

FOURTEENTH KERALA LEGISLATIVE ASSEMBLY

# COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2019)

## SIXTY SIXTH REPORT

(Presented on 22nd March, 2018)

SECRETARIAT OF THE KERALA LEGISLATURE THIRUVANANTHAPURAM

FOURTEENTH KERALA LEGISLATIVE ASSEMBLY

## COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2019)

### SIXTY SIXTH REPORT

#### On

The action taken by Government on the Recommendations contained in the Thirty Fifth Report of the Committee on Public Undertakings (2011-2014) relating to Kerala State Electricity Board, based on the Report of the Comptroller and Auditor General of India for the year ended 31-3-2006, 31-3-2007 and 31-3-2008 (Commercial)

737/2018.

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## COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2019) COMPOSITION

Chairman :

Shri C. Divakaran.

Members :

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Shri T. A. Ahammed Kabeer

Shri K. B. Ganesh Kumar

Shri C. Krishnan

Shri S. Rajendran

Shri Thiruvanchoor Radhakrishnan

Shri P. T. A. Rahim

Shri Raju Abraham

Shri Sunny Joseph

Shri C. F. Thomas

Shri P. Unni.

Legislature Secretariat :

Shri V. K. Babu Prakash, Secretary

Shri A. Abdul Kharim, Additional Secretary

Shri Mathewkutty G., Deputy Secretary

Smt. Deepa V., Under Secretary.

#### INTRODUCTION

I, the Chairman, Committee on Public Undertakings (2016-2019) having been authorised by the Committee to present the Report on their behalf, present this Sixty Sixth Report on the Action Taken by Government on the Recommendations contained in the Thiry Fifth Report of the Committee on Public Undertakings (2011-2014) relating to the Kerala State Electricity Board Limited based on the Reports of the Comptroller and Auditor General of India for the year ended 31 March 2006, 2007 and 2008 (Commercial).

The Statement of Action Taken by the Government included in this Report was considered by the Committee constituted for the year (2016-2019) in its meetings held on 30-11-2016.

This report was considered and approved by the Committee at its meeting held on 12-3-2018.

The Committee place on record its appreciation for the assistance rendered to them by the Accountant General (Audit), Kerala during the examination of the Action Taken Statements included in this Report.

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Thiruvananthapuram, 12th March, 2018.

C. DIVAKARAN, Chairman, Committee on Public Undertakings.

#### REPORT

This report deals with the action taken by Government on the recommendations contained in the Thirty Fifth report of the Committee on Public Undertakings (2011-2014) relating to Kerala State Electricity Board based on the Report of the Comptroller and Auditor General of India for the year ended 31 March 2006, 2007 and 2008 (Commercial).

The Thirty Fifth Report of the Committee on Public Undertakings (2011-2014) was presented to the House on 28<sup>h</sup> January, 2014. The Report contained 9 recommendations in Para numbers 9, 10, 11, 12, 19, 20, 22, 26 and 27 of which the Government furnished Action Taken Statements to all of them. The Committee (2016-2019) considered the Action Taken Statements furnished by the Government at its meeting held on 30-11-2016.

The Committee accepted the reply to the recommendation in Para Nos. 12, 19, 20, 22, 26 and 27 without remarks. These recommendations and the replies furnished by the Government form Chapter I of the Report.

The Committee accepted the replies to the recommendations in Para Nos. 9, 10 and 11 with remarks. These recommendations, the replies from Government and the remarks of the Committee form Chapter II of the Report.

### CHAPTER I

## REPLIES FURNISHED BY THE GOVERNMENT ON THE RECOMMENDATIONS OF THE COMMITTEE WHICH HAS BEEN ACCEPTED BY THE COMMITTEE WITHOUT REMARKS

SI.	Para	Department	Conclusions/	Action Taken by the
No.	No.	Concerned	Recommendations	Government
1	2	3	4	5
1	12	Power	The Committee further recommends that appropriate steps should be initiated to identify the officials responsible for the loss and stringent action should be taken against them after fixing the liability.	It is hereby informed that the officers who arranged for storage-cum- erection insurance of Kakkad Hydro Electric Project during the period of 1988-1993 were already retired. Also most of the officers who are alleged to have delayed lodging claim and filing appeal before IRDA also retired. Even though KSEB had filed an appeal before the IRDA, for revising the compensation amount, same was also rejected. The matter was taken to the High Power Committee constituted by Government for settling disputes between Public Sector Companies/bodies,

				and the committee
				examined the matter and
				directed that competent
				officials from Kerala
				State Insurance Depart
				ment and KSEB may
				examine each claim in
				detail, rectify defects if
				possible and work out an
				agreeable solution within
				one month. Accordingly a
				meeting was convened
				and in the meeting KSID
				intimated that, since a
				resurvey has already been
				conducted and the second
	ĺ			surveyor also found that
				asset was under insured
				and hence the claim
				cannot be considered. It
				is also informed that
				since KSID is a Govt.
				Department and KSEB, a
				Public Sector Under
				takings under the control
		1		of Govt., there is no issue
				of misuse/loss of public
				money in the subject
				case.
2	19	Power	The Committee	Sabarigiri Hydro
			notices that the Board	Electric Project, the
			had released the	second largest generating
			amount for extra	station of the KSEB

