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भारत सरकार

GOVERNMENT OF INDIA

जल संसाधन मंत्रालय

MINISTRY OF WATER RESOURCES

वार्षिक प्रतिवेदन ANNUAL REPORT (2009-10)



सरदार सरोवर निर्माण सलाहकार समिति,
वड़ोदरा

SARDAR SAROVAR CONSTRUCTION ADVISORY COMMITTEE
,VADODARA

FOREWORD

The Sardar Sarovar Construction Advisory Committee (SSCAC) was constituted with a view to ensure efficient, economical and timely execution of the Unit-I (Dam & Appurtenant works) and Unit-III (Hydro Power works) of the Sardar Sarovar Project (SSP). The office of Sardar Sarovar Construction Advisory Committee has been issuing Annual Reports regularly since its inception in 1980. This Annual Report of SSCAC presents a glimpse of SSCAC, its constitution, its functions and various activities of SSCAC Secretariat, expenditure incurred and gist of decisions taken in the various meetings held during the year 2009-10. The Unit-I component of the project involves main dam construction which started in April 1987 and was programmed to be completed by the end of January 1998 as per the Revised Implementation Schedule (RIS) approved by the SSCAC in February 1990. Unfortunately, the construction work on spillway blocks of the dam remained held up for long, due to litigation in the Supreme Court of India. Though this hurdle was cleared in October 2000 with the final verdict of the Court in favour of project, yet the desired pace of progress could not be achieved owing to non-completion of required resettlement and rehabilitation (R&R) works of the project affected persons an environmental protection measures. However by raising the spillway portion could be raised above the elevation level (EL) of 110.64 m by June 2004, thereby making it possible to derive partial irrigation and power benefits from the Project.

Further permission to raise the height of dam in spillway portion from EL 110.64 m to EL 121.92 m was accorded by Narmada Control Authority on 8th March 2006 after taking into account the recommendations of Resettlement & Rehabilitation Sub-Group and Environment Sub-Group and the assurances of all the party States. After getting clearance from NCA, the height of the dam is raised up to EL 121.92 m in December 2006.

The Unit-III of the project involves mainly works in regard to the Canal Head Power House (CHPH), underground River Bed Power House (RBPH) and Garudeshwar wier. All works of CHPH were completed in January 1998; however, power could only be generated after the dam had attained the height of EL 110.64 m. All the five units of CHPH have been commissioned successfully during August 2004 to December 2004. All the civil and electrical works of 1200 MW RBPH are complete and the 1st to 6th Units of RBPH have been commissioned in February 2005, April 2005, August 2005, October 2005, March 2006 and June 2006 respectively. Substantial power generation has been started about 2500 Million Units energy was generated by both power houses during 2009-10. The work for Garudeshwar weir was approved by SSCAC in its 76th meeting held on 15th June 2009 but the actual works are yet to be started.

Date: September 2010

(N.K.Bhandari)
Secretary
Sardar Sarovar Construction Advisory Committee

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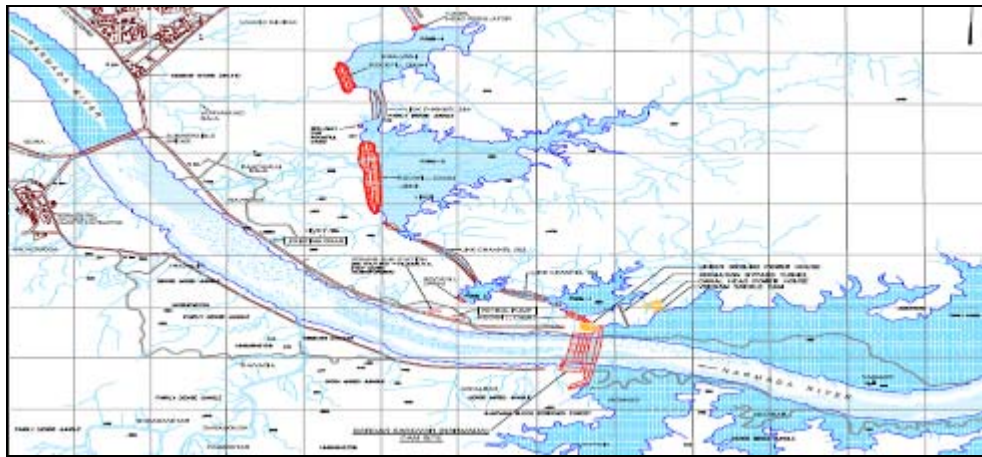
ABBREVIATIONS

CEA	:	Central Electricity Authority
CHPH	:	Canal Head Power House
CMO	:	Central Mechanical Organisation
CWC	:	Central Water Commission
CWES	:	Central Water Engineering Services
EL	:	Elevation Level
EMC	:	Energy Management Centre
GIS	:	Gas Insulated Switchyard
GOG	:	Government of Gujarat
GOM	:	Government of Maharashtra
GOMP	:	Government of Madhya Pradesh
GOR	:	Government of Rajasthan
GRA	:	Grievance Redressal Authority
GUVNL	:	Gujarat Urja Vikas Nigam Ltd.
IBPT	:	Irrigation Bye-Pass Tunnel
LCM	:	Lakh Cubic Metre
MOWR	:	Ministry of Water Resources
NCA	:	Narmada Control Authority
NWDT	:	Narmada Water Disputes Tribunal
PSC	:	Permanent Standing Committee
R&R	:	Resettlement & Rehabilitation
RBPH	:	River Bed Power House
IBPT	:	Irrigation Bye-Pass Tunnel
RCNCA	:	Review Committee of NCA
RIS	:	Revised Implementation Schedule
SSCAC	:	Sardar Sarovar Construction Advisory Committee
SSNNL	:	Sardar Sarovar Narmada Nigam Ltd.
SSP	:	Sardar Sarovar Project
SSRRC	:	Sardar Sarovar Reservoir Regulation Committee
TCM	:	Thousand Cubic Metre
TRC	:	Tail Race Channel
TRM	:	Thousand Running Metre
TSM	:	Thousand Square Metre

CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

The Narmada Water Disputes Tribunal (NWDT) was constituted in October 1969 by the Government of India, Ministry of Irrigation and Power, to adjudicate upon the water dispute in the inter State river Narmada and the river valley thereof. The final order and decision of the said Tribunal was published in the Official Gazette of India in December, 1979, in which the tribunal has ordered setting up of the “Sardar Sarovar Construction Advisory Committee” to perform the supervisory function over the construction of the Sardar Sarovar Project.



SARDAR SAROVAR PROJECT

The Tribunal considered that the said Construction Advisory Committee is desirable and necessary for ensuring efficient, economical and timely execution of Unit-I (Dam & Appurtenant works) and Unit-III (Power Complex) of the project. Accordingly the Sardar Sarovar Construction Advisory Committee (SSCAC) was constituted by the Government of India in September 1980 and the first meeting of SSCAC was held on 5th December 1980 at Vadodara.

1.2 CONSTITUTION

The constitution of the SSCAC originally ordered by the Ministry of Irrigation (Govt. of India) vide its Resolution No. 22/7/80-P-I dated 4th September 1980, was as per the NWDT Award, with the Secretary to Government of India, in charge of Ministry of Irrigation as its Chairman. Subsequently three amendments have been made in the constitution, two in April 1986 and one in August 1987. Copy of the original order of Government of India constituting the

SSCAC is given as **Annex-I(A)** and the copies of subsequent amendments are presented as **Annex-I(C), I(D) & I(E)** respectively.

The present composition of the SSCAC is as under:

- i) The Secretary to the Government of India, in charge of the Water Resources -Chairman
- ii) The Secretary to the Government of India, Department of Power, Ministry of Energy*. -Member
- iii) Chairman, Central Water Commission (CWC) or a Member of the CWC representing him in case the Chairman is unable to attend a meeting. -Member
- iv) Chairman, Central Electricity Authority (CEA) or a Member of the CEA representing him in case the Chairman is unable to attend a meeting. -Member
- v) Executive Member, Narmada Control Authority (NCA) or its Independent Member representing Chairman in case the Executive Member is unable to attend a meeting. -Member
- vi) Financial Adviser in the Ministry of Water Resources. -Member
- vii) Secretaries in charge of Finance Department of Government of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan or their nominees. -Members
- viii) Secretaries in-charge of Irrigation Department of Governments of Gujarat and Rajasthan or their nominees. -Members
- ix) Secretaries in-charge of Power Department of Governments of Madhya Pradesh, Gujarat and Maharashtra or their nominees. -Members
- x) Secretaries in charge of Revenue Department or any other Department concerned with land acquisition of Madhya Pradesh, Maharashtra & Gujarat or their nominees. -Members
- xi) 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 or their nominees. -Members
- xii) Chairman, State Electricity Board of Madhya Pradesh,

	Maharashtra and Gujarat or their nominees.	-Members
xiii)	Financial Adviser, Sardar Sarovar Project.	-Member
xiv)	Secretary (to be appointed by the Government of India)	-Secretary

Note: * Department of Power, Ministry of Energy is now renamed as Ministry of Power.

1.3 FUNCTIONS

As decided by the NWDT in its Award of December 1979, and as resolved by the Government of India in its order of 4th September 1980, the SSCAC shall:

- i) Scrutinise the project estimates prepared for Unit-I and Unit-III 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 recommendations on the programme of construction of different parts of the project in a coordinated 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 the necessary recommendation.
- 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 works on the project, to the officers engaged in the execution of the project.
- vi) Examine and, where necessary, recommend specifications for various classes of work.

- vii) Examine and make recommendations 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.

1.4 HEAD- QUARTERS & SECRETARIAT

In the Govt. of India resolution constituting the SSCAC, its headquarter was indicated as Gandhinagar. However, the SSCAC during its first meeting held in December 1980 had fixed Vadodara as its headquarter on the suggestion of Govt. of Maharashtra and in view of the fact that the dam site was near Vadodara and that the Govt. of Gujarat was in a position to provide office and residential accommodation to SSCAC Secretariat at Vadodara. The resolution regarding change of head-quarters of the SSCAC from Gandhinagar to Vadodara was issued in December 1980 and is given at **Annex-I (B)**.

The SSCAC has a full time Secretary of the rank of Chief Engineer appointed by the Government of India. The post of Secretary has been encadared in the Central Water Engineering (Group-A) Service of the Ministry of Water Resources since August 1986. The Secretary is assisted by a Deputy Secretary and three Assistant Secretaries who are also from the Central Water Engineering (Group-A) Service. The supporting staff is taken on deputation from the party States and other Central/State government offices.

1.5 CONDUCT OF BUSINESS AND PROCEDURE RULES

According to the directions of the Tribunal, “the Construction Advisory Committee will frame rules regarding procedures and delegation of powers for the purpose of carrying its business”.

Accordingly, the Committee, in its 3rd meeting has approved the rules for the conduct of its business and procedure, which were subsequently amended during its 11th, 14th and 67th meetings. The Conduct of Business and Procedure Rules are enclosed as **Annex –II**.

1.6 PERMANENT STANDING COMMITTEE (PSC)

1.6.1 Constitution of PSC

In order to streamline arrangements for scrutiny and sanctions to be accorded by SSCAC for various matters, concerning Unit-I and Unit-III of the Sardar Sarovar Project, SSCAC during its 9th meeting held on 9th June 1983 decided to create a Permanent Standing Committee (PSC).

