review".

In Paragraph 18.6.1 Clause 14(3), *add* at the end "It is expected that the decisions of the Review Committee will be by consensus. Failing consensus it shall be by majority of votes of members including the Chairman."

In Paragraph 18.6.1 Clause 15, in place of the existing clause, *substitute "Clause 15: Construction Outside Jurisdiction Of The Authority.*

The planning and construction of the projects will be carried out by each State through its own agencies, save and except to the extent prescribed in Clause 16."

In Paragraph 18.6.1 after Clause 15, *insert new Clause* 16. *"Clause* 16. *Supervisory Function Of The Authority Over Construction Of Sardar Sarovar Project.*

(1) The four party States have financial commitment in respect of Unit I—Dam and Appurtenant works of Sardar Sarovar project and three of them, namely, Gujarat, Maharashtra and Madhya Pradesh have such commitment in respect of Unit III—Power complex of the Project. With a view to ensuring efficient, economical and early execution of these units of the project, and taking into account the financial commitments of the party States, it is desirable and necessary that a Construction Advisory Committee should be constituted for the purpose. We, therefore, order that such an Advisory Committee to be called Sardar Sarovar Construction Advisory Committee should be set up within three months from the date of publication of the Decision of the Tribunal in the Official Gazette.

(2) The Construction Advisory Committee shall have a whole-time Secretary of the rank of Chief Engineer to be appointed by Union of India and such other staff as may be necessary.

(3) The Committee shall comprise—

(i) The Secretary to the Government of India, in charge of Irrigation—Chairman.

(ii) Chairman, Central Water Commission (CWC), or a Member of the CWC representing him in case the Chairman is unable to attend a meeting.

(iii) Chairman, Central Electricity Authority (CEA), or a Member of the CEA representing him in case the Chairman is unable to attend a meeting.

(iv) Chairman, Narmada Control Authority (NCA) or an Independent Member of NCA representing him in case the Chairman is unable to attend a meeting.

(v) Joint Secretary (Financial Adviser) in the Union Ministry of Agriculture and Irrigation (Department of Irrigation).

(vi) Secretaries in charge of Finance Department of Governments of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan.

(vii) Secretaries in charge of Irrigation Department of Governments of Gujarat and Rajasthan.

(viii) Secretaries in charge of Power Department of Madhya Pradesh, Maharashtra and Gujarat.

(ix) Secretaries in charge of Revenue Department or any other department concerned with land acquisition, of Madhya Pradesh, Maharashtra and Gujarat.

(x) General Manager or Chief Engineers of Gujarat in charge of the project and Chief Engineers of Madhya Pradesh, Maharashtra and Rajasthan concerned with the project.

(xi) Chairman, State Electricity Boards of Madhya Pradesh, Maharashtra and Gujarat.

(xii) Financial Adviser, Sardar Sarovar Project. The Chairman may co-opt any other Member for any particular meeting.

(4) The Sardar Sarovar Construction Advisory Committee shall:—

(i) scrutinise the project estimates prepared for these works, advise necessary modifications and recommend the estimates for the administrative approval of the concerned Governments;

(ii) examine and make recommendation on all proposals pertaining to technical features and designs as may be referred to it by any of the party States and where necessary consult experts for the purpose;

(iii) examine and make recommendation on the programme of construction of different parts of the project in a co-ordinated manner, keeping in view the funds available, the economics of the project and the desirability of obtaining quick results;

(iv) examine the requirement of funds for the construction of works and other purposes according to the approved programme and make necessary recommendations;

(v) examine and recommend, from time to time, the delegation of such powers, both technical and financial, as it may deem necessary for the efficient execution of the project, to the General Manager/Chief Engineers, Superintending Engineers, Executive Engineers and Sub-Divisional Officers engaged in the execution of the project;

(vi) examine and, where necessary, recommend specifications for various classes of work;

(vii) examine and make recommendation on all sub-estimates and contracts, the cost of which exceeds the powers of sanction of the General Manager/Chief Engineers;

(viii) review progress reports, both for works and expenditure from the General Manager/Chief Engineers and recommend, where necessary, steps to be taken to expedite the work.

(5) The headquarters of the Construction Advisory Committee will be fixed by the Committee.

(6) The Construction Advisory Committee will frame rules regarding procedure and delegation of power for the purpose of carrying out its business.

(7) The recommendations of the Construction Advisory Commitee shall be conveyed to the Governments concerned by the Committee and copies sent to the Review Committee and Narmada Control Authority for information.

(8) The recommendations of the Construction Advisory Committee shall normally be accepted by the State Governments concerned. In the event of any disagreement, the matter shall be referred to the Review Committee and the decision of the Review Committee shall be final and binding on all the concerned States.

In all matters relating to the construction of the Sardar Sarovar Dam and appurtenant works (Unit I), Power House and generating machinery (Unit III) and Transmission lines to feed power to Madhya Pradesh, Maharashtra and Gujarat upto the next substation in each case, the Narmada Control Authority will carry out only such functions as do not specifically devolve upon the Construction Advisory Committee set up under Clause 16.

(9) The Construction Advisory Committee will be dissolved after three years of the completion of construction of Units I and III of the Sardar Sarovar Project. The post-construction management of Units I and III will be by Gujarat under the supervision of the Narmada Control Authority.

(10) The expenditure of the Construction Advisory Committee will be borne by the four States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan equally.

In Paragraph 18.6.1 Clause 16, *substitute* "Clause 17" for "Clause 16".

In Paragraph 18.6.1 Clause 17, *substitute* "Clause 18" for "Clause 17"

In Paragraph 18.6.1 Clause 17, *delete* the words "in CMP 234 of 1977 and CMP 201 of 1977" in the first paragraph.

Delete the phrase "in terms of the CMP's in second paragraph and substitute "accordingly" in its place.

CHAPTER IX

FINAL ORDER AND DECISION OF THE NARMADA WATER DISPUTES TRIBUNAL

In Chapters I to VIII of this Further Report, Volume I, the Chairman of the Tribunal, Shri V. Ramaswami, and Member, Shri M. R. A. Ansari, have expressed their opinion on all the important points arising in these References. Shri A. K. Sinha, another Member, has expressed on a few points a somewhat different opinion which is reproduced in Volume II of this Further Report. In accordance with the majority opinion, the Tribunal gives the following modified Decision under Section 5(3) of the Inter-State Water Disputes Act 1956 read with Section 5(4) of the same Act.

Final Order and Decision of the Tribunal

CLAUSE I.—*Date of Coming Into Operation Of The Order.*

This Order shall come into operation on the date of publication of the Decision of this Tribunal in the Official Gazette under Section 6 of the Inter-State Water Disputes Act, 1956.

CLAUSE II.—*Determination Of The Utilisable Quantum Of Narmada Waters At Sardar Sarovar Dam Site.*

The Tribunal hereby determines that the utilisable quantum of waters of the Narmada at Sardar Sarovar Dam Site on the basis of 75 per cent dependability should be assessed at 28 Million Acre Feet (34,537.44 M.cu.m.).

CLAUSE III.—*Apportionment Of The Utilisable Quantum Of Narmada Waters.*

(1) The Tribunal hereby orders that out of the utilisable quantum of Narmada waters, (a) Madhya Pradesh is entitled to a share of 18.25 Million Acre Feet (22,511.01 M.cu.m.), (b) Gujarat is entitled to a share of 9 Million Acre Feet (11,101.32 M.cu.m.), (c) Rajasthan is entitled to a share of 0.5 Million Acre Feet (616.74 M.cu.m.) and (d) Maharashtra is entitled to a share of 0.25 Million Acre Feet (308.37 M.cu.m.);

(2) Further, it is clarified that the apportionment relates to actual withdrawals and not consumptive use;

(3) Within its share of water, each party State is free to make such changes in the pattern of water use and in the areas to be benefited within or outside the Narmada basin in is territory as it may consider necessary.

CLAUSE IV.—*Order With Regard To Excess Waters and Sharing Of Distress.*

(1) The utilisable flow of Narmada in excess of the 28 Million Acre Feet (34,537.44 M.cu.m.) of utilisable flow in any water year, i.e., from 1st of July to 30th of June of next calendar year is apportioned in the following ratios of allocation i.e., 73 for Madhya Pradesh, 36 for Gujarat, 1 for Maharashtra and 2 for Rajasthan;

(2) In the event of the available utilisable waters for allocation in any water year from 1st of July to 30th June of the next calendar year falling short of 28 Million Acre Feet (34,537.44 M.cu.m.), the shortage should be shared between the various States in the ratio of 73 for Madhya Pradesh, 36 for Gujarat, 1 for Maharashtra and 2 for Rajasthan;

(3) The available utilisable waters in a water year will include the waters carried over from the previous water year as assessed on the 1st of July on the basis of stored waters available on that date;

(4) The available utilisable waters on any date will be inclusive of return flows and exclusive of losses due to evaporation of the various reservoirs;

(5) It may be mentioned that in many years there will be surplus water in the filling period after meeting the storage requirements and withdrawals during the period. This will flow down to sea. Only a portion of it will be utilisable for generating power at

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Sardar Sarovar river-bed power-house, and the rest will go waste. It is desirable that water, which would go waste without even generating power at the last river-bed power-house, should be allowed to be utilised by the party States to the extent they can.

Gujarat is, therefore, directed that whenever water starts going waste to sea without generating power, or based on the information received from upstream gauging stations, it anticipates that water would so go waste, it shall inform the Narmada Control Authority (hereinafter referred to as the Authority) and designated representatives of all the concerned States. Gujarat shall also inform them when such flows cease. During the period of such flows, the party States, whose reservoirs are spilling and the spill water cannot be stored elsewhere, may utilise such flows from the said reservoirs as they like and such utilisation by the party States will not count towards allotment of supplies to them, but use of such water will not establish any prescriptive rights.

CLAUSE V.—*Period Of Operation Of The Order Of Apportionment.*

Our Orders with regard to the equitable allocation in Clauses III and IV are made subject to review at any time after a period of 45 years from the date of publication of the Decision of the Tribunal in the Official Gazette.

CLAUSE VI.—*Full Supply Level Of The Navagam Canal.*

The Tribunal hereby determines that the Full Supply Level of Navagam Canal off-taking from Sardar Sarovar should be fixed at 91.44 m., (+300') at its head regulator with a bed gradient of 1 in 12,000 from head to 290 km (mile 180), tht is, upto the offtake of Saurashtra branch. From that point to Rajasthan border the bed gradient should be 1 in 10,000. These bed gradients may be changed by Gujarat and Rajasthan by mutual agreement. Gujarat and Rajasthan shall be at liberty to decide the canal capacity required by each in the light of water which would be expected to be available within their share.

CLAUSE VII.—*Full Reservoir Level And Maximum Water Level Of The Sardar Sarovar Dam.*

The Tribunal hereby determines that the height of the Sardar Sarovar Dam should be fixed for Full Reservoir Level +138.68 m., (+455') and Maximum Water Level at +140.21 m., (+460'). Gujarat shall take up and complete the construction of the dam accordingly.

CLAUSE VII.—*Sharing Of Costs And Benefits.*

(1) (i) The Tribunal hereby determines that out of the net power produced at Navagam at canal head and river bed power houses on any day the share of Madhya Pradesh will be 57 per cent; Maharashtra's share will be 27 per cent and Gujarat's share will be 16 per cent.

(ii) The party States shall make available in annual instalments their share of funds required according to approved construction programme and take all the necessary steps to complete the Sardar Sarovar Dam within ten years of the date of publication of the Final Order and Decision of the Tribunal in the Official Gazette.

(2) The Tribunal makes the following further Orders:—

(i) The power generated in the River Bed and Canal Power Houses at Navagam will be integrated in a common switchyard.

(ii) Madhya Pradesh and Maharashtra will be entitled to get 57 per cent and 27 per cent respectively of the power available at bus bar in the switchyard after allowing for station auxiliaries.

(iii) The above entitlement applies both to availability of machine capacity for peak loads and to the total energy produced in any day.

(iv) The entitlement of power and energy for any day can be utilised fully or partly by the concerned States or sold to another participating State under mutual agreement. It cannot, however, be carried forward except under a separate agreement or working arrangement entered into among the effected parties.

(v) Gujarat will construct and maintain the transmission lines needed to supply the allotted quantum of power to Madhya Pradesh and Maharashtra upto Gujarat State border, along an alignment as agreed to between the parties and if there is no agreement, along such alignment as may be decided by the Narmada Control Authority. The transmission lines beyond Gujarat State border shall be constructed and maintained by Madhya Pradesh and Maharashtra in their respective States.

(vi) The power houses and appurtenant works including the machinery and all installations as well as the transmission lines in Gujarat State will be constructed, maintained and operated by Gujarat State or an authority nominated by the State.

(vii) The authority in control of the Power Houses shall follow the directions of the Narmada Control Authority in so far as use of water is concerned.

(viii) The scheme of operation of the Power Houses including the power required and the load to be catered for the different party States during different parts of the day shall be settled between the States at least one week before the commencement of every month and shall not be altered during the month except under agreement among the States or under emergencies.

If and when Sardar Sarovar Power Complex gets linked with the Regional or National Power Grid, the operation of the Sardar Sarovar Power Complex will be governed by such altered system conditions. But in that event the Narmada Control Authority should arrange to take such steps as are necessary to enable the three States of Gujarat, Madhya Pradesh and Maharashtra to get their entitlement of power and energy from the Sardar Sarovar Power Complex according to these orders.

(ix) The capital cost of the power portion of Navagam Complex shall comprise the following:—

(a) Full cost of Unit III electrical works and control works pertaining thereto, upto and including the switchyard.

(b) Full cost of transmission lines in Gujarat State constructed for supplying power to Madhya Pradesh and Maharashtra.

(c) 56.1 per cent of the net cost of common facilities such as Dam and Appurtenant Works i.e. Unit I of Sardar Sarovar Project, after allowing for credits, if any;

(d) 56.1 per cent of the credit given to Madhya Pradesh for the downstream benefits derived from Narmadasagar Dam.

(x) Madhya Pradesh and Maharashtra shall respectively pay to Gujarat 57 per cent and 27 per cent of the capital cost of the power portion of the Sardar Sarovar headworks worked out vide (ix) above. This amount shall be paid in annual instalments until the capital works are completed. Each instalment will be worked out on the basis of the budgeted figures of the concerned works at the commencement of each financial year and shall be set off and adjusted against actual figures at the end of the financial year.

(xi) In addition to the payments vide (x) above, Madhya Pradesh and Maharashtra shall also pay to Gujarat 57 per cent and 27 per cent respectively of the operation and maintenance costs of the Sardar Sarovar Power Complex each year. These payments are also to be based on budgeted figures at the commencement of each financial year and adjusted against actual cost at the end of the year.

(xii) Notwithstanding the directions contained hereinabove, the party States may, by mutual agreement, alter, amend, or modify any of the directions in respect of sharing of power and payment for it.