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	work well in advance	system having an
	before seeking the	installed capacity of 300
	opinion of the CEA.	MW (6x50 MW) was
	Though the payment	commissioned during
	made was explained	1966. The machinery
	to be based on the	comprises of vertical
	decision of the expert	shaft Pelton turbines and
	engineers of Board,	generators, both of 'Allis
	the Committee	Chalmers, USA, who
	expresses its doubt	stopped manufacturing of
	whether both Board	Hydro generators and
	and CEA examined	turbines. The excitation is
	the issue on the	of conventional rotating
	different condition in	type and the Governors
	the contract as CEA	were cabinet actuator
	objected extra	type. The equipment was
	payment. The	tendered during 1960 as
	Committee opines	per the specification and
	that as the decision of	technology available at
	Board differed from	that time.
	the opinion of CEA,	Since many of the
	either of them have	project components have
	to be termed	crossed their useful life
	incompetent; The	span, the machines were
	Committee strongly	experiencing frequent
	criticises the action	breakdowns. All the
	of the Board in	spares obtained with the
	seeking advice from	units at the time of
	CEA after making a	installation had exhausted
	decision based on	and it became very
	examination	difficult to procure
	conducted by its own	additional spares due to
	engineers. The	the change in technology.

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	Committee also	Moreover, the wear and
	remarks that the	tear of the units had
	advice seems to be	resulted in deterioration
	sought due to the fear	of efficiency of the units.
	that the decision	All these factors forced
	arrived at was not	the Board to proceed
	fair at large. The	with the Renovation and
	Committee	Modernization (R&M) of
	recommends that	the units. While finalizing
	before awarding extra	the project report and
	work to the	tender specifications, it
	contractor the Board	was decided that only the
	should seek expert	
	advice from	need be replaced with
	competent authority,	new core and windings,
	whether the work	since the other five units
	intended to be done	had already been
	as extra will come	rewound with 55 MW
	under the ambit of	
	original work so that	
	unwarranted	Thus, only unit # 6 was
•	expenditure can be	
	avoided in future.	the other nee
		remain with a capacity of
		55 MW each. However, the turbine runners of all
		the six units were replaced with 60 MW
		runners, so that in future
		the capacity of remaining
		five units can also be
		increased by changing the
		generator winding alone.
	ļ	Benerator minung aroner

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The extra works
proposal submitted by the
firm was thoroughly
examined by the expert
engineers of KSE Board.
After convincing its
necessity, various levels
of negotiations were also
conducted with the firm
for getting the rock
bottom rate. Based on the
report and
recommendation of the
Chief Engineer, Board
accorded sanction to
award the extra works
amounting to ₹ 78, 88,
445/to M/s V.A. Tech
Hydro and extra work
amounting to ₹
3,81,473/to M/s L &T on
12/2004.
When the issue of
unforeseen extra works
was placed for sanction,
the Board desired to
know the opinion of an
expert from CEA, on the
necessity of work and
reasonability of the cost
of works and accordingly
the opinion of CEA was
sought. The CEA team

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conducted a site visit for '
examining the matter land
submitted their report.
According to CEA's
opinion, out of the 11
extra works sanctioned by
KSEB, 5 of them could
not be treated as extra as
the same could be carried
out within original scope
or by using the existing
parts as such.
The Board came to the
conclusion that awarding
of extra work is in the
best interest of the Board
and in accordance with
relevant clauses in the
agreement. Considering
the long term perspective,
the works were essential
for the trouble free
operation of the machines.
Thus ₹ 51.08 lakh cannot
be considered as loss due
to unwanted extra work
but only a payment for
the extra work carried out
by the contractor as per
contract which also
improved the overall
performance and
efficiency of the

1 1		
		machines. Considering
		the total expenditure
		incurred for the RMU of
		Sabarigiri HEP (₹ 102.63
		Crore including extra
		works), this objected
		amount is only 0.5%. It
		may be noted that due to
		the early decision taken
		by KSEB before getting
		the expert opinion of the
		CEA, the spillage of the
		reservoir was avoided
		during the year 2005-06,
		which resulted in saving
		of crores of rupees.
		The matter was
		referred to CEA only for
		getting a second Opinion
		for future guidance for
		other machines.
3 20 Power	The Committee	The Board as per the
	recommends that	Order dated 22-1-1999
	liability should be	decided to arrange the
	fixed upon the	work of Renovation,
	officers responsible	Modernization and
	for the loss sustained	Uprating of Sabarigiri
	by the Board and	HEP by inviting global
	details regarding the	tender and sanction was
	action taken should	accorded for an estimate
	be intimated to the	of ₹ 112 crore as per the
	Committee without	Order dated 1-9-2000.
	delay. The Committee	Subsequently, as per the

also recommends that	BC (FB) No. 439/2002
should be furnished	dated 30-3-2002, the
with a detailed	work was awarded to the
report regarding the	lowest bidder M/s V.A
reasons for the	Tech Hydro, Austria for
unwarranted haste in	₹ 94.64 crore. The Chief
awarding the extra	Engineer (O & M) Hydro
work before	executed the agreement
ascertaining the	on 28-7-2002. The
reasonableness of the	completion period of
work and additional	contract as per the
expenditure.	agreement was 48 months
	from the date on which
	the contract became
	effective. The contract
	became effective on
	27-1-2003 (date of
	opening of letter of credit
	in favour of the
	contractor). The scheduled
	date of completion was
	on 26-1-2007.
	M/s V.A Tech started
	site inspection on
	25-2-2003. While the site
	inspection was on around,
	a fire accident occurred at
	Moozhiyar Power house
	on 7-3-2003. As so many
	statutory official
	procedures (investigation
	by concerned departments
	like Inspectorate of