The proposal of Terms of Reference for constituting the PSC, headed by the Chairman, Narmada Control Authority and with Member (P&P) of CWC, Financial Advisor to Sardar Sarovar Project and the Secretary of SSCAC as members, was finalized in the first meeting of PSC held on 9th August 1983 and the proposal was accepted by the SSCAC in its 10th meeting held on 25th August 1983. In the 26th meeting of SSCAC held on 22nd September 1986, the PSC was reconstituted by including representatives from each of the four party States and the Financial Adviser of Ministry of Water Resources. The constitution of PSC was further amended in the 28th meeting of SSCAC held on 29th June 1987 to provide the Executive Member of NCA as Chairman of PSC instead of Chairman, NCA as provided earlier. In the 64th meeting of SSCAC held on 24th August 1998, the Chief Engineer (CMO) of CWC was nominated as member of PSC in place of Member (P&P) of CWC.

The present composition of the PSC is as under:

- | | | |
|----|--|-----------|
| 1. | The Executive Member, Narmada Control Authority | -Chairman |
| 2. | The Member (HE), Central Electricity Authority, Government of India | -Member |
| 3. | The Chief Engineer (CMO), Central Water Commission, Government of India | -Member |
| 4. | The Financial Advisor, Ministry of Water Resources, Government of India | -Member |
| 5. | The Secretary (Narmada), Narmada, Water Resources, Water Supply & Kalpsar Department, Govt. of Gujarat | -Member |
| 6. | The Director (Finance & Administration), Sardar Sarovar Narmada Nigam Limited, Government of Gujarat | -Member |
| 7. | The Member (Engg.), Narmada Valley Development Authority, Government of Madhya Pradesh | -Member |

- | | | |
|-----|--|----------------------|
| 8. | The Chief Engineer and Joint Secretary, Irrigation Department, Government of Maharashtra | -Member |
| 9. | The Additional Chief Engineer, Irrigation Zone, Government of Rajasthan | -Member |
| 10. | The Secretary, SSCAC, Government of India | -Member
Secretary |

1.6.2 Functions of PSC

As per the proposal approved by SSCAC in its 10th meeting, the functions of Permanent Standing Committee are as under:

- i) Scrutiny of all project estimates and getting them modified as considered necessary.
- ii) Examination and acceptance on behalf of the SSCAC of estimates beyond the Powers of the General Manager/Chief Engineer up to Rs. 20 crore in each case for recommendation to the concerned Governments for administrative approval, and examination and recommendation of estimates costing more than Rs. 20 crore each to the main Committee for acceptance.
- iii) Scrutiny of technical features and designs of the project works referred to the SSCAC and sending its recommendations to the referring authority. In case where the recommendations made by the Standing Committee would cause more than 10% deviation in cost beyond what was earlier approved by the SSCAC, the Standing Committee for approval to the SSCAC shall refer the matter to SSCAC.
- iv) Identification of problems to be referred to the Panel of Consultants and/or expert institutions and recommending them to the SSCAC for further necessary action; processing of the Consultants' suggestions and reporting to the SSCAC the Standing Committee's recommendations.
- v) Review of Construction Programme of Unit- I & III and review of the monthly progress on all works of the project and making recommendations to the Construction Authority for such modifications / adjustments in the construction programme as may be required.

- vi) Recommendations of appropriation of funds to and between Unit- I & III and between one work and another within a unit depending on the review of progress of works, within the overall Annual Outlay approved by the SSCAC.
- vii) Examination and recommendations to the concerned Governments on the tenders for the project works beyond the powers of project officers for works up to Rs. 20 crore each.
- viii) Examination and recommendations on specifications for project works.
- ix) Examination and recommendations to the SSCAC on tenders for project works costing more than Rs. 20 crore each.
- x) Recommendations on creation of posts required under the administrative control of the Secretary of the Sardar Sarovar Construction Advisory Committee and sanction to the relevant recruitment rules.
- xi) Such other functions as may be delegated to it by the SSCAC from time to time.

As per SSCAC's decision in its 29th meeting held on 29th September 1987, the PSC also functions as "Claims Committee" to consider the claims of the contractors beyond the delegated powers of project authority. As per the decision of 68th meeting of SSCAC held on 27th June 2002, the consolidated functions of PSC as Claims Committee are as follows:

The PSC shall function as Claims Committee and approve the contractor's claims: -

- a) for all claims arising out of unforeseen circumstances, pertaining to all contracts approved by the SSCAC;
- b) for all claims arising out of change in quantities of tender items, or due to extra items, where each claim exceeds Rs.5 crore, pertaining to all contracts approved by the SSCAC;
- c) for all claims arising out of change in quantities of tender items, or due to extra items, if total value of the claims settled exceeds 25% of the contract value of the particular work, pertaining to all contracts approved by the SSCAC;

- d) for all claims arising out of change in quantities of tender items, or due to extra items, or for unforeseen reasons, if total claim exceeds 10% of the contract value of the particular work, pertaining to all contracts finalized by project authorities under power delegated to them.

1.7 REVIEW COMMITTEE

The Review Committee of NCA constituted as per the NWDT Award also functions as the Review Committee for the SSCAC in case of disagreement on any decision taken by the SSCAC. The Review Committee may suo-moto or on the application of any party State, reviews any decision of the SSCAC. The decision of the Review Committee on such matters shall be final and binding on the concerned States. The Review Committee is chaired by the Union Minister for Water Resources; and the Chief Ministers of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan and Union Minister of Environment and Forests are its members. The Secretary of the Union Ministry of Water Resources is the convener of the Review Committee without any voting rights.

CHAPTER 2

TECHNICAL ACTIVITIES

2.1 MEETINGS OF SSCAC

The SSCAC is entrusted with the responsibility to ensure efficient, economical and expeditious execution of the Unit-I & Unit-III works of the Sardar Sarovar Project. The Committee deliberates on the various points concerned with the programme/progress of construction, estimates, claims, share cost payments etc. related to Unit-I & Unit-III works of Sardar Sarovar Project.

76th meeting was held on 15th June 2009 at New Delhi. Important decisions taken in the meeting are given in the following paragraphs:

A) 76TH MEETING OF SSCAC

I) Insurance coverage for Sardar Sarovar Power Project

Member Secretary informed the Committee that the Insurance policy from M/s. HDFC-EGRO General Insurance Co. Ltd, Vadodara at a premium of Rs. 96,79,900/- for Sardar Sarovar Power Project for the Insurance coverage of amount of Rs.1797 Crores has been taken by SSNNL, GOG. The Committee decided that the insurance coverage for Sardar Sarovar Power Project may be taken up every year.

II) Payment of Share Cost of SSP by the party states.

The Committee directed GOMP and GOM to reconcile with GOG the expenditure figures of balance share of undisputed share cost and expedite the payment of share cost due to GOG.

III) Draft proposal for Annual Development Plan (ADP) 2008-09 of Unit-I and Unit-III works of SSP

Chairman observed that as the year 2008-09 was already over there was no point in approving ADP for the same and that SSNNL, GOG may intimate the actual expenditure incurred in the year 2008-09 on Unit-I and Unit-III of SSP along with ADP for the year 2009-10 during the next PSC meeting, which would then be put up to SSCAC. The Committee decided that SSNNL, GOG would intimate the actual expenditure incurred on Unit-I and Unit-III works of SSP during 2008-09 along with ADP for the year 2009-10 in the next PSC meeting.

IV) Revised Implementation Schedule (RIS-September 2003) for construction of Garudeshwar weir of SSP

The Committee decided that as all the three concerned States namely Gujarat, Madhya Pradesh and Maharashtra have agreed for the construction of Garudeshwar Weir, steps may be taken by SSNNL, GOG for the construction of Garudeshwar Weir immediately.

V) Claim put forth by M/s. Jaiprakash Associates (JPA) on account of shortfall in concrete progress during the various working seasons from 1993-94 to 1997-98 due to the restrictions imposed in raising the spillway of SSP.

The Committee decided that both the States, Gujarat and Madhya Pradesh, try to resolve the issue bilaterally and the matter may be placed before SSCAC thereafter.

VI) Review of the progress of Unit-I and Unit-III works of SSP.

The Committee noted the progress of the Unit-I and Unit-III.

VII) Real Time Data Acquisition System (RTDAS) - commissioning of Water Management System.

The Committee decided that the contract with M/s. ECIL, may be foreclosed as per contract document, and further action be taken by NCA Secretariat accordingly. It was also decided that a proposal for carrying out the inflow/ flood forecasting for middle Narmada Basin by CWC may be sent by the State Governments/ NCA Secretariat to CWC, which would examine the same for taking up the works.

VIII) Pending payment to M/s BHEL for their supply of CHPH & RBPH Hydro equipment.

The Committee decided that GOG would give a detailed note regarding pending payment to M/s BHEL for their supply of Hydro equipments of CHPH and RBPH on account of liquidated damage, price variation & Retention money, to SSCAC Secretariat and SSCAC will take it up with GOMP and GOM.

2.2 MEETINGS OF THE PSC OF SSCAC

Two meetings of the Permanent Standing Committee (PSC) of SSCAC were held during the year. The 97th meeting was held on 18th December 2009 at New Delhi and 98th meeting was held on 22nd February 2010 at New Delhi.

The important decisions taken in the above meetings are given in the following paragraphs:

A) 97TH MEETING OF THE PSC OF SSCAC

I) Time extension and revision of rates for the civil works of underground River Bed Power House of SSP.

The Committee recommended the cost of balance work of UGRBPH as Rs. 79.097 crore and in that of Main Dam as Rs. 257.49 crore to SSCAC which is as per the methodology adopted for TRC. The response from GOG on remaining points of GOMP will also be discussed in SSCAC meeting.

II) Revised Implementation Schedule (RIS-September 2003) for construction of Garudeshwar weir.

The Committee directed GOM to send their views on sharing of cost of pumping energy to SSCAC Secretariat at the earliest.

III) Revised estimate of Unit-I (Dam & Appurtenant works) and Unit-III (Hydro Power) at 2000-01 price level.

The Committee decided that the Revised Estimate may be finalised in the next PSC meeting well before the TAC meeting for Revised Estimate of SSP by CWC/MOWR. The Committee directed GOMP and all other Members to send their comments on the revised estimated cost of SSP at price level 2008-09, if any, to SSCAC latest by 18th January 2010. There after the estimate will be finalised by the Committee based on the comments received.

IV) Review of the progress of Unit-I and Unit-III works of SSP

The Committee noted the progress of Unit-I & Unit-III works of SSP.

V) Installation of regulatory mechanism for Godbole gate.

Chairman stated that in comparison to the cost of installing the controlling mechanism for Godbole Gate, the benefit is much more and requested GOMP to reconsider their stand. The Committee directed GOMP to send their comments on this issue to SSCAC Secretariat at the earliest.

VI) Draft proposal for Annual Development Plan 2009-10 of Unit- I and Unit-III works of Sardar Sarovar Project.

The Committee recommended the Annual Draft Proposal (ADP) 2009-10 for Unit-I and Unit-III components amounting to Rs. 177.00 crore to the SSCAC for its approval.

VII) Review of the progress of Real Time Data Acquisition System (RTDAS) in Narmada river basin.

The Committee decided that this issue will be first discussed in Hydromet subgroup before the same is referred to PSC of SSCAC.

VIII) Closure of contract with M/s BHEL for Work Package- I & II of Energy Management Centre (EMC) Project.

The Committee decided that this issue will be first discussed in Power Sub-Committee and after finalisation it will be referred to PSC of SSCAC.

IX) Claim put forth by M/s Jaiprakash Associates for handling excess sand content in the river shol at Tilakwada for constructing main dam of SSP.

The Committee decided that as the matter has already been dealt by SSCAC, this issue need not be discussed in PSC of SSCAC.

X) Draft proposal for Annual Development Plan 2010-11 of Unit- I and Unit-III works of SSP.

The Committee directed GOMP and GOM to provide their outlays for ADP 2010-11 to GOG on priority basis and GOG to submit ADP within a month so that it can be discussed in next PSC meeting.

B) 98TH MEETING OF THE PSC OF SSCAC

I) Revised Implementation Schedule (RIS-September 2003) for construction of Garudeshwar weir.

