ANNEXURE - 2



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	Additional Capitalization Proposed for the FY 2018-19					
Sr. No.	Description	Amount (Rs. In Crores)	Need/Urgency of CAPEX	How the Capex will have improvement in performance of plant/life enhancement	Justification of cost/rate	
А	Land	-				
В	Building	-		·		
С	Major Civil Works	-				
D	Plant & Machinery	-				
1	additional protection/strengthenin g work for Renovation, Modernization & Up Gradation of ventilation system installed at Chibro Power Station	1.85	Existing MAU (Blower room) has to be extended for accommodation of new higher capacity MAU (Blowers incorporating heater banks) for proper working/functioning of new HVAC system to be installed at Chibro underground Power Station. The new rooms for Chiller plant & exhaust blower are proposed outside of underground power station cavity near existing blower room for ventilation & adjacent to main entrance of power station. For stability and protection of structure, the chiller room foundation & its structure have to be protected from heavy water thrust & impact during rainy season and flood pass period	For improvement of efficiency & to provide hyegenic condition and healthy atmosphere for working employees. New ventilation system will improve the working conditions of under ground power station.	Offer based	
2	Supply, Installation & commissioning of water filtration unit including associated pipe line for ventilation cooling system of Chibro Power Station	1.80	It is our prime duty to provide & maintain clean & potable water supply and other required facility to the working employees of Chibro Power Station in the premises of Power Station.	Presently there is no reliable means of water cleaning & treatment arrangement available in Chibro Power Station to provide clean and potable water supply for routine use.	Offer based	
3	Supply, Installation, Testing & Commissioning of 500 KVA Silent Diesel Generator Set for Chibro Power House		To maintain the emergency supply & black start during grid failure The DG set to be replaced is very old and requires frequent maintenance. The existing old DG set do not comply with the current emission norms and noise level as recommended by MOEF of India government.	Proposed to replace the existing old D.G. set with new, energy efficient having emission & noise norm as per MOEF of India Government and fulfilling stable supply requirement norms.	Offer based	



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4	"Supply & Retrofitting of ABB make 245 kV, 1250 Amp motorized Isolator including support Insulator for 220kV Switchyard" of Chibro Power Station, Chibro	1.64	life. The pneumatically operating system of the Isolators is very	By Replacing the existing male-female contacts, auxiliary contact drum, Isolator Insulator & operating system with new Insulator and motorized operating system will save huge generation loss and loss of valuable assets of prestigious underground Chibro Power Station	Offer based
5	"Supply, (nstallation , Testing, commissioning of 11 kV, 630 Amp, 26.3 kA VCBs (Vacuume Circuit Breaker)" for Chibro Power Station		The existing 11 kV MOCB,s are phased out due to inception of new technology. The wiring & protection circuits also have damaged and in very poor condition. The problems are being faced to maintain auxiliary electrical supply of Chibro Underground Power Station	By replacing MOCBs with VCB, auxiliary supply of Chibro Underground Power Station will be reliable and will work smoothly for further 15 -20 years. Huge loss of generation and assets shall be saved due failure of auxiliary supply of Power Station	. Open tender
6	supply, installation, testing & commissioning of advance CCTV security (surveillance) system for Chibro Power Station	0.\$3	For strengthening of security system of Chibro Power Station premises, CCTV security (surveillance) system is urgently required at various locations of power station.	Now a day's terrorist and unwanted person activities have intensifies in India and whole of the world. Safety of Chibro Underground Power Station is very crucial issue in such circumstances of terrorist activities. Being an underground power station security of this power station should be taken on priority basis by all concerned. For strengthening of security system of Chibro Power Station premises, CCTV security (surveillance) system is urgently required at various locations of power station.	Offer based



	Implementation of				
	Restricted Governor				
	Mode Operation		·		
_	(RGMO) in ANDRITZ	0.14	As per directions of Hon'ble CEC and UERC.	la villi bala an matagain aba anti	Offer based from M/s Andtritz Hydro
′	HYDRO make	0.14	As per directions of Hon bie CEC and CERC.	It will help to maintain the grid.	Offer based from Mys Anduritz Hydro
ļ	Microprocessor based				
	Governor of 4x30 MW				
	Khodri Power House.			·	
	Implementation of				
	Restricted Governor	!			
1	Mode Operation				
	(RGMO) in ABB make Pro-		·)
8	control P13 EHGC	0.22	As per directions of Hon'ble CEC and UERC.	It will help to maintain the grid.	Offer based from M/s ABB
					·
	Governor panel of		·		
	4x60MW Chibro Power				
	House				
	SITC of 220 V DC/300				
9	AH Lead Acid Plante	1.00	Battery banks have completed their life.	To ensure the availability of DC supply.	Open Tender
	Battery Banks at Khodri	1.00	battery barnes have completed their mer	in charte the availability of 20 supply.	
	and Chibro.				
	Design, Engineering,				
	Supply, Installation,		'		
	Commissioning of			On the Adotesing of Francis Adotes & Automotic	
10	Energy Monitoring	0.51	As per directions of Hon'ble CEC and UERC.	On line Motoring of Energy Meters & Automatic	Open Tender
	System Including AMR at			Meter Readings.	
	Chibro & Khodri Power				
	House			·	
	5				
	Supply of cables and			·	
	connectorsd for				
11	communication of	0.03	As per directions of Hon'ble CEC and UERC.	On line Motoring of Energy Meters & Automatic	Limited Tender
	Energy Monitoring		, , , , , , , , , , , , , , , , , , , ,	Meter Readings.	1
	System Including AMR at				
	Chibro Power House				
		9.35			
Ε	Vehicles	-			
F	Furniture & Fixtures	_			
G	Office Equipment	, -			
	Total	9.35		•	