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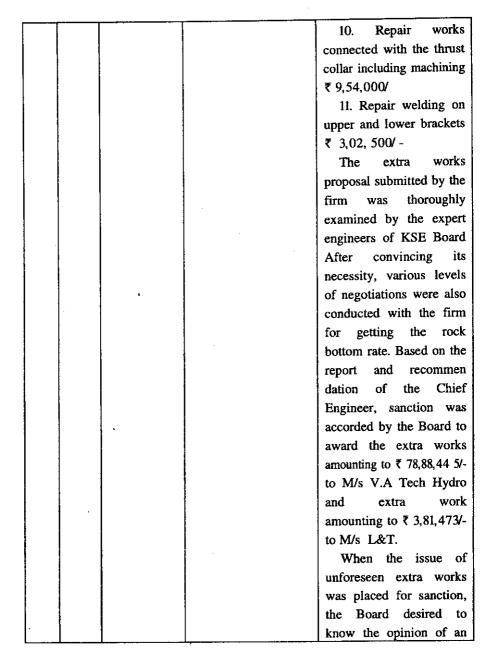
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	Factories 7 Boilers,
	Electrical Inspectorate
	and Police Department
	etc.) are to be completed
	consequent to the fire
	accident, the work was in
	a suspended stage from
	7-3-2003 to 25-7-2003
	ie; more than 4 months
	were lost from the
	schedule without any
	work.
	On completion of the
	formalities, the units # 6
	& 5 were handed over to
Į	M/s V.A Tech on
	25-7-2003 for the RMU
	works. As per the agreed
	schedule, the time period
	for completing the RMU
	work of Unit # 6 was 52
	weeks (1 year) ie; up to
	24-7-2004.
	After dismantling and
	conducting required tests
	on unit No.6, the firm
	had identified the extra
	Works and submitted
	their offer for the extra
	works as per Clause 22
	of the contract agreement.
	clause No. 22 stipulates
L [	that:

"On dismantling,
detailed inspection and
testing conducted on
parts, if some parts/
components/equipments
are found to be defective
which are not included in
the scope of tender
specifications, replace
ment/repairs to the above
parts shall be treated as
extra work. For the extra
works, the rate, terms and
conditions and the
influence on the
completion period of this
purchase order shall be
reported by the contractor
to the Chief Engineer.
Within reasonable time
from the date of receipt
of the above mentioned
report the Chief Engineer
shall convey the Board's
decision to the
contractor".
The following works
(refurbishment of existing
parts and replacements of
existing items with new
one) were identified as
extra work.

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	1. Machining of the
	trunnions in MIV and
	machining of the seat for
	the rotor seal to maintain
	Coaxiality (work) ₹ 8,53, 266 /-
	2. Supply Of self
	lubricated bearings of
	main inlet valve (supply)
	₹ 196802/-
	3. Replacement of
	connecting flange at the
	up stream and down
	stream side of MIV
	(Supply) ₹ 7,76,278/-
	4. Machining of the
	runner coupling flange of
	the turbine shaft (work)
	₹ 9,02,390/-
	5. Replacement of
	Water Guard with new
	one-(supply)-₹ 6,89,875/-
	6. Site machining of
	distributor bores, (work)
	₹ 13,86,079/-
	7. Replacement of
	flow guide with new one
	(supply) ₹ 13,24,244/-
	8. Jet alignment using
	precision equipments
	(work) ₹ 8,05,600 /-
	9. Supply of Guide
	ring in the dismantling
	flange portion of MIV
l	₹ 1,57,000/-

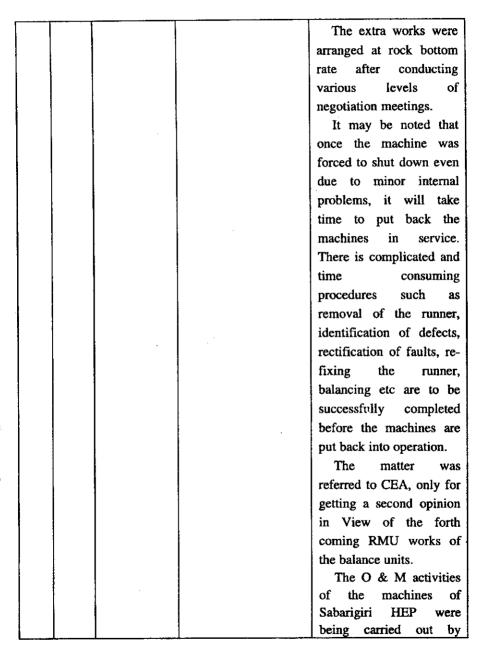


expert from CEA, on the
necessity of work and
reasonability of the cost
of works and accordingly
the opinion of CEA was
sought. The CEA team
conducted a site visit for
examining the matter and
submitted their report.
According to CEA's
opinion, out of the above
11 extra works sanctioned
by KSEB, 5 of them
(item No. 4,5,6,7,8)
could not be treated as
extra as the same could
be carried out within
original scope or by using
the existing parts as such.
The financial commitment
for the above objected
items is ₹ 51.08 lakh.
The following points
may be noted in this
regard. Sabarigiri Hydro
Electric Project is the
second largest generating
station of the KSEB
system With an installed
capacity of 300 MW, on
which KSEB largely
depend for meeting the
peak demand.