Chairman stated that since the construction of Garudeshwar weir has already been approved in the SSCAC meeting, finalisation of tender process may be continued by GOG to avoid delay in the construction.

The Committee after deliberation directed GOM to send their views on sharing of cost of pumping energy to SSCAC Secretariat in three weeks time.

II) Revised Estimate of Unit-I (Dam & Appurtenant works) & Unit-III (Hydro Power) of SSP at Price Level 2008-09.

The Committee recommended the revised cost estimate of Unit-I (Dam & Appurtenant works) and Unit-III (Hydro power) for Rs. 8930.53 crore and Rs. 2910.89 crore respectively to SSCAC. The Committee also directed GOG to send an abstract showing disputed items and a statement reflecting the increase/ decrease in cost of disputed items at price level 2008-09 to be put up in the next SSCAC meeting.

III) Review of the progress of Unit-I and Unit-III works of SSP

The Committee noted the progress of Unit-I work of SSP and directed GOG to complete the CCS work in RBPH on top priority and send the status of CCS works to SSCAC Secretariat immediately.

IV) Installation of regulatory mechanism for Godbole gate.

The Committee after deliberation decided to go ahead with works of installation of regulatory mechanism for Godbole Gate, taking note of comments of GOMP. The cost of such regulatory mechanism will be chargeable to Unit-III.



RELEASES FROM GODBOLE GATES

V) Draft proposal for Annual Development Plan 2010-11 of Unit- I and Unit-III works of SSP

The Committee directed GOG to send the proposal for ADP 2010-11 of Unit-I and Unit-III of SSP by 2nd week of March 2010 to SSCAC Secretariat.

2.3 MEETING OF THE REVIEW COMMITTEE FOR NCA (RCNCA)

No meeting of Review Committee was held during the year 2009-10. The last meeting of RCNCA (13th) was held on 15th April, 2006 at New Delhi under the Chairmanship of Hon'ble Minister of Water Resources. In the meeting RCNCA reviewed the decision of Narmada Control Authority permitting increase in the height of Sardar Sarovar dam from EL 110.64 m to EL 121.92 m and also considered the report of Group of Ministers based on their visit on 6-7 April 2006 to some rehabilitation sites in Madhya Pradesh. Having considered all the views expressed by the Members present in the meeting, the Chairman of the RCNCA said that he would remit this matter for the consideration of the Prime Minister in accordance with the Orders of the Supreme Court.

2.4 INSURANCE COVERAGE FOR SARDAR SAROVAR POWER PROJECT

On the recommendation of Empowered Committee for Insurance Coverage for Sardar Sarovar Power Project, the Insurance policy from M/s. HDFC-EGRO General Insurance Co. Ltd, Vadodara at a premium of Rs. 96,79,900/- for Sardar Sarovar Power Project for the Insurance coverage of amount of Rs.1797 Crore has been taken by SSNNL, GOG for the period from 01.10.2009 to 30.09.2010.



SSP MAIN CANAL

2.4.1 PROJECT MONITORING AND STATUS REPORTS

The Secretary and other officers of SSCAC undertook visits to dam, powerhouse and other appurtenant works and held discussions with the project officials for updating the information on the progress of works.

As per the decision taken in the 86th PSC meeting held on 14th November 2002, a Monitoring Team with Chief Engineer level officials from CWC, CEA, NCA and SSCAC was constituted by the PSC for closely monitoring the River Bed Power House (RBPH) progress. The Monitoring Team was envisaged to remain in operation till full completion of RBPH work. The last meeting of the Monitoring Team was held on 14th November 2005. The meetings of the Monitoring Team were discontinued after commissioning of all units of RBPH/CHPH.

The 6th and last Unit of RBPH was commissioned in June 2006 and all power units of SSP are now under O&M by Gujarat Urja Vikas Nigam Limited (GUVNL). The works like fire fighting system, Lift, ventilation system, Air Conditioning work, power house lighting and loud phone for RBPH have been completed. Provision of Computerized Control System (CCS) etc. in RBPH are in progress and in advanced stages of completion. The power generation are planned and operated under the directions of Energy Management Centre (EMC) of NCA, Indore.

The status of project expenditure and Share Cost of party States were compiled on monthly basis and circulated to Party States/ MOWR by the SSCAC Secretariat regularly during the year 2009-10.

2.5.1 PROGRESS OF MAIN DAM AND APPURTENANT WORKS (UNIT-I)

The construction of the main spillway portion of the dam had been held up for over five years due to the writ petition filed by Narmada Bachao Andolan in the Supreme Court of India. The final judgment on the case was delivered by the Supreme Court on 18th October 2000, in which the Court cleared raising of the dam up to EL 90.0 m and also gave directions for further construction of dam as per the award of the Narmada Water Disputes Tribunal (NWDT). The work of raising the block nos. 30 to 46 to EL 90.0 m was completed on 30th December 2000. The NCA, which is monitoring the Resettlement and Rehabilitation (R&R) progress of SSP, finalized an action plan for completion of R&R works in its 61st meeting held on 17th November 2000. The Action Plan finalized by NCA was also accepted by the Review Committee for Narmada Control Authority (RCNCA) in its 8th meeting held on 10th January

2001. The R&R time frame as per above action plan and the corresponding tentative schedule for completion of dam works is given in the **Table 2.1**.

TABLE 2.1

Dam Height (EL) (Afflux)	Development of all civic amenities and keeping in readiness developed agricultural land and house plots with core houses at R&R sites and allotment of land and house plots to PAFs by	Completion of construction subject to approval of NCA after getting the clearance of R&R and Env. Sub-groups by
90 m (112.75 m)	Works Completed	
100 m (120.04m)	December, 2001	June, 2002
110 m (127.10m)*	December, 2002	June, 2003
121 m (136 m)**	December, 2003	June, 2004
138.68 m	December, 2004	June, 2005

(*) Instead of 110.00 m, the dam was raised up to 110.64 m (corresponding to MDDL) (afflux level 128.16 m) in the next stage as discussed in the 70th meeting of NCA held on 12/13 March 2004.

(**) Instead of EL 121.00 m, the dam has been raised up to EL 121.92 m (crest level of the spillway) in the next stage as discussed in the 71st meeting of NCA held on 11th May 2004.

The NCA's stipulated target however was not achieved due to non-completion of Resettlement and Rehabilitation works. Permission for raising of the effective dam height to EL 95.0 m was given by NCA in its 64th meeting held on 17th May 2002, and the work was completed by July 2002. The NCA in its 66th (Emergency) meeting, held on 14th May 2003, gave permission to raise the main spillway blocks (Nos. 30 to 46) up to EL 100 m, along with permission to construct 3.0 m high hump over blocks 31 to 45, leaving the blocks 30 and 46 as such for the safety of downstream stilling basin. The said work was completed by the end of June 2003. Subsequently the NCA in its 70th meeting held on 12th/ 13th March 2004 granted permission for raising the blocks no. 30 to 46 to EL 110.64 m level. Besides these, the blocks numbering 29,47,48,49 and 50 which were at EL 105.0 m level, were also required to be raised to the EL 110.64 m level for achieving the effective dam height of 110.64 m. The work with the total quantum of 164699 m³ of concreting commenced on 16th March 2004 and was completed on 30th June 2004. After

deliberation on the R&R works in the States of Madhya Pradesh, Gujarat and Maharashtra and with the recommendations of Environmental and R&R Sub-groups, in the 76th emergency meeting of NCA held on 8th March 2006.

In consequence to the reference made by the Chairman, RCNCA to the Prime Minister on 16th April 2006 and in the light of the observations of the Supreme Court in its order dated 17th April 2006, the Prime Minister constituted the Sardar Sarovar Project Relief & Rehabilitation Oversight Group (OSG) under the chairmanship of Shri V.K. Shunglu former Comptroller and Auditor General of India with other two members which would verify the status of rehabilitation in Madhya Pradesh of the families affected by the raising of the height of the Sardar Sarovar Dam from Elevation Level (EL) 110.64 m to EL 121.92 m.

The report of the OSG was submitted in the Supreme Court on 8th May, 2006 on the status of rehabilitation of the project affected families in Madhya Pradesh. In the meantime dam was constructed upto EL 119.0 m before on set of monsoon. On 10th July, 2006 the Supreme Court gave verdict that stopping the construction of the dam which is designed to serve larger public interest would not be appropriate in the light of material and observations contained in the report of OSG. The decision further states that the Government of Madhya Pradesh shall be directed that relief and rehabilitation work must be accelerated during the period when there would be stoppage of work so that all the relief and rehabilitation sites can be brought at par with each other and that the same should be attempted to be completed before work on construction of the dam is resumed. Further raising of the dam height from EL 119 m to EL 121.92 m in both Auxiliary and Service Spillway blocks was started on 28th October 2006 and completed in 31st December 2006.

The balance works remaining to be carried out are raising of piers and installation of Radial Gates in the spillway portion of the dam. As per the Court's directions, the permission for further raising of dam is now to be given by the NCA, after obtaining clearances from the Environment Sub-Group and Resettlement and Rehabilitation Sub-Group, in consultation with the Grievances Redressal Authorities (GRA's) of Gujarat, Maharashtra and Madhya Pradesh.

The overall progress of various items of Main Dam (Unit-I) achieved up to March 2010 is given in **Table 2.2**.

TABLE 2.2
PROGRESS OF MAIN DAM (UNIT-I) WORKS UPTO MARCH 2010

Item	Unit	Est. Qty.	Progress up to March 2009	Progress during reporting period	Cumulative Progress up to March 2010	Percentage Progress up to March 2010
Excavation	TCM	6400	6359.01	0.00	6359.01	99.36
Concreting						
Dam	TCM	5620	5183.07	0.00	5183.07	92.22
Stilling Basin	TCM	1200	1393.52	0.00	1393.52	116.13
Sub-Total	TCM	6820	6576.59	0.00	6576.59	96.43
Drilling & Grouting	TRM	282	250.45	0.00	250.45	88.81

Note: TCM: Thousand Cubic Metre

TRM: Thousand Running Metre

Statement showing the block level achieved at the end of 31st March 2010 is given in **Table 2.3**.

TABLE 2.3
BLOCK LEVELS ACHIEVED UPTO 31ST MARCH 2010

Block No.	Level (metre)	Block No.	Level (metre)
1	146.50	33	121.92
2	146.50	34	121.92
3	146.50	35	121.92
4	146.50	36	121.92
5	146.50	37	121.92
6	146.50	38	121.92
7	146.50	39	121.92
8	146.50	40	121.92
9	146.50	41	121.92
10	146.50	42	121.92
11	146.50	43	121.92
12	125.00	44	121.92
13	125.00	45	121.92
14	134.00	46	121.92
15	134.00	47	121.92
16	134.00	48	121.92
17	134.00	49	121.92
18	134.00	50	121.92
19	132.00	51(OFF)	121.92
20	132.00	51(NOF)	146.50
21 (NOF)	130.00	52	146.50
21 (OF)	121.92	53	146.50

22	121.92
23	121.92
24	121.92
25	121.92
26	121.92
27	121.92
28	121.92
29	121.92
30	121.92
31	121.92
32	121.92

54	146.50
55	146.50
56	146.50
57	146.50
58	146.50
59	146.50
60	146.50
61	146.50
62	146.50
63	146.50
64	146.50

Note:

1. NOF Block No. 13 is truncated section at d/s from EL 121.0 m & beyond EL 125.00 m, protection work done up to EL 134.50 m.
2. Protection work done in N.O.F Block No. 12 from EL 125.00 m to EL 134.50 m
3. Protection work done in N.O.F Block No. 14 to 18 from EL 134.00 m to EL 134.50 m
4. Protection work done in N.O.F Block No. 19 & 20 from EL 132.00 m to EL 134.50 m
5. Protection work done in N.O.F Block No. 21 from EL 130.00 m to EL 134.50 m

2.5.1.1 PROGRESS OF OTHER WORKS RELATED TO MAIN DAM

As per construction drawing, total 432 instruments are proposed to be installed in the main dam body in blocks no. 13,18,23,25,34,37,43,47,51,55 and 58. There is provision of Instrumentation Observation Cabin in Block No. 34. All 432 instruments have been procured by the project authorities and 379 instruments have been installed so far and only 53 nos. of instruments are remaining to be installed.