CLAUSE IX.—*Regulated Releases To Be Made By Madhya Pradesh For The Requirement Of Sardar Sarovar Project.*

With regard to the quantum and pattern of regulated releases, the Tribunal makes the following Order:—

It has been agreed by the party States and decided by the Tribunal in its Order dated 8th October, 1974, that the utilisable quantity of water of 75 per cent dependability in the Narmada at Sardar Sarovar Dam site should be assessed at 28 MAF (34,537,44 M.cu.m.).

The actual inflow of 75 per cent dependability, however, is only 33,316.29 M.cu.m. (27.01 MAF) and this is brought up to utilisable quantity of 28 MAF (34,537.44 M.cum.) by means of carryover in various reservoirs allowing for evaporation losses and regeneration. Out of 28 MAF (34,537.44 M.cu.m.), 11,101.32 M.cu.m. (9 MAF) has to be provided for Gujarat and 0.5 MAF (616.74 M.cu.m.) for Rajasthan at Sardar Sarovar. The requirements at Sardar Sarovar have to be met by releases by Madhya Pradesh and by inflows from the intermediate catchment, surplus to the requirements of Madhya Pradesh below Narmadasagar and Maharashtra. The releases from Maheshwar work out to 10,015.86 M.cu.m. (8.12 MAF). Making uniform monthly releases the amount of water to be released by Madhya Pradesh per month would be 834.65 M.cu.m. (0.677 MAF). The actual inflow in the river system, however, would vary from year to year and, therefore, the releases by Madhya Pradesh would also vary.

The inflow during the filling period, July to October, cannot be predicted at the beginning of the season. It is only in October that it would be fully known whether the particular year is a normal year or the extent to which it is a surplus or deficit year. Normally the releases by Madhya Pradesh during the filling period, therefore, would have to be more or less on the basis of the year yielding 28 MAF (34,537.44 M.cu.m.) utilisable quantity. The month of July and early part of August are crucial for Kharif sowing. It is important that during this period regulatory arrangements should ensure that due share of water is made available to all parties.

Having regard to the facts mentioned in the preceding two paragraphs, we order that detailed rules of regulation and water accounting shall be framed by Narmada Control Authority in accordance with the guidelines given below. These guidelines may, however, be altered, amended or modified by agreement between the States concerned.

(i) The 28 MAF (34,537.44 M.cu.m.) utilisable supplies of 75 per cent dependability in a water year (1st July to 30th June next year) shall be shared by the party States as under:—

Madhya Pradesh	18·25 MAF	(22,511·01 M.cu.m.)
Gujarat	9·00 MAF	(11,101·32 M.cu.m.)
Rajasthan	0·50 MAF	(616·74 M.cu.m.)
Maharashtra	0·25 MAF	(308·37 M.cu.m.)
	28·00 MAF	(34,537·44 M.cu.m.)

(ii) Surplus or deficit utilisable supplies in a water year shall be shared to the extent feasible by the party States in the same proportion as their allotted shares in (i) above. The surplus water shall first be utilised for filling up the reservoirs to capacity and surplus water shall be utilised for irrigation and other purposes only after that has been ensured.

(iii) The water available in the live storages of the various reservoirs on 30th June shall be reckoned as an inflow to be shared in the next water year.

(iv) The releases necessary to ensure Gujarat and Rajasthan's share of water in a water year shall be let down by Madhya Pradesh at a reasonably uniform rate, permitting only such variation as the Authority may direct or approve and keeping in view the directions for regulated releases.

(v) The Authority shall ensure by so directing the releases by Madhya Pradesh that there is at all times sufficient utilisable water in Sardar Sarovar to meet the requirements of the next ten days, subject to water being available in the storages in Madhya Pradesh after taking into account the proportionate requirements of Madhya Pradesh. For this purpose, Gujarat and Rajasthan would intimate their requirements of the 10 daily period well in advance.

(vi) Utilisation in a water year by each party State shall be figured out on the basis of actual daily discharge at canal head on every major and medium project. For minor works, it shall be on the basis of area irrigated under different crops, the delta for each crop being approved by the Authority. For pumping schemes, drawing directly from the river, its tributaries or servoirs, whether for irrigation, domestic or industrial use, water drawn shall be reckoned on the basis of the rated capacity of pumps and the number of hours they run. For a cross check, the

seasonwise and cropwise area irrigated by each pumping scheme shall also be recorded, and if the figures of water drawn as worked out by the two aforesaid methods differ, the decision of the Authority as regards water drawn shall be final.

(vii) Withdrawals from Sardar Sarovar for Navagam Canal for Gujarat and Rajasthan shall be measured at the head of Navagam Canal. The supply to Rajasthan shall be measured at Gujarat-Rajasthan border. The loss in the canal in carrying the supply for Rajasthan shall be determined by the Authority after the canal has been constructed and shall reckon against the share of Rajasthan.

Water let down into the river from Sardar Sarovar through power house turbines shall be measured on the basis of power generated by it and that escaped through the spillway by measurement at the spillway.

Gujarat may let down water from Sardar Sarovar for its downstream use by making specific indent for it and such releases shall reckon against its share. Such releases for downstream use shall be made through the turbines and the power so generated shared between Madhya Pradesh, Maharashtra and Gujarat in the prescribed ratio. Water let down into the river from Sardar Sarovar except at the specific indent of Gujarat shall not reckon against the share of Gujarat.

The water drawn from Sardar Sarovar for use in Madhya Pradesh and Maharashtra, as the case may be, shall reckon against the share of water of that State.

(viii) For major and medium projects, water account shall be kept by 10 daily period. The last 10 daily period of a month may have 11 days, 10 days or less, depending upon the number of days in the month. For minor schemes water accounts shall be kept by crop seasons, kharif (July to October) rabi (November to March) and hot weather (April to June). For pumping schemes and domestic and industrial uses it shall be monthly.

(ix) The water use by minor and pumping schemes in any ten daily period may provisionally be taken to be the same as in the corresponding period in the previous year on the basis of average use during the crop period. For final water account, however, it will be determined as in (vi) above.

(x) Each State shall furnish to the Authority and make available to any party State desiring the same, such data and information as the Authority may require and ask for.

(xi) The Authority shall arrange the review of the ten day releases made by Madhya Pradesh at least once a month and oftener as considered necessary for directing any change in the releases. It may designate a person for doing so.

(xii) The Authority shall direct final adjustment to be made in the following water year of the use in excess of the authorised use, if any, by any State or States during the preceding water year by curtailing the share(s) of the State or States concerned which have used water in excess and make over the same to the State or State which have received short supplies. Water supplied to Rajasthan on any day in excess of 10 per cent over and above its indent shall reckon against use by Gujarat.

(xiii) The Authority shall furnish the annual water account for the water year to the Governments of the party States by the end of August of the next water year. Each State may make any observation on the account and/or point out corrections in it, if any, within one month of its receipt. After making the necessary modifications, the Authority shall furnish to each party State the final annual water account for the water year by 31st October. The Authority shall cause the annual water account to be published each year.

CLAUSE X.—*Payment To Be Made By Gujarat To Madhya Pradesh For Such Regulated Releases.*

(1) Madhya Pradesh shall take up and complete the construction of Narmadasagar dam with FRL 262.13 m (860 ft.) concurrently with or earlier than the construction of Sardar Sarovar dam.

(2) The Tribunal further orders that Gujarat should credit to Madhya Pradesh each year 17.63 per cent of the expenditure on account of Narmadasagar dam in the financial year commencing from the year of taking up of the construction of Narmadasagar dam. This will be initially credited on the basis of budget allotment to be adjusted at the end of the year on actual expenditure. The post construction expenditure on maintenance is not to be considered as cost of construction.

CLAUSE XI.—*Directions Regarding Submergence Land Acquisition And Rehabilitation of Displaced Persons.*

SUB-CLAUSE I.—*Definitions.*

1(1): "Land" The expression "land" shall have the same meaning as defined in the Land Acquisition Act, 1894 (hereinafter referred to as the Act) which states "the expression 'land' includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth."

1(2): "Oustee" An 'oustee' shall mean any person who since at least one year prior to the date of publication of the notification under Section 4 of the Act, has been ordinarily residing or cultivating land or carrying on any trade, occupation, or calling or working for gain in the area likely to be submerged permanently or temporarily.

1(3): "Family" (i) A family shall include husband, wife and minor children and other persons dependent on the head of the family, e.g., widowed mother.

(ii) Every major son will be treated as a separate family.

SUB-CLAUSE II.—*Lands Which Are To Be Compulsorily Acquired.*

II(1) : Madhya Pradesh and Maharashtra shall acquire for Sardar Sarovar Project under the provisions of the Land Acquisition Act, 1894, all lands of private ownership situated below the FRL+138.68 m (455') of Sardar Sarovar and all interests therein not belonging to the respective States. If on the basis aforesaid, 75 per cent or more land of a contiguous holding of any person is required to be compulsorily acquired, such person shall have the option to compel compulsory acquisition of the entire contiguous holding.

II(2): Madhya Pradesh and Maharashtra shall also acquire for Sardar Sarovar Project under the provisions of the land Acquisition Act, 1894 all buildings with their appurtenant land situated between FRL + 138.68 m (455') and MWL+141.21 m (460') as also those affected by the backwater effect resulting from MWL +141.21 m (460').

II(3): The backwater level at the highest flood level in Sardar Sarovar shall be worked out by the Central Water Commission in consultation with Madhya Pradesh and Gujarat.

SUB-CLAUSE III.—*Liability of Gujarat To Pay Compensation For Land Acquisition And Rehabilitation Etc.*

III(1): Gujarat shal pay to Madhya Pradesh and Maharashtra all costs including compensation, charges and expenses incurred by them for or in respect of the compulsory acquisition of lands required to be acquired as aforesaid.

III(2): Gujarat shall pay to Madhya Pradesh and Maharashtra and the Union of India compensation for the respective Government lands and structures on principles similar to those underlying the Land Acquisition Act, 1894. Where any dispute or difference arises between Gujarat, Madhya Pradesh, Maharashtra and the Union of India with respect to the compensation payable as aforesaid any of the three States of Gujarat, Madhya Pradesh and Maharashtra or the Union of India may refer the matter in dispute to arbitration. The State of Gujarat on the one hand and the States of Madhya Pradesh, Maharashtra or the Union of India (as the case may be) on the other hand shall respectively nominate one Arbitrator each. In the event of disagreement between the Arbitrators, such dispute or difference shall be referred to an Umpire who shall be a person appointed in that behalf by the Chief Justice of India from among persons who are, or have been Judges of the Supreme Court. The decision of the Arbitrators, or, as the case may be, of the Umpire shall be final and binding on the parties and shall be given effect to by them.

III(3): Gujarat shall pay to Madhya Pradesh and Maharashtra land revenue in accordance with the respective Land Revenue Codes of Madhya Pradesh and Maharashtra in respect of all lands in their respective territories acquired for Gujarat or conveyed to it.

III(4): Gujarat shall pay to Madhya Pradesh and Maharashtra all costs, charges and expenses incurred by Madhya Pradesh and Maharashtra for the purpose of removal and reinstallation of any ancient or historical monuments, archaeological remains, religious place of worship or idols likely to be affected by submergence under Sardar Sarovar and that in the event of such payment being made, no separate compensation as hereinbefore provided shall be required to be paid in respect of the same having been affected by the submergence.

III(5): Gujarat shall pay to Madhya Pradesh and Maharashtra all costs, charges and expenses required to be incurred by them for rehabilitation of oustees and oustee families in their respective territories in accordance with the directions hereinafter contained.

III(6): Gujarat shall pay to Madhya Pradesh and Maharashtra costs on account of establishment charges for land acquisition and rehabilittion and other departmental staff which Madhya Pradesh and Maharashtra may consider necessary for the purpose of such acquisition and rehabilitation.

SUB-CLAUSE IV.—*Provision For Rehabilitation.*

IV(1): According to the present estimates the number of oustee families would be 6147 spread over 158 villages in Madhya Pradesh, 456 families spread over 27 villages in Maharashtra. Gujarat shall establish rehabilitation villages in Gujarat in the irrigation command of the Sardar Sarovar Project on the norms hereinafter mentioned for rehabilitation of the families who are willing to migrate to Gujarat. For oustee families who are unwilling to migrate to Gujarat, Gujarat shall pay to Madhya Pradesh and Maharashtra the cost, charges and expenses for establishment of such villages in their respective territories on the norms as hereinafter provided.

IV(2)(i): According to the present estimates the number of oustee families below RL 106.68 metres (RL 350') would be 30 spread over 20 villages in Madhya Pradesh and 250 families spread over 20 villages in Maharashtra. Within six months of the publication of the decision of the Tribunal in the Official Gazette, Gujarat, Madhya Pradesh and Maharashtra shall determine by mutual consultation the location of one or two rehabilitation villages in Gujarat to rehabilitate oustees from areas below RL 106.68 meters (RL 350). Gujarat shall acquire necessary lands for the rehabilitation villages and make available the same within two years of the decision of the Tribunal. Within six months of the decision of the location of the rehabilitation villages in Gujarat, Madhya Pradesh and Maharashtra shall intimate to Gujarat the number of oustee families from areas below RL 106.68 meters (RL 350') willing to migrate to Gujarat. For the remaining oustee families, Madhya Pradesh and Maharashtra shall arrange to acquire lands for rehabilitation within the respective States.

IV(2)(ii): Madhya Pradesh and Maharashtra shall set up adequate establishments for land acquisition and rehabilitation of oustee families. Gujarat shall deposit within three months of the decision of the Tribunal Rupees ten lakhs each with Madhya Pradesh and Maharashtra in advance towards cost of establishment and rehabilitation in these States to be adjusted after actual costs are determined. Madhya Pradesh and Maharashtra shall start land acquisition proceedings for areas below RL 106.68 metres (RL+350'), within six months of the decision of the Tribunal and convey the lands to Gujarat for project purposes within three years of the decision of the Tribunal. Within 18 months of the decision of the Tribunal, Gujarat shall make an advance payment of Rs. 70 lakhs to Madhya Pradesh and Rs. 100 lakhs to Maharashtra towards the compensation of land, to be adjusted after actual costs are determined.

IV(2)(iii): Regarding the oustee families from areas above RL 106.68 metres (RL+350'). Gujarat shall intimate to Madhya Pradesh and Maharashtra within six months of publication of the decision of the Tribunal in the Official Gazette the number and general location of rehabilitation villages proposed to be established by Gujarat in accordance with the decision of the Tribunal. Within one year of the receipt of proposal of Gujarat, both Madhya Pradesh and Maharashtra shall intimate to Gujarat the number of oustee families willing to migrate to Gujarat. The three States by mutual consultation shall determine within two years of the decision of the Tribunal, the number and general location of rehabilitation villages required to be established by Gujarat in its own territory. Madhya Pradesh and Maharashtra shall intimate to Gujarat the number of such villages to be established in Madhya Pradesh and Maharashtra and for which Gujarat would be required to make payments to Madhya Pradesh and Maharashtra respectively.

IV(2)(iv): Gujarat shall acquire and make available a year in advance of the submergence before each successive stage, irrigable lands and house sites for rehabilitation of the oustee families from Madhya Pradesh and Maharashtra who are willing to migrate to Gujarat. Gujarat shall in the first instance offer to rehabilitate the oustees in its own territory.