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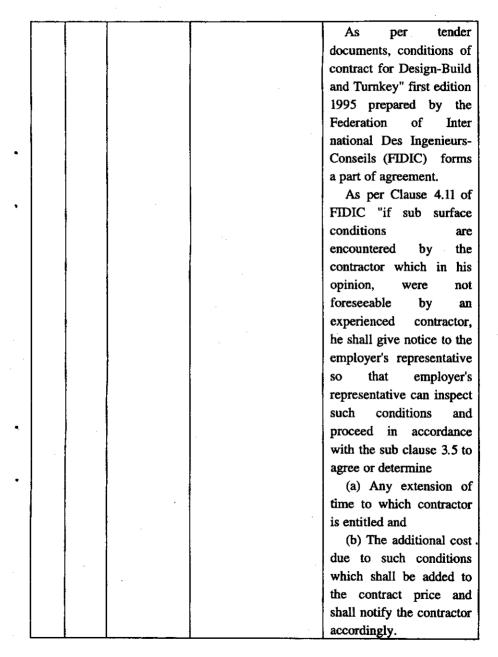
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	The renovation work
	was scheduled to be
	carried out on the units
	one by one with the
	intention to utilize
	maximum quantity of
	water for generation,
	avoiding the spilling of
	water. The Board was
	aware that the delay in
	putting back unit # 6
	would derail the schedule
	of entire renovation work.
	More than 4 months were
	already lost due to the
	accident.
	Unit # 6 was already
	under shut down during
	2003-04 as per schedule.
	Because of the issue of
	extra work, the unit could
•	not be put into service
	during monsoon of
	2004-05. Board was very
	particular that the unit # 6
	had to be commissioned
	before the onset of the
	monsoon for the year
	2005-06 to avoid
	spilling.
	The total cost of RMU
	works of Sabarigiri HEP
	as per the original Order

is ₹ 94.64 Crore and that
of Unit #6 is ₹ 17 Crore
(approx).
Out of the 11 items of
extra works arranged by
K.S.E Board on Unit # 6,
the CEA offered a
different opinion only in
the case of 5 works
having a total additional
financial commitment of
₹ 51.08 lakh. Comparing
the total financial
commitment of the RMU
works of unit #6, this
amount comes only
around 3%.
The extra works
proposal forwarded by
the firm was thoroughly
examined and analysed
by the expert engineers of
the KSEB and fully
convinced its need and
necessity.
KSEB is very
particular to see that the
renovated machines
should ensure trouble free
operation for the next 20-
25 years and hence
cannot take any risk on
account of minute extra
works.

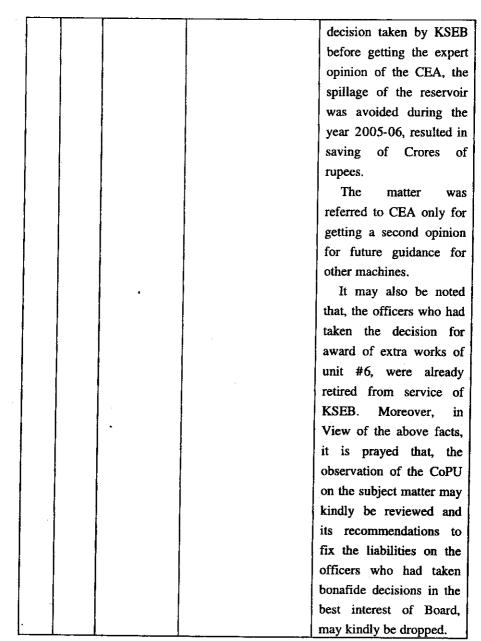


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			KSEB Engineers since its
			commissioning during the
			year 1966 and they are
			very much experienced
			and aware of the
			conditions of the
			machines, than any other
			team. Even though CEA
			has very good technical
			capability, KSEB
		1	Engineers has got the
			practical experience with
-			the machines and they are
			competent to analyse the
			issues relating to
			Sabarigiri machines.
		i.	The timely award of
			extra works of unit #6
			has enabled the Board for
		1	the commissioning of the
		1	unit on 1-7-2005, thus to
			avoid spilling of dam
			during the monsoon of
			2005-06 and to utilize
			the full water potential
	ĺ		during the year, resulted
	ĺ		in savings of Crores of
			rupees.
		}	The CEA has not
			taken in to account of the
			relevant clause on the
			Agreement (clause no.
			22) with M/s V.A Tech
			while offering their
		- <u> </u>	remarks.