Nine seismological observatories are established to monitor the seismicity near dam site and seismic data are being collected from these stations. Computer based Seismic data Processing and Analysis System (DAC-300) with Magnetic Playback System and Digitizer is installed at the Central Station at Kevadia Colony for processing and analysis of seismic data. Ten numbers of Digital Strong Motion Accelerographs have to be installed in the body of the dam. Three units are proposed to be installed in spillway block no. 43, two units in the power dam block no.55, one unit in non-overflow block no.13, one unit each at right and left abutments of the dam and two units in River Bed Power House.

2.5.1.2 PROGRESS OF IRRIGATION BYE-PASS TUNNEL (IBPT)

The decision about necessity of IBPT was taken in the 60th meeting of the NCA held on 18th July 2000, which was endorsed by the RCNCA in its 9th meeting held on 18th August 2001. The arrangement for irrigation Bye-Pass

Tunnels (IBPT) comprises of two circular tunnels of 5.5 m finished diameter across the right bank hill connecting the main reservoir with the first irrigation pond. The twin IBPTs, with invert level of EL 88.39 m at the inlet, have a discharge capacity of 424.81 cumecs (15,000 Cusecs) at reservoir level of 110.64 m.

The work of installation of service gates and hydraulic hoist of IBPT are completed and wet testing will be scheduled to be undertaken in overflowing condition of dam. Excavation, rock covering concreting, installation of steel liner, concreting around steel liner and service gates hoist chamber etc. are completed.

Overall progress of IBPT works at the end of March 2010 is given in the **Table 2.4**

TABLE 2.4
PROGRESS OF IBPT WORKS UPTO MARCH 2010

Item	Unit	Est. Qty.	Cumulative Progress up to March 2009	Progress during reporting period	Cumulative progress up to March 2010
Open Excavation	LCM	7.38	7.346	0	7.346
Tunnel & shaft excavation	LCM	0.35	0.318	0	0.318
Concreting	LCM	1.60	1.608	0	1.608
Installation gates & Liner	M T	2220	2473	0	2473

Note: LCM: Lakh Cubic Metre MT: Metric Tonne

For operation and control of IBPT, the RCNCA in its 9th meeting held on 18th August 2001 decided that:

- The reservoir water level shall not be depleted below the Minimum Draw Down Level (MDDL) of EL 110.64 m.
- NCA shall evolve a mechanism to control and ensure that the reservoir water is not drawn through IBPT below MDDL.

2.5.1.3 NON STRUCTURAL MEASURES

NCA in its 73rd meeting decided to adopt non-structural measures for control and operation of IBPT of the SSP and constituted Sardar Sarovar Reservoir

Regulation Committee (SSRRC) for this purpose. Total 18 nos. of meetings of SSRRC have been held upto 2009-10 out of which 5 nos. of meetings have been held during 2009-10. As a non structural measure, service gate for IBPT would be remotely supervised by the Telemetry at Master Control Centre (MCC) at Indore. Water level sensors would be installed upstream in the reservoir as well as in downstream of the Service Gate and water levels & discharge data would be regularly monitored in the MCC. At present reservoir water level is monitored through Remote Station at Dam site. An additional station is proposed to be established at IBPT for the transmission of data to MCC at Indore through GSM based technology. The work is yet to be completed.

2.5.2 PROGRESS OF POWER HOUSE WORKS (UNIT-III)

The Sardar Sarovar Project has an installed capacity of 1450 MW in its two power stations viz Underground River Bed Power House-RBPH (1200 MW) and Canal Head Power House-CHPH (250 MW). Total energy generation by both power houses during 2009-10 (April 2009 - March 2010) was 2501 MU. Operation and Maintenance of both power houses (CHPH & RBPH) and transmission lines upto feeder of M P & Maharashtra is being carried out by Gujarat Urja Vikas Nigam Limited (GUVNL).

2.5.2.1 CANAL HEAD POWER HOUSE (CHPH)

The CHPH is a surface power station in a Saddle Dam on the right bank at the fringe of the first balancing storage pond with installed capacity of 250 MW (5 units of 50 MW each), deploying Kaplan turbines. The Civil and Electrical works of Canal Head Power House were completed in all respect in January 1998; however, power could only be generated after the dam had attained the height of EL 110.64 m. All the five units of CHPH have been commissioned successfully during August 2004 to December 2004.



UPSTREAM VIEW OF IBPT

2.5.2.2 RIVER BED POWER HOUSE (RBPH)

The River Bed Power House (RBPH) is an underground power station on the right bank of river located about 165 m downstream of the Dam. The underground RBPH has 6 units of 200 MW each, deploying Francis type reversible turbines. As per Revised Implementation Schedule (RIS) of June 2002 approved by the SSCAC in its 69th meeting held on 29th July 2003, the milestone dates for various activities were fixed as per **Table 2.5** given below:

TABLE 2.5
MILESTONE DATES FOR RBPH (RIS-JUNE 2002)

S. No.	Name of Activity	Target date for completion
1.	Civil Works of powerhouse cavern	30.06.2005
2.	Construction of Tail Race Channel	31.05.2004
3.	Fabrication and erection of Penstocks	31.12.2004
4.	Supply & erection of draft tube gates in Collection Pool and trash rack in exit tunnels.	31.12.2004
5.	Commissioning of RBPH	Unit -I 30.09.2004 Unit-II 31.01.2005 Unit-III 31.05.2005 Unit-IV 30.09.2005 Unit-V 31.01.2006 Unit-VI 31.05.2006 (Sixth/Final Unit)

Civil & electrical works of River Bed Power House have been completed for all six units. All six units of RBPH were commissioned on 01.02.2005, 30.04.2005, 30.08.2005, 28.10.2005, 07.03.2006 and 20.06.2006 respectively. The status of progress of civil works of RBPH at the end of March 2010 is given in **Table 2.6**.

TABLE 2.6
PROGRESS OF CIVIL WORKS OF RBPH UPTO MARCH 2010

S.No	RBPH Civil Works	Unit	Total Revised Estimated Quantity	Work done up to March 2010	Percentage of Completion
1	Open Excavation	TCM	1715.00	1703.36	99.32
2	Underground Excavation	TCM	732.06	688.07	93.99
3	Concreting	TCM	335.19	311.88	93.05
4	Shotcreting	TSM	207.73	184.86	88.99
5	Rock bolting	TRM	168.18	142.01	84.44

Note: TCM: Thousand Cubic Metre TSM: Thousand Square Metre TRM: Thousand Running Meter

Work of Lighting in RBPH Power House, Lift and Fire Fighting system of RBPH, Loud phone system, Air Conditioning and Ventilation system have already been completed and put in operation. The work of provision of Computerized Control System (C.C.S) of RBPH is in progress.

2.6 PROJECT EXPENDITURE AND SHARE COST DUES

The estimate of Sardar Sarovar Project amounting to Rs. 6406.04 crore at Price level 1986-87 was approved by the Planning Commission in October 1988 vide their letter No. 2 (194) / 88 – I & CAD of 5.10.1988. As per the estimate, the cost of Unit-I (Dam and Appurtenant Works) was Rs.1019.45 crore including the B-land cost of Rs.316.7149 crore and the cost of Unit-III (Hydro Power works) was Rs. 979.95 crore. The revised estimated cost at 2000-01 price level of Unit-I amounting to Rs. 3003.57 crore (excluding B-land (R&R) cost of Rs. 3033.21 crore) and Unit-III for an amount of Rs. 2782.07 crore has been approved by the SSCAC in its 71st meeting held on 8th September 2004. Revised Estimated Cost of the project at 2008-09 price level amounting to Rs 39240.44 crore has been cleared by TAC in its 103rd Meeting held on 11.03.2010. PSC of SSCAC, in its 98th meeting, has recommended the Revised Estimated cost of Unit-I Rs 8930.53 crore and Unit-II Rs 2910.89 crore to SSCAC. An amount of Rs. 31400.50 crore has been booked as total project expenditure by the GOG, up to the end of March 2010 including disputed expenditure as given in **Table 2.6(a)**:

TABLE 2.6(a)
PROJECT EXPENDITURE BOOKED BY THE GOG, UP TO MARCH 2010

(Amount in Rs. Crore)

Sr. No	Unit/ Group	Expenditure up to March 2009	Expenditure up to March 2010*
1	Unit-I (Dam & Appurtenant Works)	4478.82	4568.84
2	Unit-II (Main Canal)	5181.60	5348.53
3.	Unit-III (Hydro-Power works)	2290.29	2430.64
4.	Group-IV (Branches & Distributaries)	7140.76	7704.17
5.	Group-V (Common Expenditure)	11035.81	12097.04
6.	Group-VI (Non-Sharable Expenditure)	- 573.51	- 748.72
	Total Expenditure	29553.77	31400.50

*as per monthly expenditure statement of SSNNL

SSCAC is regularly making efforts to reduce the dues payable by party States for the project. However mainly due to non payment of full share cost in this financial year by Government of Madhya Pradesh and Government of Maharashtra, the balance share cost due to Government of Gujarat increased from Rs. 354.75 Crore to Rs. 368.81 Crore. Overall position of disputed cost, undisputed share cost and balance of undisputed dues payable by the party States to the Government of Gujarat is given in Table 2.7.

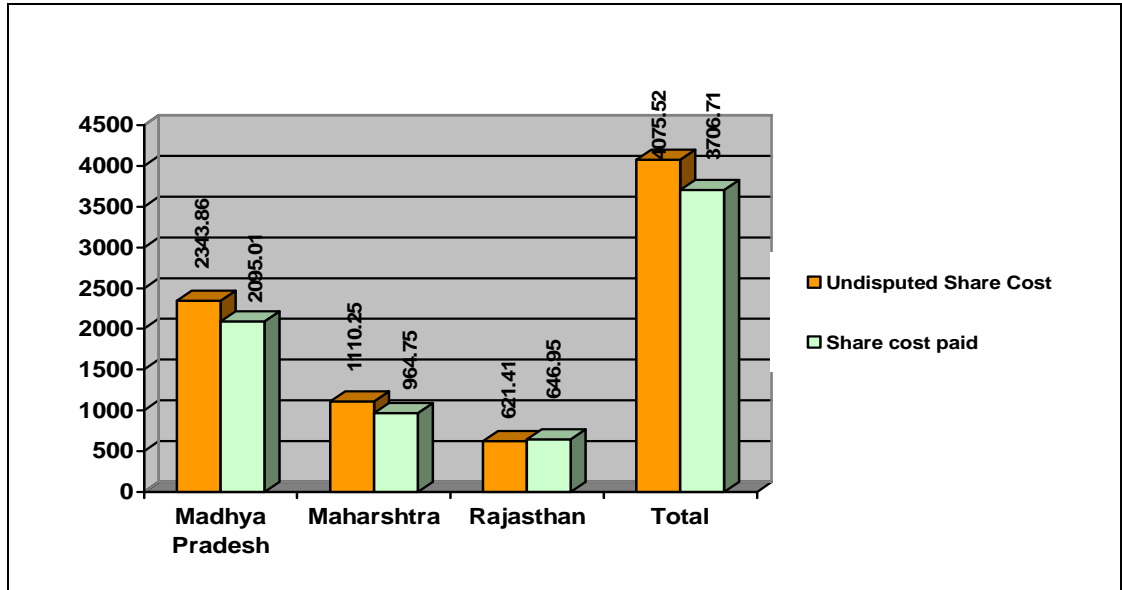
TABLE 2.7
STATUS OF BALANCE DUES ON UNDISPUTED BOOKED SHARE COST UPTO MARCH 2010

(Amount in Rs. Crore)

Particulars	Madhya Pradesh	Maharashtra	Rajasthan	Total
Undisputed Share of expenditure	2343.86	1110.25	621.41	4075.52
Share Cost Paid	2095.01	964.75	646.95	3706.71
Balance Undisputed Share Cost Dues	248.85	145.50	-25.54	368.81
Disputed expenditure incurred by GoG	(on interest on market borrowing, R&R expenditure & Rockfill dykes & Link Channel)			13398.93

Note: 1. (-) indicates excess payment.