IV(3): Gujarat shall also provide the following grants and amenities to the oustees:—

(a) Resettlement Grants (Rehabilitation Grant)—Gujarat shall pay per family a sum of Rs. 750 inclusive of transportation charges as resettlement grant.

(b) Grant-in-aid.

In addition, Gujarat shall pay per family grant-in-aid in the following scale:—

Where total compensation is received	Grant-in-aid
Above Rs. 2000/-	Nil.
Between Rs. 2000/- and Rs. 500/-	Rs. 500/- less an amount equal to one-third of the compensation in excess of Rs. 500/-
Less than Rs. 500/-	Rs. 500/-

(c) Civic amenities:

1. One primary school (3 rooms) for 100 families.
2. One Panchayat Ghar for every 500 families.
3. One Dispensary for every 500 families.
4. One seed store for every 500 families.
5. One children's park for every 500 families.
6. One village pond for every 500 families.
7. Drinking water well with trough for every 50 families.
8. Each colony should be linked to main road by roads of appropriate standard.
9. One platform for every 50 families.
10. Every oustee family shall be entitled to and allotted a house site, i.e., a plot of land measuring 18.29 × 27.43m. (60' × 90') free of cost. In addition, a provision of 30% additional area for roads, Government buildings, open space etc. shall be made by Gujarat under civic amenities.

11. The State of Gujarat shall make the following provision for rehabilitation in Madhya Pradesh and Maharashtra:—

(a)	Resettlement	Rs. 750/- per family
(b)	Grant-in-aid	Rs. 500 - per family
(c)	Acquisition of land for resettlement of families affected @ 0·40 hectares (one acre) for 6 families	Rs. 1500/- per acre
(d)	Civic amenities :	
	1. One primary school @100 families	Rs. 30,000/- each
	2. One Community Hall-cum-Panchayat Bhavan @500 families	Rs. 20,000/- each
	3. One Dispensary @500 families	Rs. 25,000/- each
	4. One seed store @500 families	Rs. 10,000/- each
	5. One Children's Park @500 families	Rs. 6,000/- each.
	6. One Well with trough @50 families	Rs. 10,000/- each
	7. One pond @500 families	Rs. 20,000/- each
	8. One tree platform @50 families	Rs. 1,500/- each
	9. One religious place of worship @100 families	Rs. 1,000/- each

10. Construction of approach roads and link roads for Abadies 3 km per every new Abadi. Rs. 30,000/- per km

11. Electrical distribution lines and street lights 2 km per 100 families . . . . . Rs. 11,000/- per km

12. Social amenities for each municipal town going under submergence, viz., water supply and sanitary arrangements layout, levelling of site etc. . . . . Rs. 5,00,000/- each town.

IV(4)(i) : Gujarat is directed to provide for rehabilitation and civic amenities as per directions contained hereinabove in Sub-clause IV(3) in its estimate for B-Land compensation and rehabilitation.

IV(4)(ii) : Notwithstanding the provisions hereinbefore contained, Gujarat shall not be liable to pay any compensation for the loss of public properties, facilities or amenities such as drinking water wells, primary school buildings, internal roads, village sites, approach roads, dispensaries, Panchayat buildings, rural electrification, highway, bridges, telegraph lines, power lines, etc., if corresponding alternative properties, facilities or amenities are to be provided at the cost of the Sardar Sarovar Project. The party owning the facility shall have the option to accept compensation for utilities as existing or ask for their replacement or re-location at the cost of Gujarat.

IV(5) : It is made clear that the monetary values in Clause IV(3)(c) are liable to be changed at the time of actual rehabilitation. Where any dispute or difference arises as regards the changed valuation the matter shall be determined by Arbitration in the manner provided in Clause III(2) above and Gujarat's liability shall stand altered accordingly.

IV(6)(i): In the event of Gujarat being unable to resettle the oustees or the oustees being unwilling to occupy the area offered by Gujarat, Madhya Pradesh and Maharashtra shall make such provisions for rehabilitation, civic amenities etc. on the lines mentioned in Clauses IV(1) to (4) above. Guiarat shall, in that event, be liable to pay all such expenses, costs etc., arising out of or in connection with rehabilitation and provision of civic amenities for the oustees including the cost of all acquisition proceedings and payment of compensation etc., as per the Land Acquisition Act, for the land allotted to oustees for cultivation and habitation.

IV(6)(ii) : In no event shall any areas in Madhya Pradesh and Maharashtra be submerged under the Sardar Sarovar unless all payment of compensation, expenses and costs as aforesaid is made for acquisition of land and properties and arrangements are made for the rehabilitation of the oustees therefrom in accordance with these directions and intimated to the oustees.

IV(7) : *Allotment of Agricultural Lands*: Every displaced family from whom more than 25% of its land holding is acquired shall be entitled to and be allotted irrigable land to the extent of land acquired from it subject to the prescribed ceiling in the State concerned and a minimum of 2 hectares (5 acres) per family, the irrigation facilities being provided by the State in whose territory the allotted land is situated. This land shall be transferred to the oustee family if it agrees to take it. The price charged for it would be as mutually agreed between Gujarat and the concerned State. Of the price to be paid for the land a sum equal to 50% of the compensation payable to the oustee family for the land acquired from it will be set off as an initial instalment of payment. The balance cost of the allotted land shall be recovered from the allottee in 20 yearly instalments free of interest. Where land is allotted in Madhya Pradesh or Maharashtra, Gujarat having paid for it *vide* Clause IV(6)(i) supra, all recoveries for the allotted land shall be credited to Gujarat.

IV(8) : Any dispute between the States in respect of Clauses IV(1) to (7) of these directions shall be referred to and determined by arbitration in the manner provided in Clause III(2) of these directions.

SUB-CLAUSE V.—*Programme For Payment To Be Made By Gujarat To Madhya Pradesh And Maharashtra*:

V(1) : As soon as practicable after the publication of the decision of the Tribunal in the Official Gazette, Gujarat shall prepare and furnish to the other party States, a fresh estimate of sub-head B-Land for the Sardar Sarovar Project as permitted by the Tribunal including in particular, costs of acquisition of lands in Madhya Pradesh and Maharashtra and of rehabilitation of oustee families in Madhya Pradesh and Maharashtra.

V(2)(i) : As soon as practicable after the publication of the decision of the Tribunal in the Official Gazette and in any case before expiry of three months thereafter, both Madhya Pradesh and Maharashtra shall furnish to Gujarat three sets of Majmuli/Taluka maps of all talukas in their respective territories likely to be submerged wholly or partly under Sardar Sarovar. These maps shall indicate village boundaries. Within three months after the receipt of the Majmuli/Taluka maps Gujarat shall mark thereon the boundary of the area situated below the FRL as also that between FRL and MWL including the area affected by back water resulting from MWL and shall return one respective set so marked to Madhya Pradesh and Maharashtra.

V(2)(ii) : As soon as practicable after the receipt of one set of the Majmuli/Taluka maps marked as aforesaid and in any case within six months thereof, the Governments of Madhya Pradesh and Maharashtra shall publish notifications under Sub-section (1) of Section 4 of the Act notifying that the lands in their respective territories situated below the FRL and buildings with their appurtenant lands between FRL and MWL, as also those affected by the back water effect resulting from MWL (to be specified in the notifications) are likely to be needed for the Sardar Sarovar Project.

V(2)(iii) : As soon as practicable after publication of the decision of the Tribunal in the Official Gazette as hereinbefore referred to and in any case within one year thereof, Gujarat shall intimate to Madhya Pradesh and Maharashtra yearwise programme of construction of the dam.

V(2)(iv) : Objections, if any, received against the proposed acquisition of lands as notified under Section 4 of the Act shall be heard and disposed of and any reports to the State Governments as contemplated by Sub-section (2) of Section 5A of the Act shall be made with utmost expedition. The Governments of Madhya Pradesh and Maharashtra shall issue requisite notifications under Section 6 of the Act with utmost expedition and in any case before the expiry of three years from the dates of publication of the respective notifications under Sub-section (1) of Section 4 of the Act.

V(2)(v) : As soon as practicable, after receipt of the yearwise programme of construction of the Sardar Sarovar Dam from Gujarat both Madhya Pradesh and Maharashtra in consultation with Gujarat shall finalise their respective yearwise programme of completing the proceedings for compulsory acquisition of lands in their respective territories upto the stages of making awards under Section 11 of the Act and of taking possession of the lands under Section 16 of the Act.

V(3)(i) : Gujarat is required to pay to Madhya Pradesh and Maharashtra compensation for compulsory acquisition of lands, market value of Government lands to be conveyed to Gujarat and expenditure to be incurred in connection with the rehabilitation of oustee families to be rehabilitated in Madhya Pradesh and Maharashtra as hereinbefore provided. Madhya Pradesh and Maharashtra shall on or before 30th September of each year intimate to Gujarat the amounts required to be paid by Gujarat to Madhya Pradesh and Maharashtra respectively having regard to (a) the extent of lands in Madhya Pradesh and Maharashtra in respect of which awards are likely to be made under Section 11 of the Act (b) the extent of Government lands likely to be conveyed by Madhya Pradesh and Maharashtra to Gujarat during the next financial year and (c) the expenditure likely to be incurred by Madhya Pradesh and Maharashtra in connection with rehabilitation of oustee families in Madhya Pradesh and Maharashtra during the next financial year. In arriving at these estimates for the next financial year, Madhya Pradesh and Maharashtra shall also take into account the differences, if any, between the payments made by Gujarat in pursuance of this clause for the current financial year and the amount actually payable during the said financial year.

V(3)(ii) : On the basis of these estimates, Gujarat shall on or before the 31st May of the following financial year make payments to Madhya Pradesh and Maharashtra of the amounts estimated as provided in Clause V(3)(i) above.

V(3)(iii) : Gujarat shall at each successive stage of submergence intimate to Madhya Pradesh and Maharashtra the area coming under submergence at least 18 months in advance. The inhabitants of the area coming under the respective stages of submergence will be entitled to occupy or use their properties without being required to pay anything for such occupation and use till a date to be notified by the State concerned which date shall not be less than six months before submergence. They must vacate the area by the notified date.

V(4)(i) : On payment of the amounts to be paid each year by Gujarat as compensation for compulsory acquisition of lands as aforesaid, Madhya Pradesh and Maharashtra shall, as expeditiously as possible, complete the acquisition and transfer such lands to Gujarat so as to vest the lands in Gujarat to be used only for the purpose of submergence and subject to Clauses V(5) to (8) of these directions.

V(4)(ii) : On payment of the market value of Government lands by Gujarat as hereinbefore provided Madhya Pradesh and Maharashtra and the Union of India shall convey such lands to Gujarat so as to vest in Gujarat to be used only for the purpose of submergence and subject to Clauses V(5) to (8) of these directions.

V(5) : Gujarat shall pay to Madhya Pradesh and Maharashtra in accordance with the respective Land Revenue Codes, the amount of land revenue payable every year for the lands in their respective territories acquired for Gujarat or conveyed to it, at the rates prevailing in Madhya Pradesh and Maharashtra respectively from time to time.

V(6) : Madhya Pradesh and Maharashtra, as the case may be, shall remit each year to Gujarat any revenue which they may derive from the cultivation of lands which get periodically exposed in Sardar Sarovar, after deducting collection charges for the same.

V(7) : Notwithstanding vesting in Gujarat of the lands coming under submergence, Madhya Pradesh and Maharashtra shall continue to enjoy all rights of sovereignty intact over the submerged area in the respective States.

V(8) : Madhya Pradesh and Maharashtra respectively shall be exclusively entitled to all rights of fishing, boating and water transportation over the part of lake over the submerged land within Madhya Pradesh and Maharashtra respectively, provided, however, that such right is not exercised to the prejudice of any utilities of the Sardar Sarovar Project or cause hindrance in the legitimate performance of their duties by the project personnel.

V(9) : All residual rights not specifically transferred to Gujarat in respect of the lands coming under submergence shall continue to vest in the Government in whose territory they are situated.

V(10) : In the event of the said lands not being used for the purpose of submergence for which it is acquired, the State of Gujarat shall retransfer such land to Madhya Pradesh or Maharashtra as the case may be, subject to the condition that Madhya Pradesh and Maharashtra refund to Gujarat the amount of compensation received from Gujarat in respect of such land.

V(11) : In the event of any land acquired for rehabilitation of oustee families is not used for the purpose, it shall be returned to the original owner on payment, where feasible or otherwise disposed of and due credit given to Gujarat.

V(12): All costs incurred by Gujarat on acquisition of land and rehabilitation of oustees in respect of Sardar Sarovar shall be charged to Sardar Sarovar Project estimate, Unit I—Dam and Appurtenant Works.

Sub-clause VI :

Nothing contained in Clause XI shall prevent the alteration, amendment and modification of all or any of the foregoing clauses by agreement between all the party States.

CLAUSE XII:—*Allocation Of Cost Of Sardar Sarovar Project Between Irrigation And Power.*

We determine that the cost of Unit I -Dam and Appurtenant Works—should be apportioned between Irrigation and Power as follows:—

Irrigation — 43.9 per cent

Power — 56.1 per cent

CLAUSE *XIII*:—*Allocation Of Irrigation Component Of Cost Of Sardar Sarovar Project Between Gujarat And Rajasthan.*

(a)(i) The irrigation component of the cost of Unit I of Sardar Sarovar Project (Dam and Appurtenant Works) should be shared by Gujarat and Rajasthan in the ratio of 18 : 1.

(a)(ii) Madhya Pradesh and Maharashtra shall contribute a *pro rata* share to the irrigation component of the cost of Sardar Sarovar Dam as also towards its operation and annual maintenance, for water drawn from Sardar Sarovar for use in their territory. The *pro rata* share shall be in proportion of the quantity of water so drawn to 9.5 MAF. The amount so contributed shall be credited to Gujarat and Rajasthan in the ratio of 18 : 1.

(b) The cost of Navagam Canal with its design approved by Narmada Control Authority shall be shared by the two States as under:—

(i) The cost differential in respect of land, earth work and lining for the gradients proposed by Gujarat and that now prescribed, to be borne by Rajasthan in full.

(ii) The actual cost of the canal less (i) above to be shared on cusec mile basis.

The actual cost should be shared by Gujarat and Rajasthan on cusec-mile basis in the first instance and on completion of the work the share cost shall be adjusted as indicated above. Rajasthan shall credit its share cost each year initially on the basis of budget allotment. This should then be adjusted at the end of the year to actual expenditure. The post-construction expenditure on maintenance is not to be considered as cost of construction.

Should any difference arise between Rajasthan and Gujarat on figures of cost in respect of Navagam Main Canal for purposes of sharing the cost, the matter shall be referred to the Narmada Control Authority and on such a reference its decision shall be final and binding.

CLAUSE *XIV*:—*Setting Up Of Machinery For Implementing The Decision Of The Tribunal.*

We make the following orders with regard to setting up of machinery for implementing the decision of the Tribunal:—

SUB-CLAUSE I:—*Constitution Of The Authority.*

1(1) : An inter-State administrative authority to be called Narmada Control Authority (hereinafter referred to as the 'Authority') shall be established for the purpose of securing compliance with and implementation of the decision and directions of the Narmada Water Disputes Tribunal (herein referred as the 'Orders').