It is hereby concluded
that awarding of extra
work is in the best
interest of the Board and
in accordance with
relevant clauses in the
agreement. Considering
the long term perspective,
the works were essential
for the trouble free
operation of the
machines. Thus ₹ 51.08
Lakh cannot be
considered as loss due to
unwanted extra work but
only a payment for the
extra work carried Out by
the contractor as per
contract which also
improved the overall
performance and
efficiency of the machine.
Considering the total
expenditure incurred for
the RMU Of Sabarigiri
HEP [₹ 102.63 Crore
(approx) including extra
Works], this objected
amount is only 0.5%
(approx). It may be noted
that due to the early



4		Dowor	The Committee	It may please be noted
4	22	Power	understands that the	that top priority is being
			department has not	given by Kerala State
			-	Electricity Board for
			furnished the reply to	•
			draft audit paragraph	answering to draft/ audit paras within the due
			in time. The	paras within the due dates. But in some rare
			Committee opines	
			that had the Board	cases delay may occur
			furnished the reply to	since data may have to be
			audit para in time the	collected from many field
			same would not have	offices or huge volume of
			found place in the	data is required etc.
			Audit Report.	In the given case the
				draft para is issued by
				Accountant General on
				28-5-2007 and received
	1			in, KSE Board on
				4-6-2007. The time limit
				prescribed by Accountant
	}			General was six weeks.
	ł			The reply on required
				details with respect to
				storage level of Idukki
				Dam, Generation
				Statistics, Power purchase
1				rates etc. could not be
				consolidated in time.
		ļ		Though earnest efforts
		1		were made to furnish the
				reply within the due date
				the consolidation of all
				these data was time
				consuming and hence

		<u> </u>		·	
					there occurred some
	ł				delay in finalising the
					reply. The reply was
					submitted after vetting by
					the then Chairman, KSE
					Board on 24-9-2007.
	[				Taking into account
					the recommendation of
			}		the Committee in its right
					sense, Board has taken all
					possible steps to ensure
ĺ			ļ.		that the replies to Draft /
ł					Audit paras are submitted
					within the prescribed time
			-		and no delay occur in
ł	5	26	Power	The O his	future.
	5		rower	The Committee	<u>Para 26 &amp; 27</u>
				finds that if the	
				Board had been	The 2x 7.5 MW
ł				vigilant enough to stock vital spare	Kallada Small Hydro
					Electric Project,
				parts, generation could not have been	
				stopped for 40 days,	
ļ					
					Irrigation project.
				produced more power.	
Γ	6	27	Power	The Committee	On 1-12-2005.
		ĺ		therefore recommends	Generator No. 1 & 2 were
				that there should be	tripped due to the failure
				an effective	of servo motor and
				mechanism in KSEB	thyristor respectively.
L	`			to ensure that critical	The faulty thyristor in the
					ultion in die

components are	exciter panel of unit No.
always therein the	2 was replaced
inventory for having	immediately with the
a sound supportive	Spare one kept in the
system to avoid	stock. But this thyristor
instances like this in	also failed when the
future. The Committee	machine was tried to put
wants to be furnished	back into service. As
with a report	there was no more spare
regarding the details	thyristor available in the
of liability fixed	stock and considering the
against the officers	time taken for the repair
responsible and the	of the servomotor of unit
present position of	#1, it was decided to take
the action taken for	out the thyristor of unit
recovering the losses	No.1 and put back the
raised in the audit	unit No. 2 in service.
objection.	Accordingly the unit #2
	was put back in service
	on 1-12-2005 itself. The
	unit No. I was put back in
	service only on
	10-1-2006 after
	rectification of oil servo
	motor problem and
	replacement of thyristor
	in the excitation panel.
	Audit has observed
	that the defective
	servomotors of Unit No. 1
	was repaired on
	10-12-2005, but gener
	ation could resume only

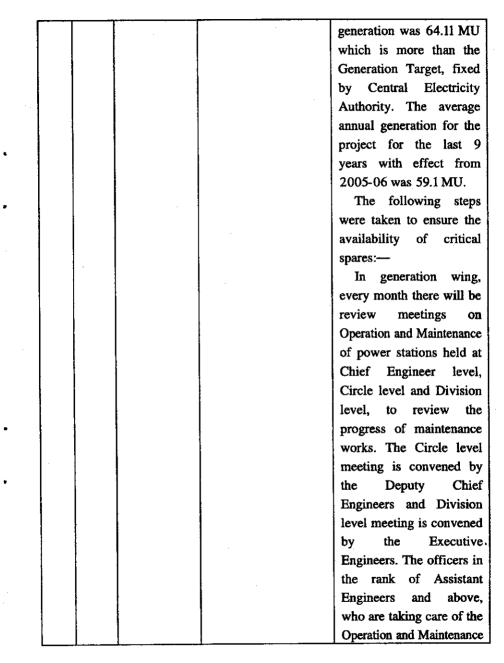
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on 10-1-2006, after;
installation of a new
thyristor at a cost of ₹
9,750/ Due to delay in
replacement of the
defective thyristor in Unit
No.1, the Board lost
generation of 5.17 million
Units of power valued at
₹ 2.02 Crore for 30 days
when there was sufficient
discharge of water from
the reservoir. Audit
noticed that the thyristor
had developed defects in
2002 also and the same
was replaced through
purchase from BHEL.
But the Board did not
keep adequate spares of
this low value item to
avert generation loss in
emergent situations.
Thyristor comes in the
list of slow moving
inventories. Slow moving
spares are kept at bare
minimum quantity. As
per agreement condition
with original supplier of
generating equipments for
a project, it is natural to
specify the required