2. Figures are based on information supplied by SSNNL.



2.7 OTHER MISCELLANEOUS ACTIVITIES

2.7.1 Meetings of NCA, R&R Sub Group, Dam Safety Panel etc. connected with the Works of Sardar Sarovar Project.

The Secretary, SSCAC is Member/ Invitee in a number of Committees connected with the works of Sardar Sarovar Project. Details of meetings of these Committees held during the year 2009-10 and attended by SSCAC officials are given in **Annex-III**.

2.7.2 Visits by VIPs to Sardar Sarovar Project Site

Several VIPs visited Sardar Sarovar Project site in the Year 2009-10. Details of such visits are given in **Annex- IV**.



Shri U.N. Panjiar, Secretary, MoWR, New Delhi visited SSP on 15.06.2009

CHAPTER 3 SECRETARIAT OFFICE

3.1 OFFICERS IN-CHARGE

Shri U.N.Panjiar, Secretary, Union Ministry of Water Resources is the Chairman of the SSCAC by virtue of being Secretary, Ministry of Water Resources during the year. The SSCAC has a full time Secretary of the rank of Chief Engineer belonging to the Central Water Engineering (Group-A) Service to head the Organisation having headquarter at Vadodara. During the year 2009-10, Shri Nirmal Jot Singh held the regular post of Secretary, SSCAC till 3rd August 2009 (FN) after that Shri N.K.Bhandari took over the charge of Secretary, SSCAC.

The Organisation chart of SSCAC Secretariat as on 31st March 2010 is given in **Annex-V**.

3.2 SUPPORTING STAFF

The Secretariat of SSCAC, being of temporary status, has no provision for its own cadre. While all the Group-A posts are filled by officers from the Central Water Engineering (Group-A) Cadre, all other posts, except one post of Chowkidar, are filled by persons taken on deputation from the departments of States/ Central Government or from their Undertakings with preference given to officials from party States i.e. Gujarat, Madhya Pradesh, Maharashtra and Rajasthan. The Narmada Control Authority (NCA) has also provided the services of one Stenographer to the SSCAC on loan basis. The remaining requirements are being met from outsourcing/contingencies expenditure.

3.3 VACANCY POSITION

The Ministry of Water Resources approved creation of 38 numbers of posts for managing the office of Secretary, SSCAC in November 1984. Subsequently, one post each of Assistant Secretary & Assistant Engineer were surrendered in lieu of creation of one post of Deputy Secretary and one post of Stenographer Grade-D, the total number of posts remaining the same. Later on four posts (one each of SAS Accountant, Office Superintendent, UDC and LDC) were surrendered under 10% statutory cut imposed by the

Government of India, reducing the total number of posts to 34. Out of these 34 sanctioned posts, 16 posts were operated during the year. Post of Deputy Secretary fell vacant in March 2010 due to retirement of Shri J.Babu R. and three posts of L.D.C. fell vacant due to repatriation of incumbents after completion of their deputation term in July, September and October 2009 respectively. Action was taken to fill up these posts. Detail of sanctioned & filled up posts as on 31.03.2010 is given in **Table 3.1**.

TABLE 3.1
VACANCY POSITION AS ON 31ST MARCH 2010

Category (Designation of posts)	Scale	Sanctioned posts			No. of posts vacant
		Original	Approved for year 2009-10	Filled for year 2009-10	
GROUP – A					
i) Secretary	PB-4 37400-67000+GP 10000	1	1	1	-
ii) Deputy Secretary	PB-4 37400-67000+GP 8700	1	1	0	1
iii) Asstt. Secretary	PB-3 15600-39100+GP 7600/6600	3	3	3	-
Total...		5	5	4	1
GROUP – B					
i) Assistant Engineer	PB-2 9300-34800+ GP 4600	3	1	0	1
ii) Stenographer Gr. I	--	1	-	-	-
Total...		4	1	0	1
GROUP-C					
i) Draftsman Gr.I	--	1	-	-	-
ii) Upper Div. Clerk	PB-1 5200-20200 +GP 2400	7	1	1	-
iii) Stenographer Gr.D	--	3	-	-	-
iv) Lower Div. Clerk	PB-1 5200-20200 +GP 1900	5	5	2	3
Total...		16	6	3	3
GROUP – D					
i) Daftary	--	1	-	-	-
ii) Peon	PB-1 5200-20200 +GP 1800	6	3	3	-
iii) Safaiwala		1	-	-	-
iv) Chowkidar	PB-1 5200-20200 +GP 1800	1	1	1	-
Total...		9	4	4	-
Grand Total...		34	16	11	05

Note: (i) One Stenographer Grade D has been posted in the SSCAC on loan basis from the Narmada Control Authority (NCA).

(ii) Typing work of Office Job (Hindi), cleaning jobs are being got done on contract basis.

3.4 BUDGETS AND EXPENDITURE

The expenditure incurred by the SSCAC Secretariat is borne equally by the four party States i.e. Gujarat, Madhya Pradesh, Maharashtra and Rajasthan as per Clause-XIV Sub-Clause 16 (10) of the NWDT Award. Initially, the expenditure is reflected in the union budget under the Ministry of Water Resources as 'Non-Plan' expenditure, which is subsequently reimbursed from the participating States. Final Budget Estimate for SSCAC Secretariat for the year 2009-10 approved by the Ministry of Water Resources was of Rs. 90.35 lakh. Actual expenditure during the year 2009-10 was Rs. 90.19 lakh.

The balance outstanding to be paid by the party States to Union Ministry of Water Resources on account of share cost of SSCAC is Rs 34.22 lakh. Position of payment of share cost of SSCAC Secretariat by the Party States for the financial year 2009-10 up to the end of March 2010 is given in Table.3.2.

TABLE 3.2
STATUS OF SHARE COST DUES OF EXPENDITURE OF
SSCAC SECRETARIAT ENDING MARCH 2010

(Amount in Rupees)

S. No.	Name of States	Outstanding share cost payable up to 2009-10	Share paid during 2009-10	Balance to be paid up to March 2010
1	Gujarat	2457924	2452340	5584
2	Madhya Pradesh	4053336	667000	3386336
3	Maharashtra	2457924	2452340	5584
4	Rajasthan	3732900	3708590	24310
	Total...	12702084	9280270	3421814

3.5 PROGRESSIVE USE OF HINDI

In accordance with official language policy of the Government of India, efforts were made by the SSCAC secretariat towards implementation of various provisions of the Official Languages Act 1963 and the rules framed there under. Replies to the letters received in Hindi were sent in Hindi only. The officers and the employees of this office were motivated to do maximum work in Hindi. All the officers and employees of SSCAC who do not possess working knowledge of Hindi were imparted training for doing work in Hindi. Four meetings of Rajbhasha Karyanvayan Samiti and four workshops on Rajbhasha were organised during the year 2009-10. Hindi Pakhwara was

celebrated from 14th September to 29th September 2009 in the office premises. There has been increase in use of Hindi in office work compared to last year.

3.6 TRAINING ACTIVITIES

The officers of SSCAC participated in seminars, workshops, conferences, short-term courses etc. during the year 2009-10. The details of participation are given in Table 3.3.

TABLE 3.3

Sr. No.	Name & Designation	Programme	Place	Date
1	Shri N.K.Bhandari, Secretary	National Hindi Technical Symposium	Hyderabad	27.10.2009
2	Shri N.K.Bhandari, Secretary Shri Jitendra Panwar, Assistant Secretary	National Symposium on Climate Change	Roorkee	18-19.11.2009
3	Shri N.K.Bhandari, Secretary	Workshop on Disposal of Appeal under RTI	New Delhi	21.11.2009
4	Shri Jitendra Panwar, Assistant Secretary	National Seminar on Integrated Water Resources Management	New Delhi	22.12.2009

Shri N.K.Bhandari, Secretary delivered a lecture in National Hindi Technical Symposium at Hyderabad on 27.10.2009. In addition to above Shri N.K. Bhandari, Secretary, SSCAC, delivered lectures on various topics related to preparation of DPR, Environment, R & R etc in CBIP and NWA, Pune.

3.7 VIGILANCE AND DISCIPLINARY CASES

Shri Janardhana Babu R., Deputy Secretary functioned as Vigilance Officer from 15.05.2006 to 16.05.2009 and from 14.09.2009 to 28.02.2010. All officers have submitted the Annual Property Returns in time. No vigilance and/ or disciplinary case of officers and staff was received or pending in SSCAC during the year. The Vigilance Week was celebrated in SSCAC office from 3rd to 7th November 2009. Posters and banners were placed in the public building and the pledge was taken by all officers and staff.

3.8 REDRESSAL OF PUBLIC AND STAFF GRIEVANCES

Shri Janardhana Babu R. was nominated as Director (Public and Staff Grievance) for SSCAC. No public grievance case or staff grievance case was received from 25.04.2005 to 28.02.2010.

3.9 WELFARE OF SC/ ST STAFF

For welfare of SC/ST, Shri Janardhana Babu R., Deputy Secretary was appointed as Liaison Officer of SSCAC during the year.

3.10 QUAMI EKTA WEEK

SSCAC Secretariat celebrated Quami Ekta Week from 19th to 25th November 2009. During this week, all staff of SSCAC were administered the "National Integration Pledge". Bilingual Posters displaying the message of Quami Ekta were displayed in the office premises.

3.11 PERSONS WITH DISABILITIES

SSCAC is a temporary organization created to perform the supervisory function over the construction of Sardar Sarovar Project and has a very small secretarial set-up. All Group-A posts are encadared in CWES (Group-A) service and these posts are filled by officers from Ministry of Water Resources/ Central Water Commission on transfer basis and the Group B, C and D posts are filled by the persons from the State/ Central Govt. on deputation basis. While selecting the candidate on deputation, preference is given to SC/ ST/ OBC/ Woman/ Handicapped persons. Out of 16 posts one LDC from Physically Handicapped category is working in SSCAC. No budget provision was earmarked separately for the benefit of persons with disabilities.

3.12 COMPUTERISATION

In the Secretariat all the officers and most of the staff have been provided computer on their desks. The office work is extensively automated. The office is having its own bilingual website "www.sscac.gov.in".

3.13 RIGHT TO INFORMATION ACT

The information under RTI Act, 2005 of this office is made available on the official website www.sscac.gov.in. Shri Janardhana Babu R., Deputy Secretary was nominated as Public Information Officer of SSCAC and Shri N.K.Bhandari, Secretary attended a Workshop on Disposal of Appeal under RTI. No application was received under RTI Act during the year.

3.14 CITIZEN'S CHARTER

The Citizen's Charter of this office is available on official website www.sscac.gov.in.

3.15 OUTSTANDING AUDIT PARAS

The details of outstanding audit paras of Inspection Report issued by O/o the Accountant General (Civil Audit), Rajkot, Gujarat for the period from 01.06.2002 to 31.01.2005 are given below in Table 3.4.