	Additional Capitalization Proposed for the FY 2018-19					
	r. Description o.	Amount (Rs. In Crores)	Need/Urgency of CAPEX	How the Capex will have improvement in performance of plant/life enhancement	Justification of cost/rate	
_	\ Land	-				
L	Building	-				
	Treatment of leakage in F-Type & CPT-Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun	0.26	Due to weathering plaster and concrete has been deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness Inside rooms.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old bulldings are threating the life of family of employees, Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam	
	Treatment of leakage in D, FH & LCT Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun	0.25	Due to weathering plaster and concrete has been deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness inside rooms.	At present quarters are not as per the mark of standard of employees. residences are worn out due to aging and are in very bad condition which may prone to accident; old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam	
	Treatment of leakage in Type-C, residential buildings of Tons Colony, New Yamuna Colony and Old Yamuna Colony at Dakpathar, Dehradun.	0.23	Due to weathering plaster and concrete has been deteriorated. Dampness In concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is pecied off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness inside rooms.	At present quarters are not as per the mark of standard of employees. residences are worn out due to aging and are in very bad condition which may prone to accident. old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam	



4	Providing and Laying of Bituminous Macadam (BM) & Semi Dense Bituminous Concrete (SDBC) on Internal Roads of Tons Colony, Dakpathar (Dehradun).	1.29	linconvenient and uncomfortable. Considering the noor	Repair and maintenance work of colony roads will prevent the roads from further deterioration and make them convenient and comfortable for traffic movement. Also, the probability of accidents will reduce.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
	Providing and Laying of Bituminous Macadam (BM) & Semi Dense Bituminous Concrete (SDBC) on Dakpathar Barrage Road, Dakpathar (D.Dun).	1.03	The roads of colony have not been repaired for around last nine years except. Due to lack of repair and maintenance since long, the roads have deteriorated very badly and the condition of roads of Dakpathar barrage has become poor. Traffic movement has become highly inconvenient and uncomfortable. Considering the poor condition of barrage roads, it has become necessary to carry out repair and maintenance work of barrage roads. In view of above mention facts, it is proposed that the Barrage roads should be repaired and maintained the proposed repair and maintenance work will prevent the roads from further deterioration and make them convenient and comfortable for traffic movement.	make them convenient and comfortable for traffic	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam

6	Providing and Laying of Bituminous Macadam (BM) and Semi Dense Bituminous Concrete (SDBC) on External Road/Outer Road (Ring road) of Tons Colony from Vidyut Bhawan to St. Mary's School at Dakpathar colony, Dekpathar (Dehradun).	0.84	condition of colony roads, it has become necessary to carry out repair and maintenance work of colony roads. Nigam personnel residing in the colony have been pressing hard for the repair and maintenance work of colony roads. In view of above mention facts, it is proposed that the colony roads should be repaired and maintained the proposed repair and maintenance work will prevent the roads from further	Repair and maintenance work of colony roads will prevent the roads from further deterioration and make them convenient and comfortable for traffic movement. Also, the probability of accidents will reduce.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
		,	deterioration and make them convenient and comfortable for traffic movement.		
7	Providing and Laying of Bituminous Macadam (BM) and Semi Dense Bituminous Concrete (SDBC) on Internal Roads of New Yamuna Colony and Old yamuna colony at Dakpathar (Dehradun).	0.46	The roads of colony have not been repaired for around last nine years except minor repair works carried out on few internal roads in 2010-11 & 2013-14. Due to lack of repair and maintenance since long, the roads have deteriorated very badly and the condition of Internal roads of Dakpathar colony has become poor. Traffic movement has become highly inconvenient and uncomfortable. Considering the poor condition of colony roads, it has become necessary to carry out repair and maintenance work of colony roads. Nigam personnel residing in the colony have been pressing hard for the repair and maintenance work of colony roads. In view of above mention facts, it is proposed that the colony roads should be repaired and maintained the proposed repair and maintenance work will prevent the roads from further deterioration and make them convenient and comfortable for traffic movement.	Repair and maintenance work of colony roads will prevent the roads from further deterioration and make them convenient and comfortable for traffic movement. Also, the probability of accidents will reduce.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



8	Renovation of floor tile in C Type residences at Tons colony Dakpathar	0.10	renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
9	Treatment of Leakage of EE, AE, A, LA and P-IV Type Residential Building of Tons Colony at Dakpathar Colony, Dakpathar, Dehradun,	0.09	Due to weathering plaster and concrete has been deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness inside rooms.	At present quarters are not as per the mark of standard of employees. residences are worn out due to aging and are in very bad condition which may prone to accident. old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
10	Renovation of floor tile in C-Type Residences of New Yamuna Colony and Old Yamuna Colony at Dakpathar Dehradun.	0.19	These buildings are more than 40 year old and in such a long service period old IPS flooring flooring surface have roughened, edges of most of floor panels broken and joints have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these residences to that the problem can be addressed in comprehensive way and the houses can be liveable and hygenic can be maintained.	the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that	. The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



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11	Renovation of floor tiles in CPT-Type and LCT- Type Residences at Dakpathar colony, Dakpathar, Dehradun	renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 i and rates approved by nigam
12	Renovation and Modernization of P-Type Residences at Dakpathar colony, Dakpathar, Dehradun	Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rátes have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
13	Construction of Store in CT, P , F type residential quarters at Dakpathar Colony, Dakpathar, Dehradun.	The Residences are older than 40 years, only one or two rooms are available in these residences. There is not enough space available in these residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



14	Construction of Store for C-Type residential at Dakpathar, Colony, Dakpathar, Dehradun.	0.14	The Residences are older than 40 years, there is not enough space available in the C type residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
15	Treatment of leakage in P Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun	0.18	Due to weathering plaster and concrete has been deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness inside rooms.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
16	Treatment of leakage in CT Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun	0.18	Due to weathering plaster and concrete has been deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness inside rooms.	At present quarters are not as per the mark of standard of employees. residences are worn out due to aging and are in very bad condition which may prone to accident. old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



1	Construction of Sewer line, Drain, Septik Tank and other miscellaneous work at Dakpathar Colony	0.13	partially or completely damaged in many residences or habitat blocks. There are various repairs and maintenance works in the transferred house such as white washing, dry distemper,	Sewage water and drainage water is collected in the areas outside the housing and housing. It is directly related to the health and hygiene of its residents. It's also has a very bad effect on environment. For above problem nigam employee and nigam unions have requested to repair the sewerage system and drainage system in colony.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
1	Renovation of floor tile in D-Type, E-Type and F- Type Residences at Dakpathar colony, Dakpathar, Dehradun	0.09	be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