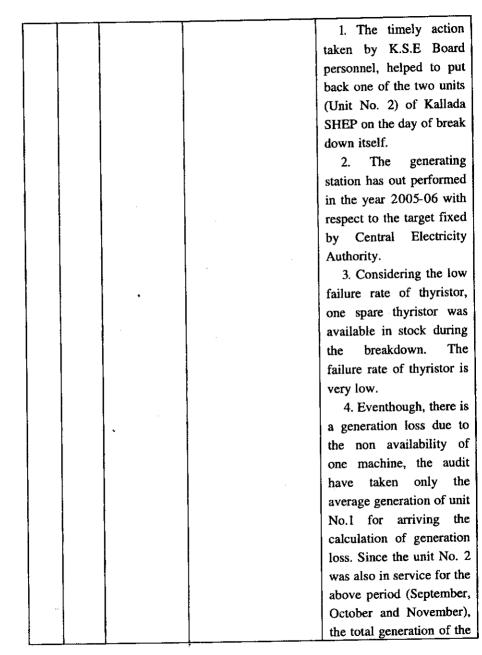
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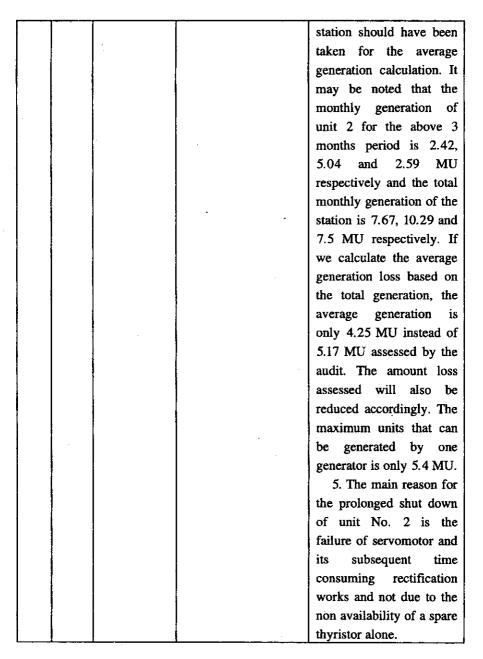
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			spares for the smooth
		1 1	running of the generating
		1	units for a certain period
		i	in the future. M/s BHEL,
		1	the OEM of Generator,
		]	Exciter, Turbine &
			Governor of Kallada
		]	HEP, which was
		•	commissioned in 1994,
		. 1	had supplied spare
			thyristors along with
		1	many other spares. It may
		1	be noted that one spare
,		1	thyristor was available in
			stock during the failure of
		1	the unit # 2, in
		•	1-12-2005 Eventhough,
		1	the failed thyristor was
		1	replaced with this spare,
		. 1	unfortunately the same
			also failed during the trial
		1	run.
			Every year, the Central
		]	Electricity Authority,
		1	under Ministry of Power,
		t .	fixes the generation target
		i	in the succeeding year for
		4	each generating stations.
		,	The Generation target
			fixed for Kallada Power
			Station for 2005-06 by
			CEA was 55 MU in
			2005-06, But the actual

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	works and in charge of
	store of a Power station
	are attending the meeting.
	In this review meeting,
	the progress of current
	maintenance activities,
	analysis of previous
	maintenance works,
	planning and scheduling
	of future maintenance
	works, availability of
	spares, purchase plan for
	required spares etc. are
	reviewed and finalized.
	Apart from the above
	monthly meeting Board
	level periodical review
	meetings will also be
	conducted by the Director
	in charge of Generation.
	As per the recommen
	dations of the Public
	undertakings Committee,
	strict instruction has been
	issued by the Board to
	ensure the availability of
	critical spares in power
	station and to include this
	as an agenda in the
	monthly review meeting.
	The following actions
	were taken to tackle the
	situations.





			It may be noted, the
			excitation system of both
			the generators of Kallada
			Power station was
			replaced with new one in
			the year 2012-13. For the
			new excitation system,
			Board purchased 6 Nos.
			of thyristors and kept as
			spare (3 Nos. each for
			unit 1&2). As
			recommended by the
			Hon'ble Committee,
		·	necessary steps for
			ensuring the availability
			of critical spares in Power
			stations, have already
			been taken by the Board.
			No such incidents of
			generation loss due to the
			unavailability of critical
			spares were reported
			since then.
			From the above stated
			facts it may be concluded
		,	that there is no wilful
	•		negligence or lapses on
			the part of any of the
			officers of the Board and
			also that the generation
			loss arrived by Audit is a
	· · ·		hypothetical figure.
			Hence no actions have
		]	been initiated against any
			of the Board officers in
			this regard.
			In the light of the
			above explanation, the
			recommendation may
			kindly be dropped.
L		<u>,                                    </u>	kindly of dropped.

## CHAPTER II

## ON THE REPLIES FURNISHED BY THE GOVERNMENT RECOMMENDATIONS OF THE COMMITTEE WHICH HAS BEEN ACCEPTED BY THE COMMITTEE WITH REMARKS

S1.	Para	Department	Conclusions/	Action Taken by the
No.	No.	Concerned	Recommendations	Government
1	2	3	4	5
1	9	Power	The Committee	Para 9, 10 and 11
			finds that the	· · · · · · ·
1			assets of Kakkad	The 2x25 MW Kakkad
			Hydro Electric	Hydro Electric Project was
			Project insured by	evolved by KSE Board as a
			KSEB for ₹ 18.85	second stage to utilize the
			crore actually	water potential of the
			included the	Pampa Basin. The order for
			escalation cost of	supply of generating
			the equipments,	equipments for Kakkad
			but the failure on	Power station was placed
			the part of the	with M/s BHEL on
			Board to	27-5-1981 by the Chief
			specifically	Engineer (Operation) for a
			mention the	contract amount of
			escalation cost in	₹ 1063.11641 Lakh. The
			the schedule to the	cost of two generators with
		ļ	insurance policy	exciter, PMG, air and oil
			led to under 5	coolers along with CO <sub>2</sub>
			assessment of	equipment as per order
		1	65.39% of the	dated 27-5-1981 was
	1		claims by Kerala	₹ 389.87 lakh. The price
	ļ		State Insurance	variation clause was also
	<u> </u>		Department stating	envisaged in the agreement.

