

Small Hydro Power

Initiatives and Private Sector Participation

Third Edition



ALTERNATE HYDRO ENERGY CENTRE
Indian Institute of Technology Roorkee
Roorkee

CONTENTS

S.No.	Topic	Page No.
1.	Preface	
2.	Small Hydro - An Overview	1
Section : Government of India Initiatives, Policies and Schemes		
Ministry of Power		
1.1	Government of India's Policies for Private Sector Participation in Power Sector, Resolution of Government of India dated 22.10.1991	15
1.2	Policy on Hydropower Development as announced by Ministry of Power - August 1998.	25
1.3	Initiatives taken by Ministry of Power	37
1.4	Depreciation Norms for Generating Companies	43
1.5	Tariff Notification for Generating Companies	47
Ministry of Non-conventional Energy		
2.1	MNES - Guidelines for promotional and Fiscal incentives by State Govt. for Power Generation from Non-conventional Energy Resources	59
2.2	MNES - Guidelines for fixation of purchase price for power produced from Non-conventional Energy	61
2.3	Small Hydropower Project Programme (Upto 25 MW Station Capacity)- Ministry of Non-conventional Energy Sources. Dated 20.09.2002	63
	Annexure-A : MNES Scheme for providing Promotional Incentives to carry out Detailed Survey & Investigation (DPI) and Preparation of Detailed Project Report (DPR) for SHP sites upto 25 MW potential.	67
	Annexure-B : MNES interest subsidy scheme for setting up of commercial small hydropower (SHP) projects upto 25 MW station capacity.	78
	Annexure-C : MNES capital subsidy scheme for setting up of SHP projects upto 15 MW station capacity in the state sector.	88
	Annexure-D : MNES scheme for renovation, modernisation and capacity uprating of SHP projects upto 15 MW station capacity.	94
	Annexure-E : MNES scheme under Small Hydropower Programme to provide promotional incentives for development & Upgradation of water mills.	100
Forest		
3.1	National Forest Policy 1998	108
3.2	Application of Forest (Conservation) Act 1980	115
3.3	Procedure for applying for Forest Clearance	164

Environment

4.1	Environment Impact Assessment Notification 1994 with application from Ministry of Environment & Forests	171
4.2	Notification June 2002	179

Section : State Governments, Initiatives Policies and Projects

1.	Andhra Pradesh	183
2.	Arunachal Pradesh	209
3.	Assam	215
4.	Bihar	217
5.	Chhatisgarh	227
6.	Goa	235
7.	Gujarat	237
8.	Haryana	251
9.	Himachal Pradesh	257
10.	Jammu & Kashmir	281
11.	Jharkhand	283
12.	Karnataka	291
13.	Kerala	341
14.	Madhya Pradesh	359
15.	Maharashtra	373
16.	Manipur	387
17.	Meghalaya	393
18.	Mizoram	399
19.	Nagaland	405
20.	Orissa	407
21.	Punjab	229
22.	Rajasthan	443
23.	Sikkim	459
24.	Tamil Nadu	461
25.	Tripura	473
26.	Uttar Pradesh	475
27.	Uttaranchal	489
28.	West Bengal	513

Section : Financial Institutions

1.	IREDA	527
2.	REC	557
3.	IDBI	561
4.	PFCL	563
5.	NABARD	569

Section : Manufacturers and Consultants

4.	Manufacturers of Small Hydro Turbines/ Generators	577
5.	Consultants	586

LIST OF ADVERTISEMENT

<u>S.No.</u>		<u>Page No.</u>
1.	USHMILO	214
2.	बिहार स्टेट हाईड्रोलेक्ट्रिक	216
3.	Swasti Power Engineering Limited	256
4.	VA Tech	280
5.	Ambuthirtha Power Pvt. Ltd.	282
6.	Meenakshi Power Limited	290
7.	Silk	358
8.	Mecon	392
9.	Joyti Small Ltd.	398
10.	Bhoruka Power Cor. Ltd.	406
11.	Power Group of Company	428
12.	Small Hydro Innovations Pvt. Ltd.	442
13.	Consulting Engineering Services (India) Pvt. Ltd.	458
14.	BHEL	488
15.	Him Urja Pvt. Ltd.	512
16.	IREDA	560
17.	Power Trading Corporation of India Ltd.	Back Cover (Inside)

I hope that this third edition of the publication would prove its worth for reference use by the developers and other organisations/individuals engaged in the development of SHP. Regarding the information furnished by State/UT Governments for enabling private entrepreneurs are upgraded in this edition, information of the potential manufacturers/developers/consultants/policy makers are welcomed by the Ministry.

We are obliged to various central, state government & other agencies who have provided upgraded information, without which, it would have not been possible to compile the updated information. Team of ANEG scientists and staff deserve all appreciations for their efforts in bringing out this publication.


(ARUN KUMAR)
Head

Date: March 31, 2010

Third Edition (2003)

Compiled & Edited by :

Shri Arun Kumar
Dr. M.P. Sharma
Shri Deepak Mathur

Head, AHEC
Scientist (Coordinator)
Fellow 'A'

For further details, please contact

Head
Alternate Hydro Energy Centre,
Indian Institute of Technology, Roorkee
Roorkee - 247 667 (Uttaranchal) India

Tel : +91, 1332, 274254 or 285213
PBX : (01332) 272349, 274860 ext. 5213, 4313, 5167
Fax : +91, 1332, 273517 or 273560
Gram : ENERGYCENTRE,
E.mail : ahec@iitr.ernet.in or ahec@vsnl.com

This publication aims to disseminate information about the policies of Central and different State Government for private sector participation in small hydro power development. The details of financial institutions, manufacturers, consultants are also given for the benefit of policy makers and prospective developers. AHEC does not accept any liability for errors and omissions. The contents in the publication may be used freely and acknowledgement to this effect will be appreciated.

Composed & Printed at :

ARTH Printer & Publisher
19 Prince Complex, Shatabdi Dwar
Roorkee - 247 667, Uttaranchal
Tel. : 01332 - 274293
e.mail : arthrke1@rediffmail.com