19	Construction of Store in CPT, D, FH and LCT Type residential quarters at Dakpathar Colony, Dakpathar, Dehradun.	0.16	The Residences are older than 40 years, there is not enough space available in the residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
20	Renovation of floor tiles in CT-Type and FH-Type Residences at Dakpathar colony, Dakpathar, Dehradun		be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
21	Exterior painting work of C-type residences of New Hydel Colony and Old Yamuna Colony at Dakpathar Colony(Dehradun)	0.07	The Residences are older than 40 years and Exterior painting work have not done for many years. Therefore these residences look very poor. This works are needed to execute to maintain. These works are different than the routine works as these need to be done as a whole, not in parts. therefore it was necessary to take these works in capital works.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
	Construction of Store B Type residences at Dakpathar Colony, Dakpathar, Dehradun.	0.16	The Residences are older than 40 years, there is not enough space available in the residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



23	Treatment of Leakage of B-Type Residential Building of Tons Colony, New Yamuna Colony and Old Yamuna Colony at Dakpathar Colony, Dakpathar, Dehradun.		rate of deterioration as dampness caused rusting in Imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior nortion of walls through which rain water perceiting and	the life of family of employees. Renovation and	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
24	Replacement of Drainage Duct plates installed at Chibro Power House, Chibro.	0.11	Chibro power House is one of the oldest power house of the Nigam and generating electricity for the last 35 years. In this period it has withstood successfully against the adverse weathering condition. The iron sheets installed at drainage ducts in the cable gallery of Chibro Power House are completely damaged and no more in the position to pass the drainage/ seepage water efficiently. As all the wires through which the electricity generated from the turbines is transmitted to the switchyard are laid in this gallery, therefore it has become extremely important to hinder the leakage of seepage/infiltrated water so-that any damage to the power house can be prevented	prevent any generation loss, the works as proposed are necessary	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
25	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	0.12	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam

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26	Treatment of Seepage at different location of Chibro Power House	0.14	Chibro power House is one of the oldest power house of the NIgam and generating electricity for the last 43 years. During this period it has been successfully generating electricity against adverse weather condition/ impact. Due to the adverse weathering condition seepage/leakage occurs at different location at the Power House. In view of the above, estimate of "Treatment of Seepage at different location of Chibro Power House." Has been prepared. In this estimate Treatment of construction joints, cracks by crystalline mortar, waterproofing treatment to retaining walls/structure by crystalline slurry and cementitious Peneplug material has been taken.	It is very necessary to treat this seepage problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
27	Special repair of toilets and construction of room in canteen at Chibro Power House	0.06	Special repair of tollets and construction of room in canteen at Chibro Power House	Special repair of tollets and construction of room in canteen at Chibro Power House	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR-2016 and rates approved by nigam
28	Reapir and maintenance of road at Chibro	0.15	The road at Chibro Switch Yard & HRT adit has been eroded due to heavy rains. No major repair has been done on this route for a long time.	The bituminous as well as CC works are required for the treatment of damaged patches for avoid any hindrance in transshipment staff of Chibro Power House.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
29	Special M & R of inspection House at Dakpathar(Dehradun)	0.10	The inspection house Dakpathar colony is functioning as a transit guest house. All suits are common and there is no any special facility for VIP's separately. Nigams higher official frequently used to visit the site as various programs are conducted here. The matter has also been taken up by concerned Executive Engineers (E&M), Dy. General Manager (E&M-YV). Direction were issued by General Manager (E&M-YV) that the two number's of suits of existing inspection house shall be converted into VIP suits and making facilities of vehicle parking, this work is different from the routine O&M works therefore should be booked in capital head.	Nigams higher official frequently used to visit the site as various programs are conducted here. These programs are essential to inhance the knowledge of staff that will convert in ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



30	Special M & R of Field Hostal at Dakpathar(Dehradun)	0.07	service period old IPS flooring flooring surface have	At present the field hostel are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
		7.11	routine O&M work and need to be taken in capital head.	ultimately ability and power generation of plants.	
С	Major Civil Works				11-25
1	Special Repair and maintenance of Khodri- Kalawar Road	0.70	The Khodri Kalawar road was developed as a project road for Chibro Power House. The repair & maintenance work of this road is executed by UJVNL. Although there is an alternate road under PWD-Uttarakhnad to Chibro Power House via Haripur. Therefore Khodri Kalawar road is always utilized by Nigam's vehicle for commuting to Chibro Power House as well as to Ichari Dam and vehicle of local people.	The road at various locations has been eroded due to heavy rains. The bituminous as well as RCC works are required for the treatment of damaged patches. Random Rubble masonry work as well as stone wire crates works is also required for the repair of damaged parapets and construction of non masonry gravity walls in slip zone. Road side drains also needs repair. The estimate are necessary to be taken up to avoid any hindrance in transshipment of local people and shifts at Chibro Power House & Ichari Dam.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
2	Maintenance of Killod Bridge at Laidhang		A site visit of IT Roorkee specialists was conducted by UJVNL for the inspection of five bridges. In the inspection report of IIT Roorkee, it is recommended to repair and maintenance of the bridge should be done at the earliest for the safety of bridge and to avoid any accident.	Repair of bridge is necessary as it is important for safety of life of peoples who use it to cross the river.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
3	Construction of culvert near shastradhara (khodri)	0.10	A site visit of IT Roorkee specialists was conducted by UJVNL for the inspection of five bridges. In the inspection report of IT Roorkee, it is recommended to replace this old bridge with the new one and to avoid any accident.		The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam



4	Replacement of old & damaged wooden sleeper of Patel Bridge with chequered plates at Chibro	0.10	Therefore the patrolling staff is facing a problem	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
		1.00		
D	Plant & Machinery			
E	Vehicles	-	·	
F	Furniture & Fixtures	-		
G	Office Equipment	-		
н	Others	-	 ·	``
<u> </u>				
	Total	8.11		