1(2) : The Authority shall consist of seven high-ranking Engineer Members, of whom one each shall be of the rank of Engineer-in-Chief, Chief Engineer, or Additional Chief Engineer of the Irrigation Department, Power Department or the State Electricity Board appointed by the Government of each of the States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan and three other eminent Engineers of a rank not less than that of a Chief Engineer to be appointed by the Central Government in consultation with the party States. One of the three Independent Members shall be nominated by the Central Government, as the Chairman of the Authority with a deliberative vote at meetings where decisions are taken on any matter affecting the interest of more than one State and he will be in charge of the administrative work of the Authority. The Central or State Government, as the case may be, shall have the power to remove or suspend from the Authority any Member who, in its opinion, is not suitable to continue as Member.

1(3) : Each Independent Member shall be a full-time Member and be appointed for a term not exceeding five years. The Members appointed by the State Governments shall be part-time Members. The appointing authority for Independent Member or that for part-time Member, as the case may be, shall determine the terms and conditions of appointment in each case. As far as practicable, the first appointment of the seven members of the Authority shall be made within three months from the date of publication of the decision of the Tribunal in the Official Gazette.

1(4) : *Vacancies Of Members.*—On any vacancy occurring in the offices of the three independent Members, the Central Government shall appoint a person to such vacant office, and on any vacancy occurring in the office of the four Members other than the independent Members, the State Government by whom the Member whose office falls vacant was appointed shall appoint a person to the vacant office.

In case of illness or absence for any cause whatever of a Member, the Central Government or State Government by whom he was appointed (as the case may be) may appoint a person as an acting Member during such illness or absence and such acting Member shall, while so acting, have all the powers and perform all the duties and be entitled to the indemnities of the Member (vide Sub-clause 5) in whose stead he so acts, save and except that the next senior independent Member appointed by the Central Government and not the acting Member shall act as Chairman at business meeting of the Authority or as the Chairman of the Authority in the event of illness or absence of the Chairman of the Authority.

SUB-CLAUSE 2.- *Secretary Of The Authority*

The Authority shall employ a Secretary, who shall be an Engineer. He shall not be a Member of the Authority.

SUB-CLAUSE 3. -*Quorum And Voting*:

Five Members shall be a quorum and the concurrence of the majority shall be necessary for the transaction of the business of the Authority except such business as the Authority may from time to time prescribe as routine. The Authority shall not prescribe as routine any business in which the interests of any two of the States are likely to be in conflict. For the transaction of routine business three Members shall be a quorum and in the absence of the Chairman of the Authority, the Chairman elected at the meeting shall have a deliberative vote and in the event of an equality of votes a casting vote also.

Subject as aforesaid the Members shall have equal powers.

SUB-CLAUSE 4.—*Disposal Of Business By The Authority*

4(1) : Subject to the provisions of Sub-clause 4(2) below, the Authority may dispose of any matter before it either by circulation or by holding a meeting. However, it will be open to any Member of the Authority to require that a matter shall not be disposed of by circulation but at a meeting.

4(2) : On the following matters the Authority shall record its decision by a Resolution at a meeting in which the Chairman and all the Members from the party States are present:—

(i) Framing of Rules of Business;

(ii) Delegation of functions to a Member or Secretary or any official of the Authority;

(iii) Categorising any part of the business of the Authority as of a formal or routine nature;

(iv) Any other matter which any of the four party States require that it shall be decided at a meeting where all the members from the party States are present.

However, if any particular item under this Sub-clause cannot be disposed of at two successive meetings owing to the absence of one or more Members from the party States, it shall be disposed of under Sub-clause 3 of Clause XIV.

4(3) : Subject to the foregoing provisions, the Authority shall frame its own Rules for the conduct of its business.

4(4) : The Authority shall cause proper minutes or records of all its proceedings to be kept as a permanent record.

SUB-CLAUSE 5.--*Indemnity Of Members*

No Member, officer or employee of the Authority shall be liable for loss, injury or damages resulting from (a) action taken by such Member, officer or employee in good faith and without malice under the apparent authority of the Orders, even though such action is later determined to be unauthorised, or (b) the negligent or wrongful act of omission of any

other person, employed by the Authority and serving under such Member, officer or employee unless such Member, officer or employee failed to exercise due care in the appointment of such other person or the supervision of his work.

SUB-CLAUSE 6.—*Officers And Servants Of The Authority*

The Authority may from time to time appoint or employ such and so many officers and servants as it thinks fit and remove or dismiss them, under the rules and regulations applicable to the appointment, removal and dismissal of the Central Government officers and servants. All such officers and servants shall as such be subject to the sole control of the Authority. The scales of pay and other service conditions shall be as applicable to Central Government employees.

Persons employed in the services of the four States may be appointed or employed by the Authority in such proportions as the Authority may deem fit. The Authority shall arrange with the State Governments to spare the services of the persons employed in the State Governments for whole-time employment with the Authority, or for the performance of any work or services for the Authority. The Authority may also make direct recruitment of any personnel or obtain the same from the Centre or other source as considered appropriate.

SUB-CLAUSE 7.—*Administrative & Field Organisation Costs*

(1): All expenses of the Authority (including the salary and expenses of the independent Members) shall be borne by the State Governments of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan in equal shares. The expenses pertaining to a Member representing a State shall be borne by the State concerned. The cost of maintaining operating and controlling the gauging and other hydrological stations in each State and the telecommunication systems for communicating the data shall be borne by the State concerned.

(2) : The costs of construction of the storages, power installations, diversion works, headworks and canal networks shall be borne wholly by the State Government in whose territory the work is located except for works whose cost has been ordered by the Tribunal to be shared between two or more party States. Where the capital cost is thus shared, the operation and maintenance cost shall also be shared in the same proportion.

SUB-CLAUSE 8.—*Powers, Functions & Duties Of The Authority*

8(1): The role of the Authority will mainly comprise co-ordination and direction. Normally all bilateral matters should be dealt with mutually by the States concerned and referred to the Authority only if there is a dispute.

8(2) : The Authority shall be charged with the power and shall be under a duty to do any or all things necessary, sufficient and expedient for the implementation of the Orders with respect to:

(i) the storage, apportionment, regulation and control of the Narmada waters;

(ii) sharing of power benefits from Sardar Sarovar project;

(iii) regulated releases by Madhya Pradesh;

(iv) acquisition by the concerned State for Sardar Sarovar project of lands and properties likely to be submerged under Sardar Sarovar;

(v) compensation and rehabilitation and settlement of oustees; and

(vi) sharing of costs.

8(3) : In particular and without prejudice to the generality of the foregoing functions, the Authority shall perform *inter alia* the following functions:—

(i) Madhya Pradesh or Gujarat, as the case may be, shall submit to the Authority the Sardar Sarovar Project Report, the Narmadasagar Project Report, the Omkareshwar Project Report and the Maheshwar Project Report. The Authority shall point out to the States concerned, the Central Water Commission, the Central Electricity Athority and Planning Commission any features of these projects which may conflict with the implementation of the Orders of the Tribunal. Any subsequent changes in the salient features or substantial increase

in cost in respect of dams, power houses and canal headworks shall be reported to the Authority for taking appropriate action in the matter.

(ii) The Authority shall decide the phasing and shall co-ordinate construction programmes of the Narmadasagar project and Sardar Sarovar Unit II—Canals with a view to obtaining expeditiously optimum benefits during and after the completion of the construction of the projects, having due regard to the availability of funds.

(iii) The Authority shall obtain from the concerned States periodical progress reports both as to works and expenditure, and shall on receipt of such reports review the progress of construction of different units of the projects and whenever necessary advise the State concerned on the steps to be taken to expedite the work, except in respect of Unit I—Dam and Appurtenant Works and Unit III—Power Complex of Sardar Sarovar Project. The States shall submit, in respect of projects in Sub-clause 8(3)(i), completion reports to the Authority.

(iv) The Authority shall issue appropriate directions whenever necessary for timely and full compliance by the concerned States with the Orders of the Tribunal in the matter of acquisition for and making available to Gujarat lands and properties likely to be submerged under the Sardar Sarovar Project and in the matter of compensation and rehabilitation of oustees thereunder.

(v) The Authority shall cause to be established, maintained, and operated by the State Governments concerned or any one or more of them, such stream and other gauging stations, equipped with automatic recorders where necessary, discharge, silt and evaporation observation stations and measuring devices as may be necessary from time to time for securing the records required for carrying out the provisions of the Orders. If deemed necessary, the Authority may require the installation, maintenance and operation by the State concerned of measuring devices of approved type at the head of main canals as also at the offtake of the canal for Rajasthan for measuring amount of water diverted from Narmada river system.

(vi) Concurrent records shall be kept of the flow of the Narmada at all stations considered necessary by the Authority and the records correlated.

(vii) The Authority shall frame rules of regulation and water accounting as per guidelines given in Clause IX. It shall determine the share of water of each State for every ten-day period for purposes of regulation and water accounting.

(viii) The Authority shall ensure implementation of the Orders of the Tribunal in respect of (a) quantum and pattern of regulated releases by Madhya Pradesh; (b) payment for such regulated releases/sharing of costs.

(ix) The Authority shall collect from the State concerned data of the areas irrigated by Narmada waters in each season, of power generated at each hydro-electric power station at and downstream of Narmadasagar, of withdrawals for domestic, municipal and industrial or any other purposes and of waters going down the river from Sardar Sarovar Project.

(x) The Authority shall determine the volume of water flowing in the river Narmada and its tributaries in a water year (1st July to 30th June next year).

(xi) The Authority shall determine from time to time the volume of water stored by each State in reservoirs and other storages and may for that purpose adopt any device or method.

(xii) The Authority shall determine at appropriate periodic intervals the use of Narmada waters made by the States, or such of them as necessary, at any place or in any area at any time and for that purpose it may take note of all diversions or obstructions, whether natural or artificial or partly natural and partly artificial, from the river Narmada and its Tributaries and measure such use by any method as it deems fit.

(xiii) The Authority or any of its duly authorised representative shall have power to enter upon any land and property upon which any project or development of any project, or any work of gauging evaporation or other hydrological station or measuring device has been or is being constructed, operated or maintained by any State for the use of Narmada water. Each State through its appropriate departments shall render all co-operation and assistance to the Authority and its authorised representatives in this behalf.

(xiv) The Authority shall meet as often as necessary and decide on a proper management of waters including in particular the manner and details of withdrawals of waters from the storages on the Narmada river system in accordance with the Orders. In particular, the Authority shall meet at the end of filling season, and review the availability of waters in the storages on the Narmada river system and decide upon the pattern of their regulation for the next irrigation season, taking into account the carryover storages.

(xv) The Authority shall give directions for a phased programme of construction for generation and transmission of power in fulfilment of the shares of power allocated to the three States of Madhya Pradesh, Maharashtra and Gujarat from Sardar Sarovar and for payments therefor in accordance with the Orders of the Tribunal. The Authroity shall also ensure that generation and transmission of power from Sardar Sarovar complex are in accordance with the Orders.

(xvi) The Authority shall issue appropriate directions for the establishment, maintenance and operation of an effective system of flood forecasting and flood control, including reporting of heavy precipitation, and telecommunication systems. The safety of a structure shall primarily be the responsibility of the Chief Engineer incharge of the structure and no decision or order shall be binding on him if in his opinion the safety of the structure will be endangered thereby. The Authority shall publish annually and make available to party States the data regarding operation of reservoirs during floods.

8(4) : In the light of its experience, the Authority may modify or add to the functions enumerated hereinabove in Sub-clauses 8(3)(i) to (xvi) by a resolution.

8(5) : All the concerned States shall submit to the Authority all the relevant information called for by the Authority in connection with the Narmada Valley Development expeditiously.

SUB-CLAUSE 9.—*Annual Report Of The Authority*

The Authority shall prepare and transmit to each of the four States as early as possible and in any case before the end of the current Water Year (1st July to 30th June) an Annual Report covering the activities of the Authority for the preceding year and to make available to each State on its request any information within its possession any time and always provide access to its record to the States and their representatives.

SUB-CLAUSE 10.—*Records Of The Authority And Their Location*

The Authority shall keep a record of all meetings and proceedings, maintain regular accounts, and have a suitable office where documents, records, accounts and gauging data shall be kept open for inspection by the four States or their representatives at such times and under such regulations as the Authority may determine.

The location of the Central, Regional and Sub-regional offices of the Narmada Control Authority shall be determined by the Authority.

The headquarters of the Authority shall be at New Delhi till such time as it decides on its permanent location.

SUB-CLAUSE 11.—*Contracts And Agreements*

The Authority shall enter into such contracts and agreements as may be necessary and essential for the full and proper performance of the functions and duties conferred or imposed on it.

SUB-CLAUSE 12.—*Financial Provisions*

(1) All the capital and revenue expenditure required to be incurred by the Authority shall be borne by the four States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan equally. The Governments of the four States shall provide the necessary funds to the Authority to meet all capital and revenue expenditure required to be incurred by the Authority for the discharge of its functions.

(2) On the constitution of the Authority each of the Governments of the four States shall contribute Rs.5,00,000 (Rupees five lakhs) to the fund of the Authority in the first instance.

(3) The Authority shall in the month of September of each year prepare detailed estimate of the amounts of money required during the twelve months from the first day of April of the ensuing year, showing the manner in which it is proposed to expend such money. The Authority shall on or before the fifteenth of October forward a copy of such detailed estimate to the concerned Chief Engineers of the four States and indicate the amount required to be contributed by each State for the ensuing financial year. Each of the State Governments shall pay to the Authority its contribution as indicated by the Authority on or before the 30th day of April of the ensuing year.

(4) The Authority shall maintain detailed and accurate accounts of all receipts and disbursements and shall after the close of each financial year prepare an Annual Statement of Accounts and send copies thereof to the Accountants General as well as the concerned Chief Engineers of the four States. The form of the Annual Statement of Accounts shall be such as may be prescribed by rules. The Accounts maintained by the Authority shall be open for inspection at all reasonable times by the four States through their duly authorised representative or representatives.

(5) Disbursement shall be made from the fund of the Authority only in such manner as may be prescribed by the Authority. The Authority may incur such expenditure as it may think fit to meet any emergency in the discharge of its functions.

(6) The accounts maintained by the Authority shall be audited by the Comptroller & Auditor General of India or his nominee, who shall certify subject to such observations as he may wish to make on the annual accounts of the Authority. The Authority shall forward to the Accountants General and the concerned Chief Engineers of the four States copies of the Report of the Comptroller & Auditor General of India and shall include the same in its Annual Report.

SUB-CLAUSE 13.—*Decision Of The Authority*

The decisions of the Authority on all matters covered under Sub-clause 8 shall be final and binding on the four party States. However, there shall be a Review Committee which may *suo motu* or on the application of any party State review any decision of the Authority. In urgent cases the Chairman of the Review Committee may, on the application of the party State, grant stay of any order of the Authority pending final decision on review.