10PowerThe Committee observes that the Board had taken a decade in claiming the insurance that decade in claiming the insurance that it co, much below the original cost and took another 4 years to go for an appeal against dated 22/10/1988 had KSID. The accorded sanction for Committee Vite and negligence on the part of KSEB generating equipment of in dealing with a serious issue like the sinsurance issue like this. The Committee points out that improper valuation of the insurance resulted in the under valuation of assets. The Committee of the value in the Schedule of insurance resulted in the under valuation of assets. The Committee of the value in the Schedule of insurance resulted in the under valuation of assets. The Committee of the part of committee of the value in the schedule of insurance resulted the value in the schedule of insurance resulted the to the dot of the value in the schedule of insurance resulted the to the dot of the project was insurance of the project was <b< th=""><th></th><th></th><th></th><th></th><th></th></b<>					
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The Committee 20-11-1999. The total	1			in the under	₹ 10,47,589/ The policy
			1	valuation of assets.	was extended till
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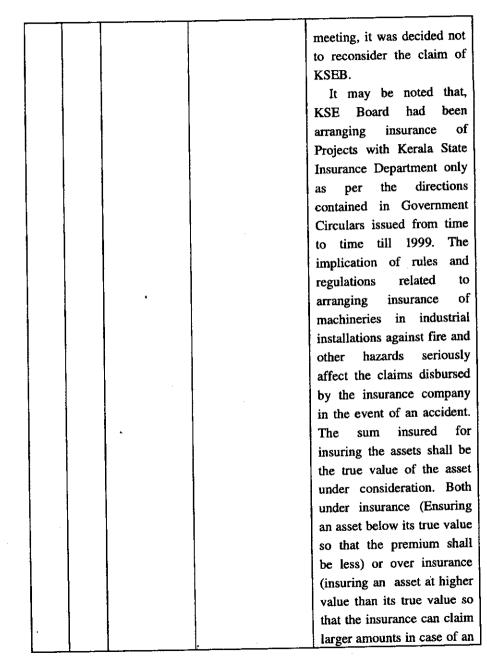
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3	11	Power	to claim the insurance in time the entire loss could have been realised as the whole assets were reinsured with United India Insurance. The Committee	₹ 42,10,086/ DETAILS OF COMPENSATION AMOUNT RECEIVED While the erection work of the project was in progress a fire accident occurred on 28-10-1992,
			recommends that KSEB should seek expert opinion before insuring assets so that the insured amount is adequate to make good the loss in case of any contingency and in case any accident occurs immediate steps should be taken to claim the insurance at the earliest.	causing damages to the stator assembly of the 25 MW Unit No. 2 Generator, which was kept very close to the downstream wall. The accident was reported to M/s KSID on the same day itself. After the accident, the Board arranged the repair/replacement of the damaged stator bars of generator No. 2 for a total expenditure of $\overline{t}$ 1,31,26,399/- including cost of transportation. The Chief Engineer (O&M) Hydro has furnished claim bill to M/s J.B. Boda Surveyors Pvt. Ltd., the surveyor of M/s KSID on 23-6-1999. Subsequent to

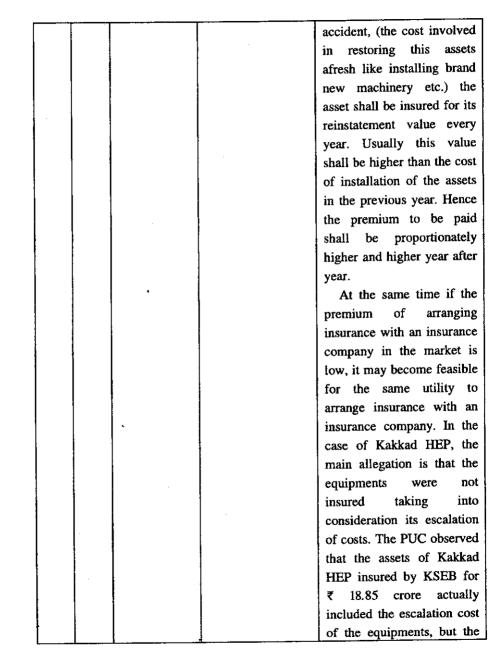
this, M/s United India
insurance Company Ltd.
(Co-insurer of KSID) has
informed that the maximum
claim amount on this claim
would be ₹ 38,48,242/-only
and the damaged equipment
is under-insured. The
Discharge receipt for
₹ 38,48,242/was furnished
by the Deputy Chief
Engineer under protest
subject to sanction of the
Board.
The subject matter was
taken up by the Board and
it was decided to take up
the matter with KSID for
revising the compensation
amount in respect of fire
accident, and to claim
balance amount with
interest for the delay in
payment. The Board had
also decided to file appeal
before IRDA (Insurance
Regulatory, Development
Authority), if M/s KSID
declines the claim of KSE
Board.
Board filed an appeal
before the Insurance
Regulatory and