-E&M Expenses

	Additional Capitalization Proposed for the FY 2019-20							
			Additional Capitalization Prop	posed for the FY 2019-20				
Sr. No.	Description	Amount (Rs. In Crores)	Need/Urgency of CAPEX	How the Capex will have improvement in performance of plant/life enhancement	Justification of cost/rate			
Α	Land	-						
	Building							
С	Major Civil Works							
Ð	Plant & Machinery	-						
1	Rehabilitation of Micro Hydel set	9.00	The existing micro hydel system is too old and not in working condition	The auxilliary electrical supply system will strengthen and will be reliable for further services	Market Survey.			
2	Rehabilitation of Mulsifyre system of . Chibro	1.00	The existing mulsifyre system is too old and not reliable for smooth services	The fire fighting system of power station will strengthen	Market Survey.			
3	Replacement of 220 kV HBB make ABCB with Hybrid System including online fault monitoring system of Chibro Power Station		Circuit breakers & isolators for feeders & bus coupler are too old and in service from the time of the commissioning of the switchyard 1975-76 The services of breakers are not reliable for further services.	By replacement of 220 kV HBB make ABCB with Hybrid System including online fault monitoring system of Chibro Power Station the reliability of power evacuation system will improve and huge generation loss may be avoided.	Open Tender			
4	Retrofitting of excitation system at chibro and khodri.	1.00	Existing system of BHEL have become obsolete. Spares and service is not available now.	Minimise the Breakdown of machines due to failure of excitation system.	Market Survey.			
		19.60						
_	Vehicles	-						
_	Furniture & Fixtures	-						
G	Office Equipment	-						
н	Others	_		·				
			,					
	Total	19.60			·			



Additional Capitalization Proposed for the FY 2019-20					
r.	Description	Amount (Rs. In Crores)	Need/Urgency of CAPEX •	How the Capex wlll have improvement in performance of plant/life enhancement	Justification of cost/rate
A	Land	-			
В	Buîlding.				
1	Renovation of floor tile in C Type residences at Tons colony Dakpathar	0.10	These buildings are more than 40 year old and in such a long service period old IPS flooring flooring surface have roughened, edges of most of floor panels broken and joints have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these residences to that the problem can be addressed in comprehensive way and the houses can be liveable and hygenic can be maintained.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
2	Treatment of Leakage of EE, AE, A, LA and P-IV Type Residential Building of Tons Colony at Dakpathar Colony, Dakpathar, Dehradun.	0.05	Due to weathering plaster and concrete has been deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness inside rooms.	At present quarters are not as per the mark of standard of employees. residences are worn out due to aging and are in very bad condition which may prone to accident. old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam

3	Renovation of floor tile in C-Type Residences of New Yamuna Colony and Old Yamuna Colony at Dakpathar Dehradun.		be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
4	Renovation of floor tiles in CPT-Type and LCT- Type Residences at Dakpathar colony, Dakpathar, Dehradun	00s	have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	the life of family of employees. Renovation and	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



S	Renovation and Modernization of P-Type Residences at Dakpathar colony, Dakpathar, Dehradun	0.14	These buildings are more than 40 year old and in such a long service period old IPS flooring flooring surface have roughened, edges of most of floor panels broken and joints have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these residences to that the problem can be addressed in comprehensive way and the houses can be liveable and hygenic can be maintained.	mordanization will fulfill the requirement of employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
6	Construction of Store in CT, P, F type residential quarters at Dakpathar Colony, Dakpathar, Dehradun.		The Residences are older than 40 years. only one or two rooms are available in these residences. There is not enough space available in these residences. employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
7	Construction of Store for C-Type residential at Dakpathar, Colony, Dakpathar, Dehradun.		The Residences are older than 40 years, there is not enough space available in the C type residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



8	Treatment of leakage in P Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun	0.05	reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old bulldings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
g	Treatment of leakage in CT Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun	0.10	off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and	At present quarters are not as per the mark of standard of employees. residences are worn out due to aging and are in very bad condition which may prone to accident. old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
10	Renovation of floor tile in D-Type, E-Type and F- Type Residences at Dakpathar colony, Dakpathar, Dehradun	0.10	routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



1	1.1	Construction of Store in CPT, D, FH and LCT Type residential quarters at Dakpathar Colony, Dakpathar, Dehradun.	0.10	problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital	mordanization will fulfill the requirement of	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
1	.2	Renovation of floor tiles in CT-Type and FH-Type Residences at Dakpathar colony, Dakpathar, Dehradun	0.05	These buildings are more than 40 year old and in such a long service period old IPS flooring flooring surface have roughened, edges of most of floor panels broken and joints have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these residences to that the problem can be addressed in comprehensive way and the houses can be liveable and hygenic can be maintained.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
1	13	Exterior painting work of C-type residences of New Hydel Colony and Old Yamuna Colony at Dakpathar Colony(Dehradun)	0.04	The Residences are older than 40 years and Exterior painting work have not done for many years. Therefore these residences look very poor. This works are needed to execute to maintain. These works are different than the routine works as these need to be done as a whole, not in parts, therefore it was necessary to take these works in capital works.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
:	14	Construction of Store B Type residences at Dakpathar Colony, Dakpathar, Dehradun.	0.10	The Residences are older than 40 years, there is not enough space available in the residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



15	Treatment of Leakage of 8-Type Residential Building of Tons Colony, New Yamuna Colony and Old Yamuna Colony at Dakpathar Colony, Dakpathar, Dehradun.	0.10	deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
16	Replacement of Drainage Duct plates Installed at Chibro Power House, Chibro.	.0.15		prevent any generation loss, the works as proposed are necessary	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
. 17	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	0.12	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	It is very necessary to treat this problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam



18	Treatment of Seepage at different location of Chibro Power House	0.14		It is very necessary to treat this seepage problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
1	Special repair of toilets and construction of room in canteen at Chibro Power House	0.06	Special repair of toilets and construction of room in canteen at Chibro Power House	Special repair of toilets and construction of room in canteen at Chibro Power House	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
2	Reapir and maintenance of road at Chibro	0.15	The road at Chibro Switch Yard & HRT adlt has been eroded due to heavy rains. No major repair has been done on this route for a long time.	The bituminous as well as CC works are required for the treatment of damaged patches for avoid any hindrance in transshipment staff of Chibro Power House.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam

21	Replacement of A C sheet by C G I sheet and fencing work back side of C-Type residence at Tons Colony Dakpathar, Dehradun	0.12		At present residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
22	Maintenance & Repair Drain of C-type residences at Dakpathar Colony , Dehradun.	0.15	are need to execute to maintain the drains. These works are different then the routine works as these need to be done as a whole not in parts, therefore it was necessary to take these	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
23	Construction of Garrage of C-Type residential quarters at Dakpathar, Colony, Dehradun.	0.15	These type of Residences are more than 40 years old. There is no provision of a garage at the time of construction. At present most of the employees have their own vehicle. So the construction of garage is necessary for the safety of the vehicle.	The probability of theft and feeling of insecurity of vehicle will be reduced.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
24	Renovation of floor tile in C-Type Residences of Tons Colony at Dakpathar Dehradun.	0.10	These buildings are more than 40 year old and in such a long service period old IPS flooring flooring surface have roughened, edges of most of floor panels broken and joints have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these residences to that the problem can be addressed in comprehensive way and the houses can be liveable and hygenic can be maintained.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
25	Construction of garrage for B-Type residential quarters at DakpatharColony, Dakpathar, Dehradun.	0.28	These type of Residences are more than 40 years old. There is no provision of a garage at the time of construction. At present most of the employees have their own vehicle. So the construction of garage is necessary for the safety of the vehicle.	The probability of theft and feeling of insecurity of vehicle will be reduced.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



	Renovation of Floor Tiles in B-Type Residences of New & Old Yamuna Colony , Dakpathar, Dehradun.	0.28	have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
. 27	Providing and Laying of Bituminous Macadam (BM) & Semi Dense Bituminous Concrete (SDBC) on Roads of Koti Colony,(Dehradun).		The roads of colony have not been repaired for around last nine years. Due to lack of repair and maintenance since long, the roads have deteriorated very badly and the condition of internal roads of Koti colony has become poor. Traffic movement has become highly inconvenient and uncomfortable. Considering the poor condition of colony roads, it has become necessary to carry out repair and maintenance work of colony roads. In view of above mention facts, it is proposed that the colony roads should be repaired and maintained the proposed repair and maintenance work will prevent the roads from further deterioration and make them convenient and comfortable for traffic movement.	Repair and maintenance work of colony roads will prevent the roads from further deterioration and make them convenient and comfortable for traffic movement. Also, the probability of accidents will reduce.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



28	Construction of Sewer line, Drain, Septik Tank and other miscellaneous work at Koti Colony	1.10	sewerage system, septic tanks and drainage systems. Sewer systems, septic tanks, drainage systems are partially or completely damaged in many residences or habitat blocks. There are various repairs and maintenance works in the	residents. It's also has a very bad effect on	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
29	Reapir and maintenance of road at Ichari Dam	1.10	The road atlchari Dam has been eroded due to heavy rains. No major repair has been done on this route for a long time.	The bituminous works are required for the treatment of damaged patches for avoid any hindrance in transshipment staff of Ichari Dam	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
<u> </u>		6.32			
С	Major Civil Works				
1	Special Repair and maintenance of Khodri- Kalawar Road		The Khodri Kalawar road was developed as a project road for . Chibro Power House. The repair & maintenance work of this road is executed by UJVNL. Although there is an alternate road under PWD-Uttarakhnad to Chibro Power House via Haripur. Therefore Khodri Kalawar road is always utilized by Nigam's vehicle for commuting to Chibro Power House as well as to Ichari Dam and vehicle of local people.	The road at various locations has been eroded due to heavy rains. The bituminous as well as RCC works are required for the treatment of damaged patches. Random Rubble masonry work as well as stone wire crates works is also required for the repair of damaged parapets and construction of non masonry gravity walls in slip zone. Road side drains also needs repair. The estimate are necessary to be taken up to avoid any hindrance in transshipment of local people and shifts at Chibro Power House & Ichari Dam.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam



2	Maintenance of Killod Bridge at Laldhang	0.23	•	Repair of bridge is necessary as it is important for safety of life of peoples who use it to cross the river.	. The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
3	Construction of culvert near shastradhara (khodri)	0.16	A site visit of IIT Roorkee specialists was conducted by UJVNL for the inspection of five bridges. In the inspection report of IIT Roorkee, it is recommended to replace this old bridge with the new one and to avoid any accident.	Construction of bridge is necessary as it is important for safety of life of peoples who use it to cross the river.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
4	Replacement of old & damaged wooden sleeper of Patel Bridge with chequered plates at Chibro	0.23	The bridge called Patel Bridge connects the Haripur-Ichari road and Patel Shaft and is constructed over river Tons. There is no other option available except the bridge for the connection of the two. Two transformers of 250 KVA & 100 KVA each for maintaining the supply of Surge Tank and Outlet structure of Chibro Power House are installed at Patel Shaft. A transmission line of 11 KV is also passing through Patel Shaft. The gate of siphon tunnel of Khodri Power House is also at Patel Shaft. Due to above reasons security guards are also deputed at Patel Shaft. A routine patrolling is carried out by the employees for the maintenance of above installations. A site visit of IIT Roorkee specialists was conducted by UJVNL for the inspection of five bridges. In the inspection report of IIT Roorkee it is recommended to replace the wooden sleeper with steel plate.	Therefore the patrolling staff is facing a problem	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
_	Discount of the state of the st	1.62			· · · · · · · · · · · · · · · · · · ·
<u> </u>	Plant & Machinery		1		
E	Vehicles	-			
F G	Furniture & Fixtures Office Equipment	-			
Н	Others	-			
H-	Others		-		
	Total	7.94			