TABLE 3.4

Statement showing the particulars of Inspection Reports

Period of Audit	Year of Audit	No. of paras	Details of Paras
6/2000 to 1/2005	2004-05	02	Share cost of SSCAC Secretariat Rs. 5488686/-
			Non recovery/ adjustment of undisputed share cost of construction on the Sardar Sarovar Project Rs. 271.51 crore

The office of Accountant General (Civil Audit), Rajkot, Gujarat after getting detailed action taken report by SSCAC vide their letter dated 15.05.2007 had intimated that the above outstanding paras are now not being pursued by them and it may be watched at department level.

ANNEX- I (A)

ORIGINAL CONSTITUTION OF SSCAC

(PUBLISHED IN THE GAZETTE OF INDIA, PART-I, SECTION-I, NO.39.DATED 27TH SEPT, 1980)

No.22/7/80-P-I,
Government of India,
Ministry of Irrigation

New Delhi, the 4th September, 1980.

RESOLUTION

The Water dispute regarding the inter-State river Narmada and the river valley thereof, between the State of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan was referred for adjudication to the Narmada Water Disputes Tribunal constituted by the Government of India in October, 1969 under the Inter-State Water Dispute Act, 1956. The Tribunal submitted its further and final report to the Government of India in December 1979. As required under Section 6 of the Act, the Government of India published the decision of the Tribunal in the official Gazette on 12th December 1979, whereupon the decision became final and binding on the parties to the dispute. In its final order, the Tribunal has, inter alia, directed setting up of an Inter-State Administrative Authority to be called Narmada Control Authority for the purpose of securing compliance with and implementation of decisions and directions of the Tribunal. The Tribunal has further directed the setting up of a Review Committee, which on the application of any Party State may review any decision of the Authority. While observing that the four party States have financial Commitments 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 Sardar Sarovar Project), the Tribunal has in addition considered it desirable and necessary that a Construction Advisory Committee should be constituted for ensuring efficient, economical and early execution of Unit I and III of the Project.

In pursuance of the above decision of the Narmada Water Disputes Tribunal, the Sardar Sarovar Construction Advisory Committee is hereby constituted, as under:

The Sardar Sarovar Construction Advisory Committee will consist of the following:-

- | | | |
|-------|---|------------|
| 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. | -Member |
| iii) | Chairman, Central Electricity Authority (CEA) or a Member of the CEA representing him in case the Chairman is unable to attend a meeting. | -Member |
| iv) | Chairman, Narmada Control Authority (NCA) or its Independent Member representing Chairman in case the Chairman is unable to attend a meeting. | -Member |
| v) | Joint Secretary (Financial Adviser) in the Ministry of Irrigation. | -Member |
| vi) | Secretaries in charge of Finance Department of Government of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan. | -Members |
| vii) | Secretaries in charge of Irrigation Department of Government of Gujarat and Rajasthan. | -Members |
| viii) | Secretaries in charge of Power Department of Madhya Pradesh, Maharashtra and Gujarat. | -Members |
| ix) | Secretaries in charge of Revenue Department or any other Department, concerned with land acquisition of Madhya Pradesh, Maharashtra & Gujarat. | -Members |
| 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. | -Members |
| xi) | Chairman, State Electricity Board of Madhya Pradesh, Maharashtra and Gujarat. | -Members |
| xii) | Financial Adviser, Sardar Sarovar Project. | -Member |
| xiii) | Secretary (to be appointed by the Government of India) | -Secretary |

The Chairman may invite any other person to attend any meeting of the Advisory Committee, should it be considered necessary for the proper discharge by the Committee of its functions.

3. The Sardar Sarovar Construction Advisory Committee shall :
 - i) scrutinise the project estimates prepared for works mentioned in paragraph 1 above, advice 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 officers engaged in the execution of the works on 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.
4. 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.
5. 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 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.

6. The Construction Advisory Committee will be subject to dissolution after three years of the completion of construction of Unit-I and Unit-III of the Sardar Sarovar Project. The post construction management of Unit-I and Unit-III will be by Gujarat under the supervision of the Narmada Control Authority.
7. The headquarters of the Construction Advisory Committee shall be at Gandhinagar in Gujarat.
8. The Construction Advisory Committee will frame rules regarding procedure and delegation of power for the purpose of carrying out its business.
9. The expenditure of the Construction Advisory Committee will be borne by the four Party States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan equally.

Sd/-
(C.C. PATEL)
Secretary to the Government of India.

ORDER

Ordered that this Resolution be communicated to all the State Governments, Ministries/ Departments of the Government of India, the Comptroller and Auditor General of India, Prime Minister's Office, President's Secretariat and Planning Commission.

Ordered also that the Resolution be published in the Gazette of India and that the State Governments be requested to publish it in the State Gazette for general information.

Sd/-
(C.C. PATEL)
Secretary to the Government of India.

ANNEX-I (B)

(TO BE PUBLISHED IN THE GAZETTE OF INDIA, PART I, SECTION-I)

No.22/22/80-P-I,
Government of India,
Ministry of Irrigation

New Delhi, the 27th December, 1980.

RESOLUTION

In suppression of para 7 of this Ministry's Resolution No.22/7/80-P.I dated the 4th September, 1980, the head-quarters of the Sardar Sarovar Construction Advisory Committee shall be at Baroda in Gujarat instead of Gandhinagar in Gujarat.

Sd/-
(C.C. Patel)
Secretary

O R D E R

Ordered that this Resolution be communicated to all the State Governments, Ministries/Departments of the Government of India, the Comptroller and Auditor General of India, Prime Minister's Office, President's Secretariat and Planning Commission.

Ordered also that the Resolution be published in the Gazette of India and that the State Governments be requested to publish it in the State Gazette for general information.

Sd/-
(C.C. Patel)
Secretary

ANNEX-I (C)

FIRST AMENDMENT

TO BE PUBLISHED IN PART-I SECTION-I OF THE GAZETTE OF INDIA

Government of India,

Ministry of Water Resources

New Delhi, the 17th April, 1986.

RESOLUTION

No.22/7/80/P.I. In pursuance of the decision of the Narmada Water Disputes Tribunal, the Sardar Sarovar Construction Advisory Committee was constituted vide erstwhile Ministry of Irrigation's Resolution No.22/7/80-P.I. dated the 4th September, 1980. Para.2 of the Resolution giving composition of the Sardar Sarovar Construction Advisory Committee is amended as under:

- a) For existing entries (i) & (v) the following shall be substituted :
- i) The Secretary to the Government of India
Incharge of the Water Resources. Chairman
- v) The Financial Adviser in the Ministry of
Water Resources. Member
- b) For the existing concluding portion, the following shall be substituted :
"The Chairman may co-opt any other Members".

ORDER

Ordered that this Resolution be communicated to all the State Governments, Ministries/Departments of the Government of India, the Comptroller and Auditor General of India, Prime Minister's Office, President's Secretariat and Planning Commission.

Ordered also that the Resolution be published in the Gazette of India and that the State Governments be requested to publish it in the State Gazette for General information.

Sd/-
(B.Sen)
Joint Secretary to the Government of India.

ANNEX-I (D)

SECOND AMENDMENT

No.23/7/80-P.I
Government of India,
Ministry of Water Resources

Shram Shakti Bhavan, Rafi Marg,
New Delhi, the 17th April, 1986.

OFFICE MEMORANDUM

Sub: - Sardar Sarovar Construction Advisory Committee:
Co-opting Member for the Meetings of...

In pursuance of the decision of the Narmada Water Disputes Tribunal, the Sardar Sarovar Construction Advisory Committee was set up by the Government of India as per erstwhile Ministry of Irrigation's Resolution No.22/7/80-P.I, dated 4th September, 1980 (copy enclosed). The composition has been further amended as per resolution No.22/7/80-P.I., dated 17th April, 1986, while inter-alia provides that the Chairman of the Committee may co-opt any other Member. Accordingly Secretary, Ministry of Water Resources who is the Chairman of the Sardar Sarovar Construction Advisory Committee hereby co-opts the Secretary to the Government of India, Department of Power or his nominee as Member of the Sardar Sarovar Construction Advisory Committee.

Encl: As above.
Sd/-

(B.Sen)
Joint Secretary to the Government of India.

The Ministry of Energy,
(Deptt. of Power),
Shram Shakti Bhavan, New Delhi.

Copy forwarded to:

- 1) Chairman and Members (including Secretary, Deptt. of Power), of SSCAC.
- 2) The Secretary, Sardar Sarovar Construction Advisory Committee, 4th floor, Narmada Bhavan, Indira Avenue, Vadodara (Gujarat).

Sd/-
(B.Sen)
Joint Secretary to the Government of India.

ANNEX-I (E)

**THIRD AMENDMENT
TO BE PUBLISHED IN PART-I SEC.I OF THE GAZETTE OF INDIA**

Government of India
Ministry of Water Resources

New Delhi, the 27th August, 1987.

RESOLUTION

No.22/7/80-P.I. In pursuance of the decision of the Narmada Water Disputes Tribunal, the Sardar Sarovar Construction Advisory Committee was constituted vide erstwhile Ministry of Irrigation's Resolution No.22/7/80-P.I, dated the 4th September, 1980 and amended further vide resolution of even number of 17th April, 1986. Para 2 of the Resolution giving composition of the Sardar Sarovar Construction Advisory Committee, is further amended as under:

For existing entries at Sl. No. (iv) and (vi) to (xi), the following shall be substituted

- | | | |
|-------|--|----------|
| iv) | Executive Member, Narmada Control Authority (NCA) or its independent Member representing Executive Member in case the Executive Member is unable to attend the meeting. | -Member |
| vi) | Secretaries in charge of Finance Department of Governments of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan or their nominees. | -Members |
| vii) | Secretaries in charge of Irrigation Department of Governments of Gujarat and Rajasthan or their nominees. | -Members |
| viii) | Secretaries in charge of Power Department of Madhya Pradesh, Maharashtra and Gujarat or their nominees. | -Members |
| ix) | Secretaries in charge of Revenue Department or any other Department concerned with land acquisition, of Madhya Pradesh, Maharashtra and Gujarat or their nominees. | -Members |
| x) | General Managers or Chief Engineers of Gujarat in charge of the project and Chief Engineers of Madhya Pradesh, Maharashtra and Rajasthan concerned with the project or their nominees. | -Members |
| xi) | Chairman, State Electricity Board of Madhya Pradesh, | |

Maharashtra and Gujarat or his nominees.

-Members

ORDER

Ordered that this Resolution be communicated to all the State Governments, Ministries/Departments of the Government of India, the Comptroller and Auditor General of India, Prime Minister's Office, President's Secretariat and Planning Commission.

Ordered also that the Resolution be published in the Gazette of India and that the State Governments be requested to publish it in the State Gazette for General information.

Sd/-
(RAMESH CHANDRA)
COMMISSIONER (PROJECTS)

ANNEX-II

**Government of India
Ministry of Irrigation**

SARDAR SAROVAR CONSTRUCTION ADVISORY COMMITTEE

CONDUCT OF BUSINESS AND PROCEDURE RULES, 1981

(As approved by the Sardar Sarovar Construction Advisory Committee in its third meeting and subsequently amended during its 11th meeting, 14th meeting and 67th meeting)

In exercise of the powers conferred on it by paragraph 8 of Government of India, Irrigation Department, Resolution No.22/7/80-P-I., dated 4th September 1980, the following rules are framed for the conduct of the business and procedure of the Sardar Sarovar Construction Advisory Committee.

1. **Short Title** :

These rules may be called the Sardar Sarovar Construction Advisory Committee (Conduct of Business and Procedure) Rules, 1981.