SUB-CLAUSE 14.—*Review Committee*

14(1) : The Review Committee shall consist of five members including a Chairman as under: —

(i)	Union Minister for Irrigation as the:	*Chairman*
(ii)	Chief Minister of Madya Pradesh:	*Member*
(iii)	Chief Minister of Gujarat:	*Member*
(iv)	Chief Minister of Maharashtra:	*Member*
(v)	Chief Minister of Rajasthan:	*Member*

The Secretary of the Union Ministry of Agriculture and Irrigation, Department of Irrigation, shall be the Convenor of the Review Committee but shall not have any voting right.

In case there is President's rule in any of the States, the Governor of that State or his authorised representative will act as Member of the Review Committee.

14(2) : The Chief Ministers of the four States may nominate the respective Irrigation Ministers either generally or specially as the alternate Member with full powers of voting, taking decisions etc.

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14(3) : The Review Committee may review the decision of the Authority at a meeting at which the Chairman and all the Members of the Review Committee are present. It is expected that the decisions of the Review Committee will be by consensus. Failing consensus it shall be by majority of votes of Members including the Chairman.

14(4) : Advance notice of the proposed meeting of the Review Committee, its agenda and agenda notes will be forwarded by the Convenor to the party States.

14(5) : The decision of the Review Committee shall be recorded in writing and shall be final and binding on all the States.

SUB-CLAUSE 15.—*Construction Out-side Jurisdiction Of The Authority*

The planning and construction of the projects will be carried out by each State through its own agencies, save and except to the extent prescribed in Sub-clause 16 of Clause XIV.

SUB-CLAUSE 16.—*Supervisory Function Of The Authority Over Construction Of Sardar Sarovar Project*

(1) The four party States have financial commitment in respect of Unit I—Dam and Appurtenant Works of the Sardar Sarovar Project and three of them, namely, Gujarat, Maharshtra and Madhya Pradesh have such commitment in respect of Unit III—Power Complex of the Project. With a view to ensuring efficient, economical and early execution of these Units of the Project, and taking into account the financial commitments of the party States, it is desirable and necessary that a Construction Advisory Committee should be constituted for the purpose. We, therefore, order that such an Advisory Committee to be called Sardar Sarovar Construction Advisory Committee should be set up within three months from the date of publication of the Decision of the Tribunal in the Official Gazette.

(2) The Construction Advisory Committee shall have a whole-time Secretary of the rank of Chief Engineer to be appointed by Union of India and such other staff as may be necessary.

(3) The Committee shall comprise—

(i) The Secretary to the Government of India, in charge of Irrigation—Chairman.

(ii) Chairman, Central Water Commission (CWC), or a Member of the CWC representing him in case the Chairman is unable to attend a meeting.

(iii) Chairman, Central Electricity Authority (CEA), or a Member of the CEA representing him in case the Chairman is unable to attend a meeting.

(iv) Chairman, Narmada Control Authority (NCA) or an Independent Member of NCA representing him in case the Chairman is unable to attend a meeting.

(v) Joint Secretary (Financial Adviser) in the Union Ministry of Agriculture & Irrigation (Department of Irrigation).

(vi) Secretaries in charge of Finance Department of Governments of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan.

(vii) Secretaries in charge of Irrigation Department of Governments of Gujarat and Rajasthan.

(viii) Secretaries in charge of Power Department of Madhya Pradesh, Maharashtra and Gujarat.

(ix) Secretaries in charge of Revenue Department or any other Department concerned with land acquisition of Madhya Pradesh, Maharashtra and Gujarat.

(x) General Manager or Chief Engineers of Gujarat in charge of the project and Chief Engineers of Madhya Pradesh, Maharashtra and Rajasthan concerned with the Project.

(xi) Chairman, State Electricity Boards of Madhya Pradesh, Maharashtra and Gujarat.

(xii) Financial Adviser, Sardar Sarovar Project.

The Chairman may co-opt any other Member for any particular meeting.

(4) The Sardar Sarovar Construction Advisory Committee shall:—

(i) scrutinise the project estimates prepared for these works, advise necessary modifications and recommend the estimates for the administrative approval of the concerned Governments;

(ii) examine and make recommendation on all proposals pertaining to technical features and designs as may be referred to it by any of the party States and where necessary consult experts for the purpose.

(iii) examine and make recommendation on the programme of construction of different parts of the project in a co-ordinated manner, keeping in view the funds available, the economics of the project and the desirability of obtaining quick results;

(iv) examine the requirement of funds for the construction of works and other purposes according to tht approved programme and make necessary recommendations;

(v) examine and recommend, from time to time, the delegation of such powers, both technical and financial, as it may deem necessary for the efficient execution of the project, to the General Manager/Chief Engineers, Superintending Engineers, Executive Engineers and Sub-Divisional Officers engaged in the execution of the project;

(vi) examine and, where necessary, recommend specifications for various classes of work;

(vii) examine and make recommendation on all sub-estimates and contracts, the cost of which exceeds the powers of sanction of the General Manager/Chief Engineers;

(viii) review progress reports, both for works and expenditure from the General Manager/Chief Engineers and recommend, where necessary, steps to be taken to expedite the work.

(5) The headquarters of the Construction Advisory Committee will be fixed by the Committee.

(6) The Construction Advisory Committee will frame rules regarding procedure and delegation of power for the purpose of carrying out its business.

(7) The recommendations of the Construction Advisory Committee shall be conveyed to the Governments concerned by the Committee and copies sent to the Review Committee and Narmada Control Authority for information.

(8) The recommendations of the Construction Advisory Committee shall normally be accepted by the State Governments concerned. In the event of any disagreement, the matter shall be referred to the Review Committee and the decision of the Review Committee shall be final and binding on all the concerned States.

In all matters relating to the construction of the Sardar Sarovar Dam and appurtenant works (Unit I), Power House and generating machinery (Unit III) and Transmission lines to feed power to Madhya Pradesh, Maharashtra and Gujarat upto the next sub-station in each case, the Narmada Control Authority will carry out only such functions as do not specifically devolve upon the Construction Advisory Committee set up under Sub-Clause 16, Clause XIV.

(9) The Construction Advisory Committee will be dissolved after three years of the completion of construction of Units I and III of the Sardar Sarovar Project. The post-construction management of Units I and III will be by Gujarat under the supervision of the Narmada Control Authority.

(10) The expenditure of the Construction Advisory committee will be borne by the four States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan equally.

Sub-clause 17

Nothing contained in this Order shall prevent the alteration, amendment or modification of all or any of the foregoing clauses by agreement between all the States concerned.

Sub-clause 18

The Union of India has consented to participate in the Machinery to be established by the Order of the Tribunal, if so directed and to do its best to implement the decision of the Tribunal.

Accordingly, we direct the Union of India to participate in the Machinery set up by the Order of the Tribunal to implement the directions of the Tribunal specifically under Clauses 1(2), 4, 12(6), 13, 14 and generally to implement all the other directions so far as the Union of India is concerned.

CLAUSE XV.—*Order As To Costs Of Proceedings*

(i) The States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan shall bear their own costs of appearing before the Tribunal. The expenses of the Tribunal shall be borne and paid by the aforesaid four States in equal shares. These directions relate to the references under Section 5(1) of the Inter-State Water Disputes Act, 1956.

(ii) The States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan shall bear their own costs of appearing before the Tribunal in the references under Section 5(3) of the said Act. The expenses of the Tribunal in respect of the aforesaid references shall be borne and paid by the States of Gujarat, Madhya Pradesh Maharashtra and Rajasthan in equal shares.

CLAUSE XVI.—*Period Of Operation Of Certain Clauses Of The Final Order*

In addition to Clauses III and IV (mentioned in Clauses V), our Orders in Clause VII with regard to Full Reservoir Level and Maximum Water Level of the Sardar Sarovar Dam, Clause VIII with regard to Sharing of Costs and Benefits, Clause IX with regard to Regulated Releases to be made by Madhya Pradesh for the Requirement of Sardar Sarovar Project, Clause X with regard to Payment to be made by Gujarat to Madhya Pradesh for such Regulated Releases, Clause XII with regard to Allocation of Costs of Sardar Sarovar Project between Irrigation and Power, Clause XIII with regard to Allocation of Irrigation Component of Cost of Sardar Sarovar Project between Gujarat and Rajasthan and Clause XIV as regards Machinery are all made subject to review at any time after a period of 45 years from the date of publication of the Decision of the Tribunal in the Official Gazette.

NEW DELHI
December 7, 1979

(Sd.) (V. RAMASWAMI)
Chairman

(Sd.) (A. K. SINHA)
Member

(Sd.) (M. R. A. ANSARI)
Member

MGIPCBE—S1—1 M of A&I/ND/79—25-10-80—750

P. Agr. 144(I)
750-1980 (DSK-II)

Price: *Inland Rs.* 26.50 *or Foreign* £ 3.09 *or* $ 9.54.

PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, COIMBATORE-641 019
AND PUBLISHED BY THE CONTROLLER OF PUBLICATIONS, DELHI 110054
1980

GOVERNMENT OF INDIA
NARMADA WATER DISPUTES TRIBUNAL

FURTHER REPORT
OF
THE NARMADA WATER DISPUTES TRIBUNAL

VOLUME II

NEW DELHI
1979

I regret, I could not agree with the views taken by Learned Chairman on certain points raised in the grounds of respective references of Union of India, States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan.

Before I take up those points for consideration, I should record briefly that the Narmada Water Disputes Tribunal was constituted for adjudication of water disputes between the above four States concerning Narmada River. The Tribunal, after investigation, forwarded its Report and decision on 16th of August, 1978. As I dissented from the majority view on certain issues I recorded my separate opinion in Chapter IV of the Report and decision under Section 5(2) of the Inter-State Water Disputes Act, 1956, (hereinafter referred to as the Act). But in view of Section 5(4) of the Act this Tribunal submitted the Report and its decision according to the opinion of the majority.

Thereafter, Reference on matters contained in the above decision, Nos. 1, 2, 3, 4 and 5 of 1978 of Union of India, States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan respectively were put in under Section 5(3) of the Act on 16th November, 1978. According to the usual procedure of this Tribunal, all the parties put in their replies, Rejoinders, Sur-Rejoinders, etc. and hearing followed details of which have been set out in Chapter-I of the Further Report under Section 5(3) of the Act and it is not necessary to restate them over again.

One of the points taken by the State of Madhya Pradesh in its reference requires determination of scope and effect of Section 5(3) of the Act. At the very outset I should state that, I agree substantially with the view taken by Learned Chairman on this aspect of the matter but I wish to record a few words of my own which would be necessary for expressing my own opinion on the above points.

Briefly speaking, the State of Madhya Pradesh has contended that Section 5 of the Act is of the widest amplitude and Section 5(3) is enabling provisions and not a limiting one. The field covered by Section 5(3) for 'further consideration' must cover the entire field under Section 5(1) and (2). Section 5(3) in substance lays down that the Report and the decision in Section 5(2) is not final. It is pointed out that this Tribunal held inter-alia on certain preliminary issues that "there is nothing in the scheme or language of the Act which precludes the Tribunal from applying principle underlying the Order 14(2) of C.P.C." (Report, Vol. III, pages 9-10). Elsewhere in the judgment, Tribunal held that "it is a statutory judicial Tribunal on which the adjudicating power is conferred by the Statute and which has been investigated with the State's inherent judicial power" (Report, Vol. III, pages 27-28 and 32)[1]. Therefore, this Tribunal has jurisdiction under Section 5(3) to re-examine and reconsider its earlier decision under Section 5(2) on all aspects and on all issues and to modify the decision accordingly. On an exhaustive analysis of several other sections and Section 5(3), Madhya Pradesh has urged that Section 5(3) must be understood in its widest amplitude in order to do justice[2].

All such contentions were opposed by States of Gujarat, Maharashtra and Rajasthan. According to them, once a report and decision have been forwarded to the Central Government under Section 5(2) of the Act, they become final except where "(I) anything contained in such report or decision requires explanation. (II) or that guidance is needed upon any point not originally referred to the Tribunal" as provided under Section 5(3) of the Act. In substance it is said that it has no power to review or reconsider or alter its earlier decision.

The whole question then, it seems, will turn on the interpretation of Section 5(3) of the Act. It is convenient at this stage to set out Section 5 Sub-Sections 1, 2 and 3 which provide—

> "5. (1) When a Tribunal has been constituted under Section 4, the Central Government shall, subject to the prohibition contained in Section 8, refer the water dispute and any matter appearing to be connected with, or relevant to, the water dispute to the Tribunal for adjudication.
>
> (2) The Tribunal shall investigate the matters referred to it and forward to the Central Government a report setting out the facts as found by it and giving its decision on the matters referred to it.

1. Rejoinder of M.P. on scope of ambit of Section 5(3) of the Act. MP/1201 —p. 44
2. Rejoinder of M. P. on scope of ambit of Section 5(3) of the Act MP/ 1—p. 50

(3) If, upon consideration of the decision of the Tribunal, the Central Government or any State Government is of opinion that anything therein contained requires explanation or that guidance is needed upon any point not originally referred to the Tribunal, the Central Government or the State Government, as the case may be, may, within three months from the date of the decision, again refer the matter to the Tribunal for further consideration ; and on such reference, the Tribunal may forward to the Central Government a further report giving such explanation or guidance as it deems fit and in such a case, the decision of the Tribunal shall be deemed to be modified accordingly."

On a plain reading of the above provision, it seems fairly clear that a right is created in favour of the Central Government or State Government concerned to refer the matter to the same Tribunal for further consideration of its earlier decision on matters referred to it under Sub-Section 2 of Section 5 of the Act only for two purposes viz., (I) anything contained in such decision requires explanation, or (II) that guidance is needed upon any point not originally referred to the Tribunal. Upon such reference the Tribunal may forward to the Central Government a further Report giving such explanation or guidance as it deems fit and in such a case, the decision of the Tribunal shall be deemed to be modified accordingly. The Tribunal's further consideration or further report, it is clear, is limited to 'giving such explanation' or 'guidance' as it deems fit.

It is not disputed before us that Tribunal's power conferred under Section 5(3) for further consideration and forwarding a further report is a duty coupled with discretion. But this discretion, as contended by Madhya Pradesh, is judicial or in any case a quasi-judicial discretion and must be guided by relevant consideration and not in any arbitrary, vague or fanciful manner. This point needs no elaboration. The question is not whether in the present case the Tribunal should exercise its power at all but whether the power conferred enables the Tribunal to reopen and re-examine the Tribunal's earlier decision under Section 5(2) of the Act on the reference made under Section 5(3) of the Act and make fresh decision or order. This being the precise question, observation of this Tribunal in its decision on preliminary issues relied on by Madhya Pradesh are not relevant. Madhya Pradesh has, however, urged that the Tribunal must of necessity for further consideration and giving explanation or guidance as it deems fit is required to reconsider further its entire decision rendered under Section 5(2) for determination of real questions in controversy raised in the grounds of reference. I am unable to accept such an extreme contention of the State of Madhya Pradesh. If, as contended by the State of Madhya Pradesh, the Tribunal has power to reopen or re-examine the entire decision under Section 5(2), that would really convert a reference into an appeal or at any rate review or revision.