Development Authority (IRDA).
The IRDA referred the
reconsideration. KSID has
appointed another
Surveyor Sri. M. Abdul
Rahman, Thiruvananthapuram,
to examine this claim.
Based on the report of Sri.
M. Abdul Rahman, KSID
informed IRDA that
argument filed by KSEB
before the Hon'ble IRDA
authorities is baseless and
they are not liable to pay
any additional amount. The
IRDA informed the matter
to the Board. The Board
took up the matter with
High Power Committee in
Government. The High
Power Committee directed
•
from KSEB and KSID may
examine the claim in detail,
rectify defects if possible
and work out an agreeable
solution within one month.
Accordingly, a meeting was
held between KSEB and
KSID officials on
27-4-2011. In the said



accident even though the premium is proportionately high) are not permitted. The sum insured be either the depreciated value of the machinery or the reinstatement value of the machinery.

The insurance оп depreciated value is applicable only for commissioned projects. All the machinery undergoes depreciation and its true value decreases in due course of time. The sum insured for the asset (machinery) is its depreciated value and premium is fixed according to the depreciated value of the asset. The premium paid shall be lesser and lesser year after year if no accident occurs. If an accident occurs the sum reimbursed by the insurance company shall be only the depreciated value of the destroyed machinery. In order to claim the reinstatement value of an asset consequent to an



failure on the part of the
Board to specifically
mention the escalation cost
in the schedule to the
insurance policy, led to the
under assessment of
65.39% of the claim by
Kerala State Insurance
Department (KSID) stating
to be case of under
insurance. The PUC also
opined that improper
Valuation of the insured
item and failure to record
the value in the Schedule of
insurance resulted in the
under valuation of assets.
The insurance cover against
damage during storage- cúm-
erection of a project can be
taken only on invoice value
of equipments or its
reinstatement value.
Insuring on depreciated cost
is not applicable for storage
cum erection insurance. The
Board insured assets of
Kakkad in the year 1988 at
its invoice value.
In Kakkad Project, the
damaged equipment was a
generator. The cost of 25
MW generator including
Benerator meruding

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erection charge at the time
of taking insurance (1988)
was ₹ 176.51 lakh. The cost
of such a generator at the
time of accident (1992) was
₹ 510 lakh ( as per details
given by BHEL). The
percentage rate of increase
for 4 years was
approximately 189%. The
average percentage increase
per year comes to
(189/4)=47% of the original
value. As per insurance
rules for getting the actual
expenditure met by the
Board for repairing any
damage due to an accident
occurred during insured
period, the project should
be insured at its
reinstatement cost, ie. the
total sum insured
mentioned in the insurance
policy should be exactly
equal to the reinstatement
cost of the project.
The Kakkad Project was
commissioned in 1999. The
extension of insurance to
cover the risk during
Storage-cum- Erection
continued up to 1999. If

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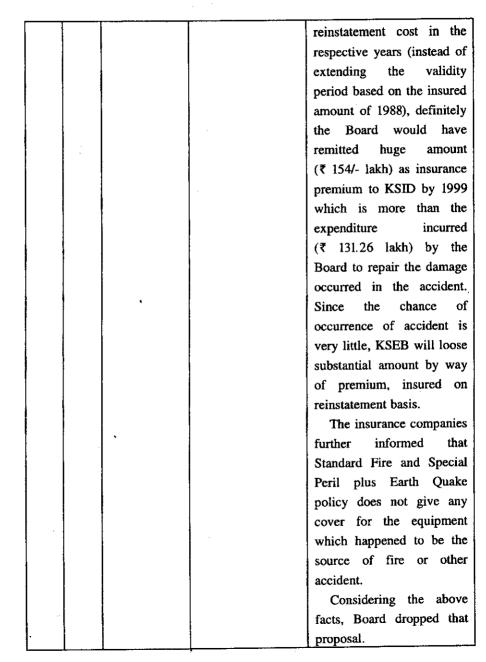
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	Board insured the project
	on reinstatement basis, the
	total premium amount
	might have been paid is
	approx ₹ 154/- lakh and
	total premium up to the
	time of accident is ₹ 34.81
	lakh. But the actual
	premium paid by the Board
	for insuring the project on
	fixed amount basis during
	the entire period is $₹$ 42.1
	lakh and the amount paid
	up to the time of accident
	was ₹ 17.81 lakh only. The
	final compensation received
	from KSID is
	₹ 38.48 lakh.
	•
	Conclusion
	For Kakkad project, if
	KSE Board went for
	insurance on reinstatement
	basis, the premium to be
	paid would be very high.
	The insurance of Kakkad
	The insurance of Kakkau
	Project was arranged in
	Project was arranged in
	Project was arranged in 1988 and only one insurer
	Project was arranged in 1988 and only one insurer was in the field i.e. KSID.
	Project was arranged in 1988 and only one insurer was in the field i.e. KSID. Had the Board renewed

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*Remarks:*—The Committee expressed its displeasure for furnishing a vague reply and remarked that there was grown negligence on the part of KSEB is recovering the compensation amount from the defaulters.

Thiruvananthapuram, 12th March, 2018.

C. DIVAKARAN, Chairman, Committee on Public Undertakings.

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