2. **Definitions:**

In these rules, unless there is anything repugnant in the context

- i) "Committee" means the Sardar Sarovar Construction Advisory Committee.
- ii) "Chairman" means the Chairman of the Sardar Sarovar Construction Advisory Committee.
- iii) "Member" means the member of the Committee duly appointed in accordance with para (2) a Ministry of Irrigation Resolution dated 04.09.1980 cited above.
- iv) "Secretary" means the Secretary of the Sardar Sarovar Construction Advisory Committee, appointed by Government of India.
- v) "Financial Adviser" means the Financial Adviser of the Sardar Sarovar Project.
- vi) "Chief Engineer" means a Chief Engineer associated with the works of the Sardar Sarovar Project (Unit-I & III) appointed by State Government or Electricity Board of Gujarat, Madhya Pradesh and Maharashtra.
- vii) "Project" means Sardar Sarovar Project (Unit-I & III).

viii) Narmada Control Authority and the Review Committee mean the Narmada Control Authority and the Review Committee appointed by the Government of India in terms of the Narmada Water Disputes Tribunal Award.

3. **Frequency of meetings:**

- i) The meetings of the Committee shall normally be held once in three months.
- ii) The Chairman may, however, at his discretion, call a meeting at any time to transact urgent business

4. **Quorum:**

Any ten Members of the Committee shall form a quorum for a meeting. In case, however, any of the party States so desires, a particular item concerning two or more States will only be discussed in a meeting where at least one Member each from all the States and a representative of the Central Government is present – provided that if the particular item cannot be disposed of at two successive meetings owing to the absence of one or more Members from the Party States, then it shall be disposed of in the normal course.

5. **Notice of meetings, agenda, etc:**

- i) The meetings shall be fixed and the agenda thereof shall be finalized by the Secretary under the orders of the Chairman.
- ii) a) A notice of a meeting mentioning the agenda items, time and venue of the meeting and the agenda notes shall be issued in writing 15 days in advance of the meeting to all the members as well as to any other person whom the Chairman may direct to be invited for the meeting. However, for meeting convened to transact urgent business under clause 3 (ii) of these Rules, the notice period for the meeting shall be at the discretion of the Chairman SSCAC.
- b) Notwithstanding that any members have not received the agenda notes the meeting may proceed to transact the business on the agenda.

- c) Any urgent item, not included in the agenda circulated to the members may also be taken up for consideration in a meeting of the committee with the permission of the Chairman.
 - d) The review of the progress of the works of Unit-I & III of Sardar Sarovar Project shall form an item of the agenda of every ordinary meeting of the committee.
 - e) All audit notes having a bearing on the decisions taken in the Committee about the Sardar Sarovar Project Units-I & III as well as those pertaining to the working of the Committee's office shall after their receipt be placed before the next meeting of the Committee.
- iii) All references requiring consideration of the Committee will be addressed to the Secretary. Such reference will be in the form of self-contained notes.
 - iv) The Secretary, after due examination of the proposals in consultation with the Financial Adviser when financial issues are involved, will, prepare a note for the consideration of the Committee. The note will indicate the technical, financial and administrative implications of the proposals and bring out the point or points on which the Committee's specific decision or recommendation is sought. The Secretary's note will also include a copy of the self contained note received as under item (iii) above.
 - v) Views of the Financial Adviser shall be circulated along with the Agenda note, wherever financial implications are involved.

6. **President of meeting:**

The Chairman of the Committee, when present, will preside over all the meetings of the Committee. In his absence Chairman, Central Water Commission failing which the Chairman, Central Electricity Authority, failing which the Chairman, Narmada Control Authority, shall preside over a meeting of the Committee.

7. **Business to be transacted at a meeting:**

- i) Except with the express permission of the presiding authority, no business, which is not entered in the Agenda, shall be transacted at any meeting.
- ii) Any member who desires at any meeting to bring forward any business supplementary to the Agenda circulated in the notice for such meeting shall give a written notice of the same to the Secretary at least seven clear days before the date fixed for the meeting and the Secretary shall seek the orders of the Chairman for distributing copies thereof to the other members at the time of the meeting.
- iii) Notwithstanding anything contained in the Rules 5 & 7 above, any matter on which the decision of the Committee is urgently required and which has not been included in the Agenda of the meeting or circulated in the meeting as a supplementary agenda item may, with the approval of the Chairman, be placed before the meeting for its consideration and decision.
- iv) Order of Business: Except with the permission of the presiding authority no business shall be transacted at any meeting otherwise than in the Order in which it is entered in the agenda/supplementary agenda for that meeting.

8. **Decision of the Committee:**

All issues at a meeting shall be decided by consensus as far as possible and failing that by a majority of the Members present through voting each member having one vote. In the case of equality of votes, the person presiding shall have a casting vote.

9. **Minutes:**

The decisions or recommendations of the Committee shall be incorporated in the draft minutes of the proceedings of the Committee to be drawn up by the Secretary and got approved from the Chairman. Copies of the draft minutes shall be sent to the members of the Committee inviting their comments thereon. The members may send their comments thereon. The members may send their comments on the draft minutes within 21 days along with the specific suggestions for the modifications in the draft minutes. With the permission of the Chairman these suggestions will be circulated with the

agenda for the next meeting of the Committee in which the draft minutes are to be taken up for confirmation.

10. **Association of persons with Committee:**

- i) The Committee may associate with itself any person possessing special knowledge or experience for advising it or attending to any work on its behalf for the purpose of efficient performance of any of its functions.
- ii) Any persons so associated, who is required to attend a meeting of the Committee may be paid special fees and allowances as may be fixed by the Committee in each case. In order to save time, it is suggested that a schedule of fees and allowance may be drawn up by a sub-group of the Committee. The actual application of the schedule would be left to the Committee in each case.
- iii) The person so associated or advising the Committee may take part in the discussions of the Committee relevant to the purpose for which he is associated or consulted, but he shall not have the right to vote at a meeting or take part in the discussions relating to other purposes.

11. **Changes in incumbencies:**

In the event of a change in the incumbency of any post included in the membership list of this Committee, the concerned State or Central Government will intimate the change to the Secretary of the Committee as early as possible and in any case before the new incumbent participates in the next meeting of the Committee.

12. **Constitution of Sub-Group:**

The Committee may, at its discretion, set up one or more Sub-Groups (Comprising Members of the Committee) for dealing with specific issues and delegate to the Sub-Groups such functions and power as it may deem fit. For the purpose of operation of this clause, Member of the CWC who is an alternative member of the SSCAC vice Chairman, CWC and Member of the CEA who is an alternative Member of SSCAC vice Chairman, CEA shall be treated as Members of the Committees defined under clause 2 (iii) of these Rules. The Secretary of the Committee would also be the Secretary of each Sub-group.

The Sub-group may associate with itself any person possessing special knowledge or experience for assisting or advising the Sub-group or attending to any work on its behalf for the purpose of efficient performance of any of the functions assigned to the Sub-group. Any person so associated may be paid special fees and allowances as may be fixed by the Sub-group in accordance with the powers delegated to it.

Each Sub-group may meet at such places and at such times as may be determined by the Chairman of the respective Sub-groups.

The recommendations of the Sub-group would be placed before the Committee for ratification/decision at its next meeting.

13. **Action on the Committee's decisions:**

The recommendations of the Committee shall be communicated to the State and Central Governments and the Narmada Control Authority for appropriate action.

14. **Procedure in case of disagreement:**

Any disagreement with the decision of the Committee shall be communicated in writing by the disagreeing member or members within 7 days of the meeting in which the minutes of the concerned previous meeting are confirmed elucidating the grounds for not accepting the decision of the Committee. If the Committee after going through the aforesaid elucidation does not revise the decision in its next meeting and the disagreement still persists, the member State shall then take up the matter with the Review Committee as provided in para 5 of Government of India's Resolution No. 22/7/80-P.I, dated 4th September 1980, constituting the committee.

15. **Emergency Procedure:**

- i) If, for any reason, it is not practicable to convene an ordinary meeting of the Committee as per rule 3 foregoing, and a decision on the proposal is required urgently, a Member may make a reference to the Chairman of the Committee bringing out the urgency.
- ii) On receipt of such a reference, the Secretary will prepare a note and, together with the comments of the Financial Adviser, will submit the same to the Chairman for orders.

- iii) All orders passed by the Chairman under the procedure mentioned in sub-rule (ii) above will be placed before the next meeting of the Committee for confirmation.

16. **General Procedure:**

- i) The Financial Adviser shall prepare and submit for the consideration of the Committee an annual financial review of the project for which the Chief Engineers of the Project shall supply all relevant information.
- ii) Copies of all sanctions, tenders, and financial decisions pertaining to the work of Unit-I & III of Sardar Sarovar Project taken by the State Governments shall be supplied to the office of the Committee for purpose of record and follow-up action, if any. The Financial Adviser shall, on behalf of the Committee, scrutinize all such sanctions and financial transactions and bring to the notice of the Committee any specific points as he may deem fit by initiating a self-contained agenda note. The Financial Adviser will be entitled to call for such information from the concerned State Governments or officers under the State Government on matters that are to come up before the Committee.
- iii) The Committee shall consider and recommend from time to time, to the State Governments reimbursements to be made by one State for the expenditure incurred by the other State on work components, the cost of which is to be shared by the party States in accordance with the Decision of the Narmada Water Dispute Tribunal.

17. **General Correspondence and office procedure:**

- i) All routine correspondence on behalf of the Committee will be carried out by the Secretary.
- ii) The Secretary of the Committee will be the administrative Head of the Establishment of the Committee and shall be Chief Executive Officer of the Committee.
- iii) The Office of the Committee shall follow all financial and fundamental procedures, Contingent Expenditure Rules, etc. prescribed by the Government of India from time to time, till such time separate rules are framed by the Committee.

ANNEX – III

**DETAILS OF MEETINGS OTHER THAN SSCAC/PSC
ATTENDED BY SSCAC OFFICIALS
(FROM APRIL 2009 TO MARCH 2010)**

Sr.No	Meeting	Date (Place)	Attended by
1	Narmada Control Authority		
	82 st Meeting	28/01/2010 (New Delhi)	Shri N.K.Bhandari, Secretary
2	R & R Sub-Group		
	74 th Meeting	16/11/2009 (New Delhi)	Shri N.K.Bhandari, Secretary Shri Janardhana Babu R., Dy. Secretary
3	Narmada Main Canal Sub-Committee		
	25 th Meeting	29/07/2009 (New Delhi)	Shri N.J.Singh, Secretary
	26 th Meeting	04/02/2010 (New Delhi)	Shri N.K.Bhandari, Secretary Shri Rajesh Kumar, Asstt. Secretary
4	Environment Sub-Group		
	47 th Meeting	26/03/2010 (New Delhi)	Shri N.K.Bhandari, Secretary
5	Power Sub-Committee		
	44 th Meeting	09/03/2010 (New Delhi)	Shri N.K.Bhandari, Secretary
6	Sardar Sarovar Reservoir Regulation Committee, NCA		
	14 th Meeting	15/04/2009 (New Delhi)	Shri N.J.Singh, Secretary Shri Rajesh Kumar, Asstt. Secretary
	15 th Meeting	11/07/2009 (New Delhi)	Shri N.J.Singh, Secretary Shri Rajesh Kumar, Asstt. Secretary
	16 th Meeting	07/09/2009 (Bhopal)	Shri N.K.Bhandari, Secretary
	17 th Meeting	12/10/2009 (New Delhi)	Shri N.K.Bhandari, Secretary
	18 th Meeting	17/11/2009 (New Delhi)	Shri N.K.Bhandari, Secretary