It is well established that there can be no appeal as of right unless created by statute. Under such statutory provision, again, appeal may be both on facts and law or limited to law only but to some superior court or authority which will reconsider the decision of the lower court or authority both on facts and law or on point of law only as the case may be. In either case they will be regulated by the provision of particular statute as there is no inherent appellate jurisdiction in the court. In England appeals from High Court to the court of appeal are authorised by the Judicature Act, 1925 and appeals to the House of Lords lie under the Appellate Jurisdiction Act, 1878 and the Administration of Justice Act, 1969 (See Administrative Law by H.W.R. Wade, 4th Ed. p. 37).

The same principle has been followed in India from the earliest time in a long line of cases and it is well settled that right of appeal cannot be assumed in every matter which comes under the consideration of a court; but such rights must be given by a statute or by some authority equivalent to a statute and there also by express words and not by any implication under a statute [See, for instance, Minakshi v. Subramanya 14 I.A. 160 ; Rangoon Botatoung Co. Ld. v. Collector, Rangoon 39 I.A. 197 at p. 200 and Narayan v. Secretary of State (1896) 20 Bom. 803].

This point does not require any further elucidation. The right of appeal in civil courts and power and jurisdiction of court over appeals are expressly provided in the Code of Civil Procedure, 1908.

The same principle applies to the case of Reference, Review and Revision. Substantive law relating to these matters are provided under Sections 113 to 115 and the procedural aspects of such Reference, Review are embodied in Orders 46 and 47 of the same Code. So far as Revision is concerned the power and jurisdiction and procedure are also defined in Section 115 of the Code. It is clear that apart from this statutory provision, there is no inherent jurisdiction of court to interfere with any decision or order under Reference, Review or Revision.

Now, so far as Tribunals are concerned, they are entirely statutory creation and one must look into the

statute for necessary information as to the powers and jurisdiction and other matters which may require determination in a given case. In one of the earliest English Decision, The Queen v. The Commissioners For Special Purposes of the Income Tax, (1888) 21 Q.B.D. p. 313 at page 319, it was held that as regards tribunals, no right of appeal exists unless conferred by statute. Same law applies to the statutory tribunals in India. It is not necessary in the present case to cite the supporting decisions, for even on extremely liberal interpretation, Section 5(3) of the Act cannot be construed as one conferring any right of appeal.

As regards Review or Revision, the points have been set at rest in quite a number of decisions of the Supreme Court. In a comparatively recent decision in Patel Narshi Thakershi and Others vs. Pradyumanshinghji Arjunsinghji (AIR 1970 SC page 1273) cited by Gujarat and Rajasthan, the Supreme Court has held *inter alia* that the jurisdiction or power to review can neither be assumed or imported in the absence of any specific provision therefor, nor can be exercised contrary to the conditions laid down in this behalf. See also other decisions of the Supreme Court cited by Gujarat [Devkinandan Prashar vs. The Agra District Co-operative Bank and others (1973) 3 SCC 303 = AIR (1972) SC 2497 ; M/s. Mehar Singh Nanakchand vs. M/s. Naunihal Thakar Dass AIR (1972) SC 2533]. The same rule applies to see if the concerned tribunal has power to interfere with its original decisions or Order in Revision. Clearly, it has no such power in the absence of any specific provision in the statute which creates such tribunals. In Kamaraja Nadar v. Kunju Thevar (1959) SCR 583 at 595 cited by Rajasthan, Supreme Court has held that election petition is not a suit and the Election Tribunal does not possess common law power. It follows that a tribunal has no inherent power to act *ex debito justitiae* for the ends of justice or to prevent abuse of the process of the court as exercised by civil courts under Section 151 of the Code of Civil Procedure.

Madhya Pradesh has contended that having regard to conspectus of Section 5 and Sub-sections 1, 2 and 3 and Section 12 of the Act, the attempt in construing Section 5(3) must always be to advance the remedy and hence the Tribunal should be slow to adopt the narrow construction. Any interpretation which limits the jurisdiction under Section 5(3) would advance the mischief and suppress the remedy. In support of its contention, it has relied for ascertaining the exact meaning of the word 'consider' or 'consideration' on the Blak's Law Dictionary, revised 4th Ed. 1968, p. 378 and 380 and sought to impress upon us that when a matter is referred to the Tribunal for further consideration under Section 5(3), the Tribunal would be required to examine carefully the whole issue for judicial determination of the matters submitted to it concerning its earlier decision. In Blak's Law Dictionary, it appears, the word 'consideration' is defined, as a technical term indicating that a tribunal has heard and judicially determined matters submitted to it. It is difficult to see how this meaning could advance the argument of the State of Madhya Pradesh. There is no dispute that this Tribunal, in the process of giving explanation or guidance, will judicially determine matters submitted to it but that does not mean that the Tribunal would be required to reopen or reconsider its earlier decision.

Madhya Pradesh has further contended that this Tribunal applying the principle enunciated in an English decision in Anisminic Ltd. v. Foreign Compensation Commission, 1969(2) A.C. 147 held *interalia* on preliminary issues that "the Authority of the Tribunal to decide the preliminary question of jurisdiction extends not merely the subject matter of determination but also to the validity of the notification constituting the Tribunal." (Report, Vol. III, pp. 42-45). It is said that the principles in Anisminic case were laid down with reference to an ouster clause. In the present Act Section 5(3) far from ousting jurisdiction, confers continuing jurisdiction on the Tribunal to further consider the matter. It is, therefore, not competent for the Tribunal to decline the jurisdiction to further consider its decision which is vested in it under Section 5(3) of the Act.

The Anisminic case is no doubt now a leading decision on jurisdictional errors by a Tribunal in the course of its proceedings. What happened in this case was, the Foreign Compensation Commission rejected a claim for compensation for a property already sold to a foreign buyer on the erroneous view that under the statutory order in council the successor in title should have been of British Nationality at the relevant date. House of Lords, by a majority, held that "this error destroyed Commission's jurisdiction and rendered their decision a nullity since on a true view of the law, they had no jurisdiction to take successor in title's nationality into account." For a Tribunal must not only have jurisdiction to enter on the enquiry but must retain it 'unimpaired until it has discharged its task'. Lord Pearce explained this principle and observed *inter alia* (p. 195)—

> "Lack of jurisdiction may arise in many ways. There may be an absence of these formalities or things which are conditions precedent to the tribunal having any jurisdiction to embark on an enquiry. Or the tribunal may at

> the end make an order that it has no jurisdiction to make. Or in the intervening stage, while engaged on a proper inquiry, the tribunal may depart from the rules of natural justice ; or it may ask itself the wrong questions; or it may take into account matters which it was not directed to take into account. Thereby it would step outside its jurisdiction. It would turn its inquiry into something not directed by Parliament and fail to make the inquiry which Parliament did direct. Any of these things would cause its purported decision to be a nullity."

Clearly, this decision is no authority for the proposition that the jurisdiction of the Tribunal in an inquiry under particular provision must also continue to be identical or the Tribunal would possess same powers in a different inquiry under another provision of the same Act. The Tribunal's jurisdiction or power can only be determined with reference to that particular provision or provisions under which inquiry is to be made by the Tribunal.

Therefore, for a proper and correct approach to the question in controversy in the present case the meaning and effect of the words 'explanation' and 'guidance' are required to be ascertained. The word 'explanation' or 'guidance' has not been defined in the statute. In the absence of such statutory meaning, these words have got to be literally construed in their ordinary and natural sense. If the meaning of the words are plain then the court or the tribunal can disregard the consequence. Without being more exhaustive and to cut the matter short, I may usefully refer to a passage from Craies' On Statute Law, 6th Ed., Chapter 5, p.66 where on an analysis of a long line of English decisions it is stated *inter alia* as follows (without foot notes) :—

> "The cardinal rule for the construction of Acts of Parliament is that they should be construed according to the intention expressed in the Acts themselves. "The tribunal that has to construe an Act of a legislature, or indeed any other document, has to determine the intention as expressed by the words used. And in order to understand these words it is natural to inquire what is the subject-matter with respect to which they are used and the object in view." In Barnes v. Jarvis Lord Goddard C.J. said : "A certain amount of common sense must be applied in construing statutes. The object of the Act has to be considered." If the words of the statute are themselves precise and unambiguous, then no more can be necessary than to expound those words in their ordinary and natural sense. The words themselves alone do in such a case best declare the intention of the law-giver".
>
> "Where the language of an Act is clear and explicit we must give effect to it, whatever may be the consequences, for in that case the words of the statute speak the intention of the legislature."

The same rule of interpretation in construing words in a statute has been applied in India. In Jugal Kishore Saraf v. Raw Cotton Co. Ltd (AIR 1955 S.C., p. 376 at p. 381), the Supreme Court has laid down such rule of interpretation as follows :—

> "The cardinal rule of construction of statutes is to read the statute literally, that is by giving to the words used by the legislature their ordinary, natural and grammatical meaning. If, however, such a reading leads to absurdity and the words are susceptible of another meaning the Court may adopt the same. But if not such alternative construction is possible, the Court must adopt the ordinary rule of literal interpretation. In the present case a literal construction of the rule leads to no apparent absurdity and, therefore, there can be no compelling reason for departing from that golden rule of construction."

The State of Maharashtra has relied on Murray's Oxford English Dictionary, Vol. III, p. 435 to show that the word 'explanation' in substance means act or process of explaining. It is contended, from such dictionary meaning, that the scope of the word 'explanation' in the Section cannot be equated with or equivalent to adjudication, appeal, review or revision. It only means to clarify or to make plain or understandable what is already to be found in the decision set out in the report under Section 5(2).

In aid of its contention, the State of Maharashtra has also relied, by way of analogy on Section 36(A) of Industrial Disputes Act, 1947 under which appropriate Government in case of doubt of difficulty is empowered to send back the award to Labour Tribunal for interpretation of award. The Supreme Court in Kirloskar Oil Engines Limited, Kirkee, Poona v. the Workmen and Others (1962) Supplement I SCR 494 on interpretation of this provision *inter alia* held that "36(A) of Industrial Disputes Act, 1947 intended to empower a tribunal to clarify the position of the award passed by it where a difficulty or doubt arose about their interpretation, and not to review or modify

its own order. Any question of about the propriety, correctness or validity of any provision of the award would be outside the purview of the enquiry contemplated by that section".

The State of Maharashtra has also referred to Short Oxford English Dictionary 3rd Ed., p. 842 to show that ordinary dictionary meaning, of the word guidance is (1) the action of guiding; directing agencies; leadership, direction and (2) something which guides or leads. The argument is that scope of reference even under the second category is not adjudication of the facts as found by the Tribunal and its decision on the matters referred to it only requires some direction of the Tribunal on some incidental or connected issues which may have some bearing on the Tribunal's decision on the matters referred to it.

On the meaning and effect of the word 'guidance', Gujarat has contended that even if such reference to the Tribunal upon matters on which guidance is needed necessitates fresh adjudication such adjudication must be confined only to such point and has to be in consonance with the decision under Section 5(2).

It appears that although in some of the earlier English decision, it was held that ordinary dictionaries gave somewhat delusive guides in the construction of statutory terms [Midland Ry v. Robinson (1890) 15 App. Cas. 19, 34] for consideration of true meaning of the word and judicial opinion on the point would probably be a safer guide, later decisions will show that reference to the better dictionary meaning does afford by definition or illustration some guide to the use of a term in a statute. In Camden (Marquis) v. A.R.C. (1914) 1 K.B. 641, it was *inter-alia* observed—

> "It is for the court to interpret the statute as best it may. In so doing the court may no doubt assist themselves in the discharge of their duty by any literary help they can find, including of course the consultation of standard authors and reference to well-known and authoritative dictionaries."

In any case in absence of opinion of the Judges on this point, reference to authoritative dictionaries would be quite helpful to ascertain plain meaning of the words or to understand them in their ordinary sense in constructing a particular statute.

As regards reference to a different statute on different lines, that is, statute not being in *pari materia*, or judicial decision involving interpretation of meaning and effect of word used in certain provision of such statute, they may not be strictly relevant. In Inland Revenue Commission Vs Forrest (1890) 15 App Case 334 at p. 353 Lord Macnaghten while discussing phraseology of two Revenue Acts observed, "The two differ widely in their scope, and even when they deal with same subject, their wording is not the same". In Geerad's Settled Estate (1893) 3 ch 252 the Court of appeal held that the settled Lands Act formed a Code applicable to the subject matter with which they dealt and a decision on Land Clause Act 1845 was not applicable for their interpretation as that Act dealt with a different subject matter. In the case of Dr. S. B. Gupta Vs University of Delhi (1959) S.C.R. p. 1236 at 1247, the Supreme Court, while interpreting certain provision of Delhi University Act, 1922, declined to consider Industrial Disputes Act which is an Act on different line. It is not necessary to multiply cases for it is fairly settled that in the interpretation of statute courts decline to consider other statutes proceeding on different lines and including different provisions or judicial decisions thereon.

Even so, following the above rules and principles, it seems clear that the words 'explanation' or 'guidance' used in provision of Section 5(3) must be understood literally in their natural meaning. No doubt or difficulty should arise as, clearly, they do not create any conflict or confusion in their natural meanings. In the present context, the word 'explanation' in substance will literally mean clarification in its ordinary and natural sense, that is, making the meaning clear in case where the decision suffers from ambiguity, inconsistency or obscurity.

The meaning of the word 'guidance' also does not create any difficulty. From a fair reading of the provisions the plain and natural meaning of the word will only mean some direction which guides or leads. These meanings find support in some of the authoritative dictionaries cited in his case.

This being so, what is the legal effect of this expression 'explanation' used in the provision of Section 5(3) of the Act ? Plainly, the Tribunal cannot go beyond clarifying the matters referred to it obviously to remove doubts or difficulties or apparent ambiguities, obscurity or inconsistencies. It is significant to note in this connection that the Tribunal has not been given any power to set aside, alter or modify like those in case of Review or Revision its earlier decision on or after giving such explanation. But the decision of the Tribunal shall be deemed to be modified accordingly. In other words, such explanation will be read as modification of the original decision of the Tribunal.

As regards second clause namely, that "guidance is needed upon any point not originally referred to the Tribunal" it is quite clear that guidance relates to matters not originally referred to the Tribunal and not to matters involved in the decision of the Tribunal. It is to be noticed that the reference is made by the Central Government for adjudication of water dispute by tribunal on the request of the State Government in the prescribed manner under Section 3(a), (b) and (c) of the Act. The precise matters, it appears, for which reference may be made, are necessarily required to be stated in the prescribed form. Now, cases may be visualized where after the Tribunal's Report and decision under Section 5(2) some matters not referred to in the original reference, may crop up and need some direction of the Tribunal. In such contingencies some fresh adjudication may be necessary, but that must be confined only to such point of reference and no more. Such adjudication as contended by Gujarat, I think rightly, has to be in consonance with the decision already given under Section 5(2) of the Act.

Thus on a fair and proper construction of Section 5(3) it must be held that Tribunal has power only of clarification and not of review or revision nor it can exercise any inherent power in giving explanation on matters referred to it. Under second clause the Tribunal has power of adjudication limited to question of guidance on matters not originally referred to but at the same time it must be consistent with Tribunal's original decision. Any question touching the correctness or validity of Tribunal's decision under Section 5(2) would be outside the scope of Section 5(3) of the Act.