E&M Expenses

	Additional Capitalization Proposed for the FY 2020-21					
Sr. No.	Description .	Amount (Rs. In Crores)	Need/Urgency of CAPEX	How the Capex will have improvement in performance of plant/life enhancement	Justification of cost/rate	
Α	Land ·					
В	Building	-				
C	Major Civil Works	-				
D	Plant & Machinery	-				
1	Retrofitting of excitation system at chibro and khodri.		Existing system of BHEL have become obsolete. Spares and service is not available now.	Minimise the Breakdown of machines due to failure of excitation system.	Market Survey.	
		1.00				
E	Vehicles	-				
F	Furniture & Fixtures	-				
G	Office Equipment	-				
н	Others					
				· ·		
	Total	1.00				



	Additional Capitalization Proposed for the FY 2020-21					
Si No	Description	Amount (Rs. In Crores)	Need/Urgency of CAPEX	How the Capex will have improvement in performance of plant/life enhancement	Justification of cost/rate	
A	Land	ı				
E	Building					
3	Treatment of Leakage of EE, AE, A, LA and P-IV Type Residential Building of Tons Colony at Dakpathar Colony, Dakpathar, Dehradun.	0.05	Irate of deterioration as damphess caused rusting in imbedded	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam	
	Renovation of floor tile in C-Type Residences of New Yamuna Colony and Old Yamuna Colony at Dakpathar Dehradun.	0.10	These buildings are more than 40 year old and in such a long service period old IPS flooring flooring surface have roughened, edges of most of floor panels broken and joints have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these residences to that the problem can be addressed in comprehensive way and the houses can be liveable and hygenic can be maintained.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam	



3	Renovation of floor tiles in CPT-Type and LCT- Type Residences at Dakpathar colony, Dakpathar, Dehradun	0.05	renovation of residences. These works could not be done in	the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
4	Renovation and Modernization of P-Type Residences at Dakpathar colony, Dakpathar, Dehradun	. 0.14		the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
5	Construction of Store in CT, P, F type residential quarters at Dakpathar Colony, Dakpathar, Dehradun.	0.10	The Residences are older than 40 years, only one or two rooms are available in these residences. There is not enough space available in these residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



6	Construction of Store for C-Type residential at Dakpathar, Colony, Dakpathar, Dehradun.	0.10		At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
7	Treatment of leakage in P Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun		reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
8	Treatment of leakage in CT Type Residential buildings at Dakpathar Colony, Dakpathar, Dehradun	0.10	Due to weathering plaster and concrete has been deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percolating and causing dampness inside rooms.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



9	Construction of Sewer line, Drain, Septik Tank and other miscellaneous work at Dakpathar Colony	0.07	systems. Sewer systems, septic tanks, drainage systems are partially or completely damaged in many residences or habitat blocks. There are various repairs and maintenance works in the transferred house such as white washing, day distemper	Sewage water and drainage water is collected in the areas outside the housing and housing. It is directly related to the health and hygiene of its residents. It's also has a very bad effect on environment. For above problem nigam employee and nigam unions have requested to repair the sewerage system and drainage system in colony.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
10	Renovation of floor tile in D-Type, E-Type and F- Type Residences at Dakpathar colony, Dakpathar, Dehradun	0.10	have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



11	Construction of Store in CPT, D, FH and LCT Type residential quarters at Dakpathar Colony, Dakpathar, Dehradun.	0.10	problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital	•	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
12	Renovation of floor tiles in CT-Type and FH-Type Residences at Dakpathar colony, Dakpathar, Dehradun		be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in	the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
13	Exterior painting work of C-type residences of New Hydel Colony and Old Yamuna Colony at Dakpathar Colony(Dehradun)	0.04	The Residences are older than 40 years and Exterior painting . work have not done for many years. Therefore these residences look very poor. This works are needed to execute to maintain. These works are different than the routine works as these need to be done as a whole, not in parts. therefore it was necessary to take these works in capital works.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
14	Construction of Store B Type residences at Dakpathar Colony, Dakpathar, Dehradun.	0.10	The Residences are older than 40 years, there is not enough space available in the residences, employees are facing the problem to keep their goods and things. Employees regularly demand store for their residence. Therefore this work is required. These works are needed to be taken in the capital head.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



. 1	s	Treatment of Leakage of B-Type Residential Building of Tons Colony, New Yamuna Colony and Old Yamuna Colony, Dakpathar, Dehradun.	0.10	deteriorated. Dampness in concrete slabs has increased the rate of deterioration as dampness caused rusting in imbedded reinforcement, Due to which plaster and concrete is peeled off. In many places cracks are visible along the line of reinforcement. This is a severe situation which needs remedial measures to increase longevity of structures. Cracks are appeared on most of wall and slab junctions on exterior portion of walls through which rain water percelating and	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18; DSR 2016 and rates approved by nigam
11	16	Replacement of Drainage Duct plates Installed at Chibro Power House, Chibro.	0.18	Chibro power House is one of the oldest power house of the Nigam and generating electricity for the last 3S years. In this period it has withstood successfully against the adverse weathering condition. The iron sheets installed at drainage ducts in the cable gallery of Chibro Power House are completely damaged and no more in the position to pass the drainage/ seepage water efficiently. As all the wires through which the electricity generated from the türbines is transmitted to the switchyard are laid in this gallery, therefore it has become extremely important to hinder the leakage of seepage/infiltrated water so-that any damage to the power house can be prevented	prevent any generation loss, the works as proposed are necessary	The cost details are as per estImate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
1	17	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	0.12	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	It is very necessary to treat this problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam



18	Treatment of Seepage at different location of Chibro Power House	. 0.14	Chibro power House is one of the oldest power house of the Nigam and generating electricity for the last 43 years. During this period it has been successfully generating electricity against adverse weather condition/impact. Due to the adverse weathering condition seepage/leakage occurs at different location at the Power House. In view of the above, estimate of "Treatment of Seepage at different location of Chibro Power House." Has been prepared. In this estimate Treatment of construction joints, cracks by crystalline mortar, waterproofing treatment to retaining walls/structure by crystalline slurry and cementitious Peneplug material has been taken.	It is very necessary to treat this seepage problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
19	Special repair of toilets and construction of room in canteen at Chibro Power House	0.06	Special repair of toilets and construction of room in canteen at Chibro Power House	It is very necessary to treat this problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
. 20	Reaplr and maintenance of road at Chibro	0.15	The road at Chibro Switch Yard & HRT adit has been eroded due to heavy rains. No major repair has been done on this route for a long time.	The bituminous as well as CC works are required for the treatment of damaged patches for avoid any hindrance in transshipment staff of Chibro Power House.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