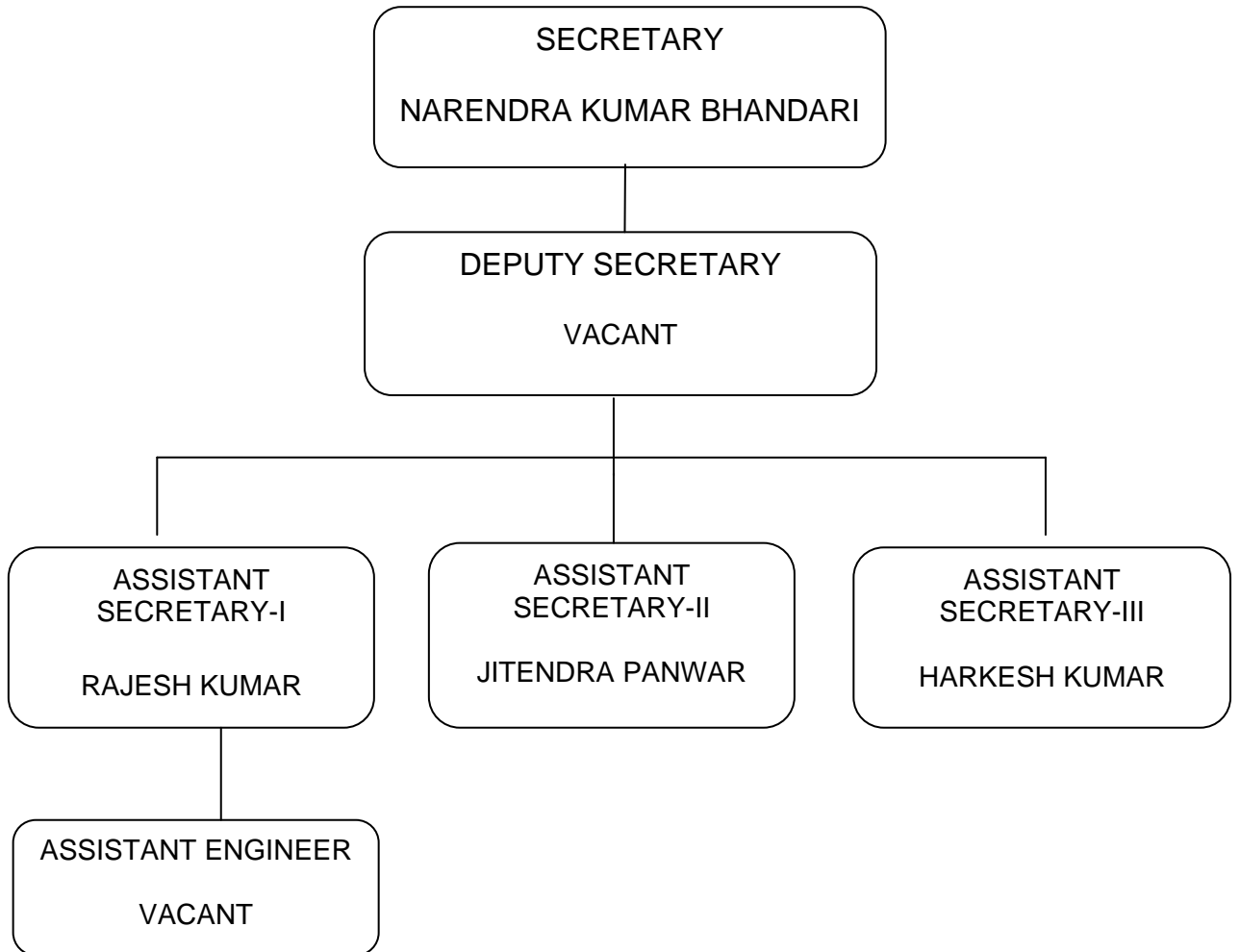
Sr.No	Meeting	Date (Place)	Attended by
7	Hydromet Sub Group		
	11 th Meeting	15/04/2009 (New Delhi)	Shri N.J.Singh, Secretary
	12 th Meeting	26/02/2010 (New Delhi)	Shri N.K.Bhandari, Secretary

ANNEX – IV

**VISIT OF VIP'S TO THE SARDAR SAROVAR PROJECT
IN THE YEAR 2009-10**

Sr. No.	Name of V.V.I.P./VIP/	Designation	Period
1	Shri U.N. Panjiar	Secretary, MoWR, New Delhi	15.06.2009
2	Shri A.K. Bajaj	Chairman, C.W.C. New Delhi	15.06.2009
3	Shri Pradeep Bhargav	Vice Chairman, N.V.D.A. & N.C.A. Team	15.06.2009
4	Hon'ble Shri S.C. Jamir	Governor of Gujarat	14.08.2009
5	Hon'ble Shri K.S. Radhakrishnan	Chief Justice, Gujarat High Court	26.09.2009
6	Shri Mohansinh Rathwa	Chairman, Public Account Committee and other Members	04.11.2009
7	MLA's of Tamilnadu	Public Account Committee, Tamilnadu	13.11.2009
8	Shri Jakko Sayrala	Water Resources Management, Finland	13.12.2009
9	Shri O.P. Rawat	Chairman, NVDA	21.12.2009 to 22.12.2009
10	Shri Nimbalkar	Irrigation Minister, Govt. of Maharashtra	28.02.2010
11	Shri Amrish bhai Patel	M.L.A. Maharashtra	28.02.2010
12	Hon'ble Shri N.K.Modi	High Court, Indore (MP)	05.03.2010

**ORGANISATION CHART OF SSCAC SECRETARIAT
(AS ON 31ST MARCH 2010)**



ANNEX – VI

SALIENT FEATURES OF SARDAR SAROVAR PROJECT

I. LOCATION

State	:	Gujarat
District	:	Narmada
Taluka	:	Rajpipla (Nandod)
River	:	Narmada

II. HYDROLOGY

Water shed area of the river above dam site:	:	88000 sq. km. (33970 sq.mile)
Mean annual rainfall	:	1120mm (44.10 inch.)
<u>Annual run-off at dam site</u>		
at 50% dependability	:	4.10 Mha m (33.20 MAF)
at 75% dependability	:	3.36 Mha m (27.22 MAF)
at 90% dependability	:	2.44 Mha m (19.77 MAF)
Designed flood (1 in 1000 years)	:	87000 cumecs (30.7 lakh cusecs)

III. RESERVOIR

Full Reservoir Level (FRL)	:	138.68m (455 ft)
Maximum Water Level (MWL)	:	140.21m (460 ft)
Minimum Draw Down Level (MDDL)	:	110.64m (363 ft)
Normal Tail Water Level (NTWL)	:	25.91m (85 ft)
Gross Storage Capacity	:	0.95 Million ha m (7.70 MAF)
Dead Storage Capacity	:	0.37 Million ha m (2.97 MAF)
Live Storage Capacity	:	0.58 Million ha m (4.73 MAF)
Annual evaporation	:	0.06 Million ha m (0.5 MAF)
Submergence at FRL 138.68m (455 ft)	:	37533 ha

<u>No. of villages affected</u>	<u>Full</u>	<u>Partial</u>
Madhya Pradesh	:	1 191
Maharashtra	:	- 33
Gujarat	:	<u>3 16</u>
Sub Total	:	4 240
Grand Total	:	244

<u>No. of families affected</u>		
Madhya Pradesh	:	39369
Maharashtra	:	3995
Gujarat	:	<u>4726</u>
Total		48090

IV. DAM

Type	:	Concrete gravity
Length	:	1210.02 m
Maximum height	:	163.00 m
Top of dam	:	EL 146.5 m
Crest Level	:	EL 121.92 m

Spillways

Max. Discharge Capacity)	:	84949.25 Cumecs (30 lakh cusecs)
Service spillway	:	23 Bays 60 ft (18.30 m) each
Auxiliary spillway	:	7 Bays 60 ft (18.30 m) each

Crest Gates

Type	:	Radial
Size	:	18.30 m x 16.76 m (23 Nos.) 18.30 m x 18.30 m (7 Nos.)
Construction Sluices at EL. 18.0m	:	2.10 m x 2.74 m (10 Nos)
River Sluices at EL. 53.00m	:	2.5 m x 3.6 m (4 Nos.)

V. POWER INSTALLATION

	<u>RBPH</u>	<u>CHPH</u>
Location	Right Bank	Right Bank
No. of units	6	5
Rated capacity of each unit	200 MW	50 MW
Installed capacity	1200 MW	250 MW
Type of turbines	Francis (Reversible)	Kaplan (Conventional)
Type of Power House	Underground	Surface

VI. CANAL SYSTEM

FSL at head regulator of Main Canal	:	91.45 m (300 ft)
Type of canal	:	Lined contour canal
Length	:	458.41 km up to Gujarat-Rajasthan border and 74 km in Rajasthan
Base width at head reach	:	73.1 m
Base width at Gujarat Rajasthan Border	:	10.3 m
FSD in head reach	:	7.6 m
Maximum Discharge at Head Regulator	:	1132.66cumecs (40000 cusecs)
Max. Discharge at Gujarat-Rajasthan Border:	:	71 cumecs (2500 cusecs)
Gross Command Area (GCA)	:	34.286 lakh ha - Gujarat 3.00 lakh ha - Rajasthan
Culturable Command Area (CCA)	:	18.419 lakh ha - Gujarat 2.460 lakh ha - Rajasthan
Annual Irrigation	:	17.92 lakh ha - Gujarat 1.51 lakh ha - Rajasthan

VII. IRRIGATION BYE-PASS TUNNEL

No. & Size	:	2 Nos. 5.5 m dia. (circular)
Length of Tunnel	:	190.24 m
C/C distance between two tunnels	:	22 m
Sill level at inlet	:	88.39 m
Crown Level	:	94.89 m
Bed gradient	:	1 in 100
Total discharge capacity of 2 tunnels	:	283.20 cumecs (10000 cusecs) @ Res. level 97.53 m (320 ft.) 424.81 cumecs (15000 cusecs) @ Res. Level 110.64 m (363 ft.)

Gates

Service Gates	:	4 Nos., Sliding Type 2.6 m (W) x 3.9 m (H)
Emergency Gates	:	2. Nos., Fixed Wheel Type 4.32 m (W) x 5.5 m (H)

VIII. COST

(in Rs. Crore)

PRICE LEVELS	1986-87*	1996-97 **	2000-01***	2008-09@
Unit-I (Dam & Appurtenant works)	1019.45	4473.75	6036.78 [^]	8930.53
Unit-II (Main Canal)	1588.54	4410.00	5216.35	23864.03
Unit-III (Hydro Power works)	979.95	2184.75	2782.07	2910.88
Group-IV (Branches & Dist. system)	2818.10	11850.00	14578.17	3535.00
Total cost of the project	6406.04	22918.50	28613.37	39240.44

Notes:

- * Full estimated cost at 1986-87 price level has been approved by the Planning Commission.
- ** Only the Unit-I estimate (partly) and Unit-III estimate of 1996-97 price level has been approved by the SSCAC in its 69th meeting held on 29th July 2003.
- *** Unit-I Estimate (3003.57 crore) excluding B-Land (R&R) Cost and Unit-III Estimate has been approved by the SSCAC in its 71st meeting held on 8th September 2004.
- [^] Unit-I cost includes share of Indira Sagar Project (MP) of Rs.464.51 crore @ 17.63% of cost of Unit-I of Indira Sagar Project amounting to Rs. 2634.77 crore
Break-up of Unit-I Cost
Unit-I (excluding B-land) approved by SSCAC Rs. 3003.57 crore
B-Land (R&R) cost Rs.3033.21 crore
Total Rs.6036.78 crore
- @ Revised Estimated Cost, cleared by TAC in its 103rd meeting held on 11.03.2010 REC of Unit-I & Unit-III, has been recommended by PSC of SSCAC to SSCAC in its 98th meeting held on 22.02.2010.