I will now proceed to consider the points mentioned above raised in the grounds of respective reference of the Union of India and other States in the next Part II.

PART II

Point No. 9 : Reference 1 of 1978

The Union of India states as follows :—

> "9. In Clause XIV(15), page 809, Honourable Tribunal have directed that the planning of the projects shall be carried out by the States, save to the extent prescribed in the orders of the Tribunal. In their report, the Honourable Tribunal have given their views on the appropriate intensity of irrigation, extent of command area, water requirements etc. The Honourable Tribunal may kindly give explanation and guidance that within the apportioned quantum of water use, the respective States may effect such modification in these planning aspects, as they consider to be in their interests."

It appears from the above statement, the Union of India has asked both for explanation and guidance for such modification of the planning aspects of the respective States within the apportioned quantum of water use as they consider to be their interest. The Union of India has referred to Final Order of the Tribunal Clause XIV, Sub-clause 15 (Vol. II, page 809 of the Report). Sub-clause (15) provides :—

> "The construction of the works and the planning of the Projects will be carried out by each State through its own agencies and in the manner such State deems proper without any interference by the Authority or the other States, save and except to the extent as prescribed in the Orders of the Tribunal."

It is difficult to see how from the order or direction quoted the question of explanation or guidance or for alteration of the planning aspects of the concerned States can arise. The Tribunal, it appears, has not given any direction or order for use of the apportioned quantum of water by the respective States according to the plan and projects for the purpose of irrigation or power generation. The provision of Sub-clause 15 of Clause XIV referred to by the Union of India was given solely for the purpose of construction of works and planning of the projects through independent agencies of respective States while defining the power and jurisdiction of the Narmada Control Authority appointed under the Order of the Tribunal and that also without giving any particulars of these projects. There is nothing to show that by the decision or order of the Tribunal the plans and projects cannot be altered in future in the best interest of the party States.

It appears, however, that State of Madhya Pradesh has also sought similar clarification for alteration of their planning in future if necessary within the apportioned quantum of water (page 7 of its reply). State of Gujarat and Rajasthan also have submitted that the Tribunal may give suitable directions to be made applicable to all the party States uniformly.

Maharashtra has, however, submitted that modifications which do not affect irrigation or power interest of State or States may be allowed to be made within the sanctioned quantum of water duly approved by the Authority (Page 9 of its reply). But Maharashtra has also stated that diversion of water to unspecified area would result in loss of power (page 89 of its reply).

Firstly, it is already noticed that no Order or directions were given by the Tribunal in its original decision for use of apportioned quantum of water by the respective parties in terms of their proposed plans or projects placed before the Tribunal. These plans, projects or schemes were adduced in evidence by the party States for the purpose of establishing their respective needs of Narmada water. Therefore, the question of granting liberty to the party States to alter or change their proposed plans and projects cannot arise.

Secondly, such order cannot be given without first determining the extent of the area, suitability of irrigation, water use, etc. that may be in contemplation of the party States.

Thirdly, the State of Maharashtra has raised objection on the ground that diversion of water to unspecified area would result in loss of power. The total power generation on the proposed plans placed before the Tribunal is the subject matter of the decision already made by the Tribunal. So, whether or not such diversion of water would result in loss of power must first be determined, for in any case, if it does, that will result, in my view, upsetting the decision of the Tribunal on this aspect of the matter.

Even so, I should take notice of the fact that all the three party States viz. Madhya Pradesh, Gujarat

and Rajasthan agree that some kind of direction as proposed by the Union of India should be made and the State of Maharashtra also agrees provided it is made clear that such direction would not affect irrigation or power interest of any State or States. It is, therefore, desirable to clarify the position and some direction, as asked for, may be given but with proper safeguards. Accordingly, the following paragraph should be added under Clause III of the Tribunal's Report at page 762 :—

> "III. Each party State will be at liberty to make such changes in the pattern of water use and in the areas of benefit within or outside the Narmada Basin in its territory as it may be considered in the best interest of the State provided such changes do not affect irrigation or power interest of any of the party State or States concerned."

I order accordingly.

Point No. 5 Gujarat's Reference No. 2 of 1978

Gujarat has asked for modification of Sub-clause 5 of the Clause V of the Final Order as under by inserting the following paragraph as Sub-clause 6 there :—

> "6. During the years in which Madhya Pradesh and/or Maharashtra cannot utilise the Narmada waters upto their allocated shares, and, therefore, flows of the Narmada reaching Navagam are in excess of shares allocated to Gujarat and Rajasthan, it will be open to Gujarat and Rajasthan to utilise such surplus waters for irrigation without any prescriptive rights. No adjustments on that account shall be made in the following water year of such use in excess of the authorised use."

Madhya Pradesh and Maharashtra have opposed such submission of Gujarat. Madhya Pradesh has submitted that in view of Sub-clause (5), Gujarat's contention is fallacious (page 34 of its reply).

The ground taken by Maharashtra, mainly is that "water should not be deemed to be surplus until full entitlement for maximum power generation on the River Bed Power House has been accorded priority." (page 29 of its reply).

Rajasthan did not raise any objection.

Sub-clause (5) of Clause IV of the Final Order of the Tribunal provides *inter alia*—

> "(5) It may be mentioned that in many years there will be surplus water in the filling period after meeting the storage requirements and withdrawals during the period. This will flow down to sea. Only a portion of it will be utilisable for generating power at Sardar Sarovar river-bed power-house and the rest will go waste. It is desirable that water which would go waste without even generating power at the last river-bed power house should be allowed to be utilised by the party States to the extent they can. Gujarat is, therefore, directed that whenever water starts going waste to sea, without generating power, Gujarat shall inform the Narmada Control Authority (hereinafter referred to as the Authority), with copies to designated representatives of all the concerned States, and Gujarat shall also inform them when such flows cease. During the period of such flows, the Party States may utilise them as they like, and such utilisation by the party States will not count towards allotment of supplies to them, but use of such water will not establish any prescriptive rights."

From the reading of the above provision, it is not clear whether surplus water in the filling period after meeting the storage requirement and withdrawals during the period would also include allocated water in favour of Madhya Pradesh which cannot be utilised for the purpose of irrigation. In any case, on the basic principle or policy of priority being given to irrigation over power generation and adopted by this Tribunal, in the adjudication of present water dispute, it is necessary and desirable that such surplus water out of the allocated shares which cannot be utilised by Madhya Pradesh or Maharashtra during particular year or years for irrigation should be allowed to be utilised by Gujarat and Rajasthan for irrigation without any prescriptive rights. It cannot be disputed that in India food deficit problem is a serious impediment in the way of its progress and prosperity. So, if the surplus water which cannot be utilised by Madhya Pradesh for irrigation can be applied by Gujarat and Rajasthan to irrigation that will no doubt help to a great extent in ameliorating the socio-economic condition of the country. Considering the matter from all these aspects the above order needs clarification. Accordingly, a further paragraph as Sub-clause (6) of Clause IV should be added as follow :—

> "Notwithstanding anything contained in Sub-clause 5 above, it is made clear that during the years in which Madhya Pradesh or Maharashtra cannot utilise the Narmada waters upto their allocated shares for the purpose

of irrigation and, therefore, flows of the Narmada reaching Sardar Sarovar are in excess of shares allocated to Gujarat and Rajasthan, it will be open to Gujarat and Rajasthan to utilise such surplus water for irrigation without any prescriptive rights. No adjustment on that account shall be made in the following water year of such use in excess of authorised use."

I order accordingly.

Point No. 16 : Gujarat's Reference No. 2 of 1978

Gujarat's case briefly is that this Tribunal has concluded that Madhya Pradesh State should provide a carry-over capacity of 5.48 MAF in the Narmadasagar on a finding that the aggregate carry-over capacity provided for in Madhya Pradesh projects at and above Narmadasagar comes to 3.45 MAF and accordingly directed the Madhya Pradesh State to increase the carry-over capacity to 5.48 MAF or adjust pattern of its water use. In determining the reservoir level of Sardar Sarovar full utilisation of 75% dependable flow downstream, provision of carry-over capacity in the upstream projects in Madhya Pradesh State is of paramount importance.

In the premises to ensure the provision of adequate carry-over capacity in the upstream projects in Madhya Pradesh, it is of vital importance that upstream project reports should be carefully examined by the Narmada Control Authority.

It is further submitted that the Tribunal has already directed for submission of project reports of Sardar Sarovar, Narmadasagar, Omkareshwar and Maheshwar Projects to the Authority which has again been directed to point out to the States concerned, the CWC and the Planning Commission any features of the said projects which may conflict with the implementation of the Orders of the Tribunal. The Tribunal has further directed that any substantial increase in the cost of dams, power houses and canal headworks of those projects should be reported to the Authority for taking appropriate action in the matter. Gujarat has, therefore, prayed that Project Reports of all the major projects on the Narmada should be examined by the Authority. (Pages 76 and 77 of Written Submission of Gujarat and pages 79 and 80 of Gujarat's Reference No. 2, CMP No. 1943 of 1978).

Madhya Pradesh opposes the prayers of Gujarat. In substance, it is submitted that there is already a carry-over storage of 7.02 MAF provided for at and above Narmadasagar and thus there is no necessity to increase the carry-over capacity or to adjust the pattern of its water use. (pp 53-54 of its reply).

Maharashtra and Rajasthan did not offer any comment on this point.

Regarding carry-over capacity, the Tribunal has *inter alia* observed—

"On this basis a carry-over capacity of 2.81 MAF is required at Sardar Sarovar and 5.48 MAF in the reservoirs of Madhya Pradesh. From Statement 11.8 it is noticed that for the representative year 1958-59 of 75 per cent dependability, there is an aggregate carry-over capacity of only 3.454 MAF in Madhya Pradesh at and above Narmadasagar. Madhya Pradesh has not provided any carry-over capacity in its projects below Narmadasagar. Madhya Pradesh should increase the carry-over capacity in its reservoirs to an aggregate of 5.48 MAF or adjust the pattern of its water use." (Report, Vol. II, page 491).

The Final Order regarding powers, functions and duties of the Authority, provides *inter alia*—

"Madhya Pradesh or Gujarat, as the case may be, shall submit to the Authority the Sardar Sarovar Project Report, the Narmadasagar Project Report, the Omkareshwar Project Report and the Maheshwar Project Report. The Authority shall point out to the States concerned, the Central Water Commission and Planning Commission any features of these projects which may conflict with the implementation of Orders of the Tribunal. Any subsequent changes in the salient features or substantial increase in cost in respect of dams, power houses and canal headworks shall be reported to the Authority for taking appropriate action in the matter." (Report, Vol. II, Sub-clause 8(3)(i), page 801).

From the decision quoted above, it is clear that all the upstream projects of Madhya Pradesh, were considered in assessing the carry-over capacity. It is one of the most important factor in determining full reservoir level of Sardar Sarovar Project and for full utilisation of 75 per cent dependable flow downstream. It may be that there is already, as contended by State of Madhya Pradesh, a carry-over capacity of 7.02 MAF provided for at and above the Narmadasagar. But upstream projects at different times, covering no doubt a long period are likely to come up separately and variation or changes in the planning of these projects in future cannot be

ruled out particularly in view of the order for such changes made by the Tribunal. All these major projects will have some bearing on the operation of Narmadasagar Project whenever they would come up. It is, therefore, necessary and desirable that the Project Reports of all these upstream major projects ought to be placed before the Narmada Control Authority for examination to see that these projects as planned do not conflict with the implementation of the Orders of the Tribunal.

Moreover, the Narmada Control Authority has been constituted by the Tribunal with various powers and duties to give effect to or implement the Orders of the Tribunal. So, there is no reason why the other Project Reports of the upstream major projects covered by a Master Plan along with Narmadasagar Project of Madhya Pradesh should not be examined and scrutinised by the Authority whenever they come up. It would be somewhat anomalous or inconsistent with decision of the Tribunal if the Authority is confined only to the examination of four major projects mentioned in the above Order. This is also necessary to avoid complication or any difficulty in future. In my view, it is only fair and proper that the State of Madhya Pradesh should be directed to submit to the Narmada Control Authority the Project Reports of all the other upstream major projects of Madhya Pradesh at the appropriate time.

Accordingly, Clause 8(3)(i) of the Final Order shall stand modified as under :—

> "Madhya Pradesh or Gujarat, as the case may be, shall submit to the Authority the Sardar Sarovar Project Report and projects reports of all major projects envisaged upstream of Sardar Sarovar Project at the appropriate time. The Authority shall point out to the States concerned, the Central Water Commission and Planning Commission any features of these projects which may conflict with the implementation of Orders of the Tribunal. Any subsequent changes in the salient features or substantial increase in cost in respect of dams, power houses and canal headworks of all the projects shall be reported to the Authority for taking suitable action in the matter."

Point No. 16 : Reference of State of Madhya Pradesh No. 3 of 1978.

The case of Madhya Pradesh briefly is that the Tribunal has allocated 57 per cent of the power generated at Sardar Sarovar Power House to Madhya Pradesh, 27 per cent to Maharashtra and 16 per cent to Gujarat. These shares in power generation have been given in lieu of the power that could have been generated by the Harinphal and Jalsindhi Projects. But due to submergence owing to the proposed construction of Sardar Sarovar Dam under Sardar Sarovar Project, Harinphal and Jalsindhi Projects will not survive. The construction of these projects would have given employment opportunities to the people of Madhya Pradesh.

But the Tribunal has directed in Sub-clause (vi), page 766 as follows :—

> "The power houses and appurtenant works including the machinery and all installations as well as transmission lines in Gujarat State will be constructed, maintained and operated by Gujarat State or an authority nominated by the State." (Reference No. 3 of 1978 of MP/1199, p. 132).

In view of the said Order and in the circumstances stated above, it is necessary that construction, maintenance and operation of the power houses of Sardar Sarovar Dam should be entrusted to Madhya Pradesh and Maharashtra. As these two States are major beneficiaries, an organisation should be set up, and the representatives from the Electricity Boards of Madhya Pradesh and Maharashtra should be included and Madhya Pradesh should head the organisation.

Further case of Madhya Pradesh is that a control board on the lines of Inter-State Control Board set up for other projects in the country is necessary for supervision of the construction, maintenance and operation of the Sardar Sarovar Dam and power houses and Madhya Pradesh should be fully associated with such board as head of the organisation.

Madhya Pradesh prays—

> "(a) that the construction, maintenance and operation of the Sardar Sarovar Dam and the river bed and canal power house, shall be supervised by a Control Board in which the four States are represented, and
>
> (b) that the representative of Madhya Pradesh shall head the organisation managing the construction, maintenance and operation of the Power Houses." (Reference No. 3 of 1978 of MP/1199, pp. 129-133).

Accordingly, Clause 8(2)(vi) of the Final Order and Decision of the Tribunal should be modified.