21	Replacement of A C sheet by C G I sheet and fencing work back side of C-Type residence at Tons Colony Dakpathar, Dehradun	0.12		At present residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
22	Maintenance & Repair Drain of C-type residences at Dakpathar Colony , Dehradun.	0.15	The Residences are older than 40 years and drains of Residences have been damaged severely. Some special works are need to execute to maintain the drains. These works are different then the routine works as these need to be done as a whole not in parts. therefore it was necessary to take these works in capital works.	At present Residences are not as per the mark of standard of employees. Renovation and mordanization will fulfill the requirement of employees that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
23	Construction of Garrage of C-Type residential quarters at Dakpathar, Colony, Dehradun.	0.15	These type of Residences are more than 40 years old. There is no provision of a garage at the time of construction. At present most of the employees have their own vehicle. So the construction of garage is necessary for the safety of the vehicle.	The probability of theft and feeling of insecurity of vehicle will be reduced.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
24	Renovation of floor tile in C-Type Residences of Tons Colony at Dakpathar Dehradun.	0.10	These buildings are more than 40 year old and in such a long service period old IPS flooring flooring surface have roughened, edges of most of floor panels broken and Joints have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these residences to that the problem can be addressed in comprehensive way and the houses can be liveable and hygenic can be maintained.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
-25	Construction of garrage for B-Type residential quarters at DakpatharColony, Dakpathar, Dehradun.	. 0.28	These type of Residences are more than 40 years old. There is no provision of a garage at the time of construction. At present most of the employees have their own vehicle. So the construction of garage is necessary for the safety of the vehicle.		The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



						
2	i 6	Renovation of Floor Tiles in B-Type Residences of New & Old Yamuna Colony , Dakpathar, Dehradun.	0.28	have widened due settiement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market. Representations of unions have been received requesting renovation of residences. These works could not be done in routine O&M work and need to be taken in capital head. It is required to carryout renovation and upgradation work in these	employees and also will prevent accidents that	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
	27	Construction of G.I. chain link fabric fencing of Dakpathar Colony for boundry wall at Dakpathar colony, Dakpathar, Dehradun.	0.32	There is need of fencing and boundry wall around Dakpathar colony for the security of Solar power plant. The proposed work is necessary for the safety of Nigam's assets and property. The scope of work is chain link fencing around stores tied with ISMC-100X50mm fencing post, ISA 50x50x5mm, MS strips 25x5mm. These works could not be done in routine O&M work and need to be taken in capital head. It is proposed to build fencing around the Dakpathar colony to restrict entry of outsiders.	The proposed works are necessary for the safety of Nigams assets and property.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
	28	Special repair of miscellaneous work of P,D,E,F,FH,LĊT,CPT- type residens at dakpathar colony, dakpathar	0.21	The condition of transferred residences is not good. In Dakpathar colony most of residences need special repair as they were abandoned earlier but allotted now. These buildings are more than 40 year old. There are various repairs and maintenance works in the transferred house such as white washing, dry distemper, acrylic distemper, painting or varnishing, brick, plaster, PCC & RCC, doors and windows/ ventilators, water supply and sanitary works/items, heavy iron/structural steel works, leakage problem, water-proof cement paint etc. are required to be done. Apart from this, repair of CC Road has also been taken in the estimation.	Special repair is required to maintain the life of residences. These residences have became old and need repair to prevent accidents.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



29	Special repair of sewer line, drain and other miscellaneous work at dakpathar colony, dakpathar	0.32	especially ithe sewerage system, septic tanks and drainage systems. Sewer systems, septic tanks, drainage systems are partially or completely damaged in many residences or habitat	Residences in dakpathar colony are more than 40 years old. In many Residences or housing blocks sewer systems, septic tanks, drainage systems are partially damaged. It is directly related to the health of emloyees. The area outside the house will also be clean and help in the prevention of health related problems such as dengue, malaria etc.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
			blocks.		·
	Major Civil Works	3.80			
	Special Repair and maintenance of Khodri- Kalawar Road		The Khodri Kalawar road was developed as a project road for Chibro Power House. The repair & maintenance work of this road is executed by UJVNL. Although there is an alternate road under PWD-Uttarakhnad to Chibro Power House via Harlpur. Therefore Khodri Kalawar road is always utilized by Nigam's vehicle for commuting to Chibro Power House as well as to Ichari Dam and vehicle of local people.	The road at various locations has been eroded due to heavy rains. The bituminous as well as RCC works are required for the treatment of damaged patches. Random Rubble masonry work as well as stone wire crates works is also required for the repair of damaged parapets and construction of non masonry gravity walls in slip zone. Road side drains also needs repair. The estimate are necessary to be taken up to avoid any hindrance in transshipment of local people and shifts at Chibro Power House & Icharl Dam.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
2	Maintenance of Killod Bridge at Laldhang	0.2\$	A site visit of IIT Roorkee specialists was conducted by UJVNL for the inspection of five bridges. In the inspection report of IIT Roorkee, it is recommended to repair and maintenance of the bridge should be done at the earliest for the safety of bridge and to avoid any accident.	Repair of bridge is necessary as it is important for safety of life of peoples who use it to cross the river.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
3	Construction of culvert near shastradhara (khodri)	· 0.1S	A site visit of IIT Roorkee specialists was conducted by UJVNL for the inspection of five bridges. In the inspection report of IIT Roorkee, it is recommended to replace this old bridge with the new one and to avoid any accident.	Construction of bridge is necessary as it is important for safety of life of peoples who use it to cross the river.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam



4	Replacement of old & damaged wooden sleeper of Patel Bridge with chequered plates at Chibro	0.25	siphon tunnel of Khodri Power House is also at Patel Shaft. Due to above reasons security guards are also deputed at Patel Shaft. A routine patrolling is carried out by the employees for	Therefore the patrolling staff is facing a problem	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
		1.65			
D	Plant & Machinery				
E	Vehicles	-			
	Furniture & Fixtures	-			
	Office Equipment		•		
н	Others	-			
\vdash					
	Total	5.45			

E&M Expenses

	Editi Expenses						
			Additional Capitalization Pro	posed for the FY 2021-22	•		
Sr. No.	Description	Amount (Rs. In Crores)	Need/Urgency of CAPEX	. How the Capex will have improvement in performance of plant/life enhancement	Justification of cost/rate		
Α	Land	-					
В	Building	-	·				
С	Major Civil Works	-					
D	Plant & Machinery	-					
1	Retrofitting of excitation system at chibro and khodri.	1.00	Existing system of BHEL have become obsolete. Spares and service is not available now.	Minimise the Breakdown of machines due to failure of excitation system.	Market Survey.		
		1.00					
E	Vehicles	-		CCR			
F	Furniture & Fîxtures	-					
G	Office Equipment	-					
н	Others	-					
	Total	1.00					

(Purushottam Singh)
Director (Operation)
UJVN Ltd.
Dehradun

Γ	Additional Capitalization Proposed for the FY 2021-22						
- []	10.	escription	Amount (Rs. In Crores)	Need/Urgency of CAPEX	How the Capex will have improvement in performance of plant/life enhancement	Justification of cost/rate	
L	A Land		-				
	B Building						
	line, Dra	ction of Sewer ain, Septik Tank er miscellaneous Dakpathar	0.07	especially in sewerage system, septic tanks and drainage systems. Sewer systems, septic tanks, drainage systems are partially or completely damaged in many residences or habitat blocks. There are various repairs and maintenance works in the transferred house such as white washing, dry distemper, acrylic distemper, painting or varnishing, brick, plaster, PCC &	Sewage water and drainage water is collected in the areas outside the housing and housing. It is directly related to the health and hygiene of its residents. It's also has a very bad effect on environment. For above problem nigam employee and nigam unions have requested to repair the sewerage system and drainage system in colony.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam	
	2 Hostel a of store	repair of Field and construction room in Sub at Chibro	0.12	Special repair of Field Hostel and construction of store room in Sub Station at Chibro	Special repair of Field Hostel and construction of store room in Sub Station at Chlbro	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam	



3	Treatment of Seepage at different location of Chibro Power House	0.14		It is very necessary to treat this seepage problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
4	Special repair of toilets and construction of room in canteen at Chibro Power House	0.06	Special repair of toilets and construction of room in canteen at Chibro Power House	It is very necessary to treat this problem so that generation loss may be avoided.	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
5	Reapir and maintenance of road at Chibro		The road at Chibro Switch Yard & HRT adit has been eroded due to heavy rains. No major repair has been done on this route for a long time.	The bituminous as well as CC works are required for the treatment of damaged patches for avoid any hindrance in transshipment staff of Chibro Power House.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



6	Construction of garrage for B-Type residential quarters at DakpatharColony, Dakpathar, Dehradun.			The probability of theft and feeling of insecurity of vehicle will be reduced.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
7	Renovation of Floor Tiles in B-Type Residences of New & Old Yamuna Colony , Dakpathar, Dehradun.	0.28	have widened due settlement. Repaired patches of floor could be seen at many places. The old floors have became obsolete as new types of flooring materials are available in the market.	At present quarters are not as per the mark of standard of employees, residences are worn out due to aging and are in very bad condition which may prone to accident, old buildings are threating the life of family of employees. Renovation and mordanization will fulfill the requirement of employees and also will prevent accidents that will enhance the positivity and ultimately ability and power generation of plants.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
8	Construction of G.I. chain link fabric fencing of Dakpathar Colony for boundry wall at Dakpathar colony, Dakpathar, Dehradun.		There is need of fencing and boundry wall around Dakpathar colony for the security of Solar power plant. The proposed work is necessary for the safety of Nigam's assets and property. The scope of work is chain link fencing around stores tied with ISMC-100X50mm fencing post, ISA 50x50x5mm, MS strips 25x5mm. These works could not be done in routine O&M work and need to be taken in capital head. It is proposed to build fencing around the Dakpathar colony to restrict entry of outsiders.	The proposed works are necessary for the safety of Nigams assets and property.	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam



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	9	Special repair of miscellaneous work of P,D,E,F,FH,LCT,CPT- type residens at dakpathar colony, dakpathar	0.40	The condition of transferred residences is not good. In Dakpathar colony most of residences need special repair as they were abandoned earlier but allotted now. These buildings are more than 40 year old. There are various repairs and maintenance works in the transferred house such as white washing, dry distemper, acrylic distemper, painting or varnishing, brick, plaster, PCC & RCC, doors and windows/ventilators, water supply and sanitary works/items, heavy iron/structural steel works, leakage problem, water-proof cement paint etc. are required to be done. Apart from this, repair of CC Road has also been taken in the estimation.	residences. These residences have became old and	The cost details are as per estimate / rates have been taken from UK PWD SOR 2017-18, DSR 2016 and rates approved by nigam
	10	Special repair of sewer line, drain and other miscellaneous work at dakpathar colony, dakpathar		Residences in dakpathar colony are more than 40 years old. The condition of transferred residences is not good. The sewerage system of the colony is also very old and it is insufficient to meet out the day -to- day need. In compliance of mandate number -2270/II-2016/7(12)/2016 Date-14.10.2016 Irrigation department has transfer many type of residences to UJVN Limited. The condition of transferred residences is not good especially ithe sewerage system, septic tanks and drainage systems. Sewer systems, septic tanks, drainage systems are partially or completely damaged in many residences or habitat blocks.	Residences in dakpathar colony are more than 40 years old. In many Residences or housing blocks sewer systems, septic tanks, drainage systems are	The cost details are as per estimate / rates have been taken from UK PWD SOR 18, DSR 2016 and rates approved by nigam
			3.60			
		Major Civil Works				
L		Plant & Machinery				
-	Ε	Vehicles				
-	F	Furniture & Fixtures		· ·		
-	G	Office Equipment				· ·
\vdash		Total	3.60			
L		1018	2.00			