Maharashtra supports Madhya Pradesh. Maharashtra's case briefly is that while these two States have

to contribute 84 per cent of the cost of the power complex of Sardar Sarovar Project, they have no active role in the control of the construction, maintenance or operation of the power complex. Maharashtra has set up several circumstances in the form of questions under Sub-heads (a) to (h) and asked both for explanation and guidance of the Tribunal on these matters by providing legitimate safeguards and machinery to ensure proper construction, maintenance and operation of the Sardar Sarovar Dam and its power houses for effective implementation of the Decision and Order of the Tribunal. Maharashtra repeated similar points in its reply to the Reference of the State of Madhya Pradesh. (Pages 50 to 52).

Gujarat has opposed the contentions of both Madhya Pradesh and Maharashtra. Shortly put, Gujarat's submission is that the construction, operation and maintenance of the Dam and the power houses, which has to be done within the State of Gujarat, must necessarily be incharge of Gujarat State and not incharge of organisation headed by the representative of Madhya Pradesh. The Tribunal has constituted Narmada Control Authority which will ensure that the work of the project is carried out in consonance with the Order of this Tribunal. No Inter-State Control Board is necessary for supervision of construction, operation and maintenance of Sardar Sarovar Dam and power houses. In the case of Narmadasagar Dam, where a part of the cost which has to be borne by the Sardar Sarovar Project, no Inter-State Control Board is envisaged for supervision of construction, maintenance and operation. Gujarat, therefore, contends that submission of Madhya Pradesh should be rejected. (Reply of Gujarat to Reference No. 3 of 1978 pp 78—80).

Rajasthan did not offer any comment.

On 24th April, 1979, tentative Draft in respect of the constitution of Construction Boards for Sardar Sarovar, Narmadasagar and Navagam Main Canal were circulated by Learned Chairman.

The Union of India suggested some modification of these Drafts (CMP No. 23 of 1979).

The State of Gujarat submitted that the Tribunal had no jurisdiction "to give any direction for the setting up or establishment of any Board to be in over all charge of the construction of Units I and III of the Sardar Sarovar Project or the Navagam Main Canal. Under the Original Reference No. 1 of 1969, Tribunal gave its decision in August, 1978 under Section 5(2) of the Inter-State Water Disputes Act, 1956. Gujarat extensively quoted the relevant Orders and the decision of the Tribunal under Section 5(2) and submitted that the Tribunal has no jurisdiction to constitute any such Board for Sardar Sarovar Project or Navagam Main Canal. Gujarat, however, without prejudice to its contention offered comments on different clauses of the tentative Drafts suggesting some modification.

Madhya Pradesh reiterated its case made in its Reference No. 3 of 1978 and submitted that in view of the fact that Madhya Pradesh and Maharashtra are the major beneficiaries in sharing power generation of Sardar Sarovar Project, it cannot be considered as a project of Gujarat alone but a joint project and, therefore, Construction Board for this project ought to be set up.

As regards Narmadasagar Project, Madhya Pradesh has submitted that it is not a joint project of Madhya Pradesh and Gujarat. There is, therefore, no necessity to constitute a Construction Board for Narmadasagar Project as proposed in the Draft. Accordingly, Madhya Pradesh proposed some modifications of the draft for Sardar Sarovar Construction Board. Madhya Pradesh did not comment on the Draft regarding Narmadasagar Construction Board.

Madhya Pradesh also did not offer any comment on the Construction Board of Navagam Main Canal. (Comments of Madhya Pradesh, MP/1205, pp 5—12 and 12—23).

Thereafter, alternative tentative Draft only for the Constitution of Sardar Sarovar Construction Advisory Committee was circulated upon which according to the direction of the Tribunal Union of India and all the party States put in their respective comments.

The Union of India filed its comments suggesting some modifications of this alternative draft of Sardar Sarovar Construction Advisory Committee and submitted, as regards the Construction of similar construction committee for Narmadasagar and Navagam Main Canal, *inter alia* as follows :—

> "3. As regards the constitution of similar Construction Committee for Narmadasagar and Navagam Main Canal, the Union of India submits that as the matter involves interests of one or more States, the Hon'ble Tribunal may like to take a decision in the light of submissions made by them. In case, however, the Tribunal finally decides to recommend the Construction Advisory Committees for Narmadasagar and Navagam Main Canal or either of them, it may be on the lines of the Sardar Sarovar Construction Advisory Committee with suitable modifications regarding composition depending on the States involved."

Gujarat opposed the setting up of Advisory Committee on Sardar Sarovar Project and reiterated its similar objection taken against the proposed Construction Board earlier. Without prejudice, however, to its objections, Gujarat made certain comments and suggested some modification of the alternative Draft. (Comments of Gujarat CMP No. 37 of 1979, pp. 1—4 and Annexure A).

The State of Madhya Pradesh pleaded for establishing a Construction Board for Sardar Sarovar Project and not an Advisory Committee as suggested which according to it would not be able to achieve the purpose for which it was proposed to be created. In particular. Madhya Pradesh suggested among other things that a Control Board on the lines of the Betwa River Board should be set up "for the efficient, economical and early construction of the Sardar Sarovar Project, Units I and III". Without prejudice to this contention, Madhya Pradesh offered its comments on the alternative Draft of Sardar Sarovar Advisory Committee and suggested some modifications. (Comments of Madhya Pradesh, MP/1207).

Maharashtra State has insisted on constitution of a control board for the purpose of 'ensuring efficient, economical and early execution of the Sardar Sarovar Project' which cannot be fulfilled by an Advisory Committee as suggested. Maharashtra, therefore, did not give para-wise comments on the Draft Advisory Committee, but referred to a Draft Constitution of a control board as suggested in its Statement 'A' of Annexure, CMP-26 of 1979.

The State of Rajasthan, in substance, has submitted that in case Advisory Committee, as proposed for Sardar Sarovar Project, is to be constituted, a similar Advisory Committee should also be constituted for Narmadasagar as well as for construction of Navagam Main Canal, Rajasthan has suuggested also some modifications regarding the constitution and power of these three Committees. (CMP 28 of 1979).

From the rival contentions of the parties, it appears, that there is a serious dispute over the proposed Constitution of a Board or Advisory Committee. As the matter stands, the question that may be considered is whether an Advisory Committee over the construction, operation and maintenance of Sardar Sarovar Project as proposed should be consituated, and if so, on what terms.

It appears that in course of adjudication proceedings under Section 5(2) of the Act, Issue No. 14 was framed as under :—

> "What machinery, if any, should be set up to make available and regulate the allocation of water to the States concerned or otherwise to implement the decision of the Tribunal

and Issue No. 21 is as under :—

> "To what reliefs and directions, if any, are the parties entitled?"

It is undisputed that duruing the hearing of the Original Reference, there were proposals regarding machinery and submissions were made with reference to Issue No. 14 by the party States. Madhya Pradesh, in its Statement 132, Clause X proposed as under :

> " Clause X—Limitation On The Jurisdiction of The Board. The actual construction work and the planning of its projects will be carried out by each State through its own agencies and in such manner as it chooses without any interference by the Board, save and except to the extent strictly necessary to carry out the direction of the Tribunal."

The Tribunal, after consideration of all matters in its Final Order and Decision (pp 794—810 Clause XIV) provided for setting up of machinery for implementing the Decision of the Tribunal. It is clear that the Tribunal established Narmada Control Authority for the purpose of securing compliance with the Decision, Order and Directions of the Tribunal and also a Review Committee mainly to review any order or decision by the Narmada Control Authority, if disputed.

Sub-clause 15 of the above Order is as under :

> "Sub-Clause 15—Construction Outside Jurisdiction of Authority.—The construction of the works and the planning of the projects will be carried out by each State through its own agencies and in the manner such State deems proper without any interference by the Authority or the other States, save and except to the extent as prescribed in the Orders of the Tribunal."

Sub-Clause 16 reads :

> "Nothing contained in this Order shall prevent the alteration, amendment or modification of all or any of the foregoing clauses by agreement between all the States concerned."

It is, therefore, clear that the Tribunal fully investigated the matter under specific Issue No. 14 (residuary Issue No. 21 was there) and after consideration of all aspects, determined that the construction of the works and planning of the respective

projects of each State will be carried out through its own agencies without any interference by the Narmada Control Authority or other States save and except to the extent as prescribed in the Orders of the Tribunal. In other words, this Order can only be modified or altered by agreement between all the States concerned as provided in Sub-clause 16. These matters are finally decided under Section 5(2) and the issues cannot be reopened. If such a course is adopted, then that would mean reopening of the case and retrial of the issue which is not permissible under the Act. It need not be over emphasised that on the legal position determined by the Tribunal on interpretation of Section 5(3) of the Act the Tribunal has no power to review or alter and reconsider or modify its decision under Section 5(2) of the Act. If such a Committee as proposed is constituted at this stage, it would be wholly inconsistent with and result in alteration or modification of the Tribunal's Original Decision and Order. It is clear that creation of a new authority as proposed in the Final Order and Decision under Section 5(2) of the Act would be outside the scope of the Tribunal's jurisdiction under Section 5(3) of the Act.

In my view, Constitution of such a Committee at this stage cannot by any means mean "giving an explanation". Clearly, Decision and the Final Order on this aspect do not suffer from any ambiguity or inconsistency and therefore, there cannot be any scope for clarification. Setting up of a Committee with supervisory or advisory jurisdiction for the first time over a project cannot be made by way of explanation of the matter. It is a substantive Order which would no doubt affect the former Decision and Order of the Tribunal.

Next, such a course, if adopted, cannot come either within the scope of guidance of the matter not originally referred to can and must mean only those As already discussed by me earlier, the matter not originally referred to can and must mean only those matters which were not referred to in the form of request by State Government under any of the Sub-clauses (a), (b) and (c) of Section 3 of the Act. It is quite clear that question of setting up of machinery by Constitution of Authority, Board or Committee was already a subject matter of decision before the Tribunal under specific issues, as already noticed in the course of adjudication proceedings under Section 5(2) of the Act. The Tribunal fully investigated the matter and after considering the relevant matters and arguments and suggestions of the parties at length took the decision and passed its Final Order as enumerated above. In my opinion, therefore, it is beyond the competence of the Tribunal to constitute and appoint an Advisory Committee at this stage over Sardar Sarovar Project, as proposed.

On merits also, State of Madhya Pradesh or Maharashtra has no case. The basis on which both States asked for setting up of a committee for supervision or advice on the construction aspect of Units I and III of Sardar Sarovar Project, may apply also to the construction part of Narmadasagar Project.

The Tribunal has held *inter-alia* as under :—

> "Without regulated releases from Narmadasagar, Sardar Sarovar FRL + 455 will not be able to utilise its allotted share of water as a good deal of flood flows would spill down to sea instead of being stored at Narmadasagar for regulated releases." (Report, Vol. II, Page 657, Para 15.6.4)

Since water stored at Narmadasagar for utilisation at Sardar Sarovar Dam will be released from Narmadasagar, the cost of Narmadasagar to the extent of 17.63 per cent has been directed to be charged to Unit I—Dam and appurtenant works of Sardar Sarovar Dam. Accordingly, the Tribunal has directed that "Sardar Sarovar should credit to Narmadasagar each year 17.63 per cent of the expenditure in the financial year commencing from the year of taking up of the construction of Narmadasagar Dam."

From all these, it is clear that State of Gujarat and also Rajasthan which has to bear the above cost in certain proportion along with Gujarat may demand for constitution of a similar committee for efficient, economical and early execution of Narmadasagar Project for protection of interests both of Gujarat and Rajasthan. In fact, both Gujarat and Rajasthan have prayed for constitution of such advisory committee for Narmadasagar in the event such an Advisory Committee on Sardar Sarovar Project is constituted. It cannot be disputed that both Gujarat and Rajasthan would very much depend on the early construction and smooth operation of Narmadasagar Dam. But this is opposed by Madhya Pradesh. In my view in the facts and circumstances of this case, nothing of the kind as suggested by the parties should be done for they would only lead to complications in future as contended rightly by Gujarat and may defeat the very object and purpose for which the projects of the respective States have been planned. I can imagine cases to be not too unreal where points of difference between the party States on certain issues on construction matter may take quite some time to be decided by the Narmada Control Authority or a Review Committee. The grounds pressed for by Madhya Pradesh

and Maharashtra pleading apprehension that their interest in the Sardar Sarovar Project may be in jeopardy are without substance. After all, we are deciding the case of States and not of ordinary person. Having regard to object and scope of the Act, there is little doubt that after the adjudication of water disputes, the rest of the matters is left to the concerned States. All the party States will, therefore, in their mutual interest and for public benefit ensure that Decision or Orders of the Tribunal are implemented.

Even so, Narmada Control Authority has been established with a Review Committee and there are enough powers given to them to see that interest of all the party States are safeguarded and construction, maintenance and operation of the concerned projects are carried out in accordance with the Decision and Final Order of the Tribunal.

Madhya Pradesh has urged that in case of major joint projects, the establishment of Inter-State Control Board is favoured and in particular relied on the Betwa River Board. In my view, the Inter-State Control Boards apply to the projects which are joint projects. The State of Madhya Pradesh and Maharashtra may have some interest in the sharing of power generation from its project. But that fact by itself will not constitute such project as a joint project. In any case, such Board can be set up only by the consent of the concerned party States and thereupon appropriate acts may be passed.

Therefore, after giving my most anxious consideration in the matter, I am of the opinion that constitution and establishment of an Advisory Committee over the construction, maintenance and operation part of Sardar Sarovar Project must be refused and I order accordingly.

In the view I have taken of the matter, the other part of the question raised need not be answered.

PART III

ERRATA FOR VOLUME IV OF THE REPORT OF THE NARMADA WATER DISPUTES TRIBUNAL

Para	Line	
1.1.2	16th	Read after "Narmada Water Resources Development Committee", hereinafter referred to as the Khosla Committee.
1.2.26	3rd	Delete 'and' after the word 'estimate'.
1.2.26	4th	Read 'is' for the word 'are'.
1.3.35	1st	Read 'substantially' in place of 'Subsetantially'.
1.3.48	7th	Read 'has' in place of 'have' after the word 'Tribunal'.
1.3.70	11th	Read 'released' in place of 'retained'.
2.2.20	2nd	Delete the one set of words 'Gujarat as'.
.2.32	Heading	Read 'Dam' in place of 'Canal'.

PART IV

As I have given my separate opinion only on few points, it is not necessary to record my Final Order extensively which have been set out in Chapter-IX of the Further Report. This Final Order shall be rea subject to my separate opinion and Orders given in Part-II of this Volume[1].

Sd/- A. K. Sinha
Member

NEW DELHI
December 7, 1979

1. Be it noted that nothing contained in the Final Orders recorded in Chapter-IX of the Further Report, shall affect my separate opinion recorded in Volume IV of the Report and the decision of the Tribunal under Section 5(2) of the Act.

MGIPRRND—7 A & I/79—Sec.-I-D—13-4-80—750.

P. Agr. 144.II
750-1980 (DSK. II

PRINTED BY THE MANAGER, GOVT. OF INDIA PRESS, RING ROAD, NEW DELHI-110064
AND PUBLISHED BY THE CONTROLLER OF PUBLICATIONS, DELHI-110054, 1980