

2020-21 Corporate Plan



NORTHWEST TERRITORIES
**HYDRO
CORPORATION**

Power for Generations



NORTHWEST TERRITORIES
**POWER
CORPORATION**

Empowering Communities





NTPC's Mission, Vision and Value statements guide its actions and ensure the organization meets or exceeds the expectations of its shareholder and customers.

Mission

To generate, transmit and distribute clean, reliable and affordable energy to the Northwest Territories

Vision

To enrich the lives of Northerners by providing power that encourages living, working and investing in the NWT

Values

***Safety** – We make safety our first priority, a cornerstone in all decisions*

***People** – We consider the well-being and success of every employee in all decisions*

***Commitment** – We are determined, agile and know how to keep the lights on*

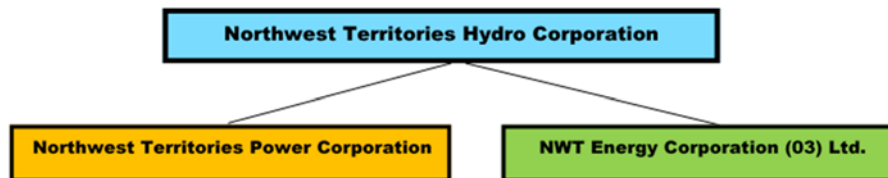
***Community** – We work with and for all Northerners*

TABLE OF CONTENTS

Corporate Overview.....	1
2020-21 Objectives.....	4
Activities to Support Achievement of Strategic Objectives	5
2020-21 Performance Measures	7
Expected Results	7
Evaluation of 2019-20 Corporate Objectives	8
NT Hydro and NTPC -- Financial Information.....	9
NT Hydro and NTPC Budget Summary.....	10
NT Hydro: 2020-21 Consolidated Statement of Operations	13
NT Hydro 2020-21 Consolidated Statement of Changes in Net Debt	14
NTPC 2020-21 Consolidated Statement of Operations	15
NTPC 2020-21 Consolidated Statement of Changes in Net Debt	16
2020-21 Consolidated Capital Expenditures.....	17

Corporate Overview

The Northwest Territories Hydro Corporation (NT Hydro) is a holding company whose sole shareholder is the Government of the Northwest Territories (GNWT). NT Hydro is the parent company of two primary subsidiary companies: the Northwest Territories Power Corporation (NTPC) and the NWT Energy Corporation (03) Limited (NT Energy).



NTPC is responsible for keeping the lights on for customers across the North and is the public face of NT Hydro. Activities of NTPC are regulated by the NWT Public Utilities Board (PUB). Capital, operational and maintenance costs are all reviewed by the PUB when NTPC submits a General Rate Application (GRA) in order to set electricity rates.

NT Energy is responsible for managing projects of higher risk that require different approaches than a regulated company. This includes projects that are being financially supported by the Federal and Territorial governments through the Investing in Canada Infrastructure Program (ICIP). NT Energy also pursues large scale business opportunities such as electricity generation for new mines. The activities of NT Energy are not regulated by the PUB; costs incurred do not impact electricity rates.

NWT electricity rates are among the highest in Canada. There are a number of reasons why this is the case, including:

- In the past decade, electricity sales have declined by almost four percent as the result of stagnant/declining population as well as very little new mining or other industrial activity.
- Aging infrastructure is also a challenge, as it is for most other North American electrical utilities – infrastructure is not just aging but is reaching the end of its design life, particularly NTPC’s hydroelectric assets.
- There is a high cost to deliver power in the North given the use of diesel in remote communities and 100% reliance on diesel for back up generation in all communities. The small scale, isolated and non-integrated systems means that there are limited economies of scale available to NTPC.

In 2019-20, NTPC saw considerable change at the strategic governance level, with a new Minister, a new Board of Directors and a new President and CEO.


Work on the Strategic Plan, which was first introduced in 2018-19, progressed. The Plan is a living document, revised and updated, as events warrant. The most significant revisions made in the past year include the addition of "People" to the Corporate Values and the addition of "Innovation" to the pillars on which the Strategic Plan is based. NTPC will be continuing with its campaign to introduce the Plan to customers and other interested stakeholders in 2020-21 after its new Board of Directors completes a review of the work done to date.

Recruitment of employees for key positions continued to be a challenge over the past year with several key roles going unfilled for a significant period of time. Progress was made on developing a succession plan to ensure that corporate knowledge is retained internally when employees retire.

Operational highlights of 2019-20 include:


- A new Collective Agreement with unionized employees was ratified in May 2019 – the agreement runs until December 31, 2020
- Repairs and refurbishment of the Snare Forks Unit 1 hydroelectric generating plant continued with a return to service expected early in the 2020-21 fiscal year
- Federal funding support for the refurbishment of the Taltson Hydroelectric Facility was announced
- Federal funding support for the construction of a new, high-efficient diesel plant in Lutsel K'e was announced
- Federal funding support for the construction of a liquified natural gas (LNG) plant in Fort Simpson was announced
- A new backup diesel plant is being commissioned in Norman Wells. Primary power in the community continues to be provided by Imperial Oil Limited through a Power Purchase Agreement with NTPC
- Work on developing a new project implementation framework continued. Following industry best practice, the framework will provide: improved problem identification, project initiation, and business case development; enhanced project definition at the appropriate stage; improved accuracy and certainty of project cost estimates; and, improved cost and schedule management with greater certainty of project delivery; efficient project & portfolio management and planning to ensure capital is spent on projects that deliver the biggest benefit to our customers
- New alternative generation projects continued to be integrated with community electricity systems. The Net Metering program now has 10 communities that have reached the 20% cap on renewable penetration allowed under a policy of the Government of the Northwest Territories. Progress on community-scale projects is ongoing with the pace of project completion expected to accelerate over the next several years.
- Licences were approved by the Mackenzie Valley Land and Water Board for the continued operation of cooling systems, including the drawing of lake water, at the

Jackfish Generating Facility in Yellowknife and for the construction of a winter road between Fort Smith and the Taltson Hydroelectric Facility. Construction of the road began in the fourth quarter of the year.



Turbine and Generator Upgrades at the Snare Forks Powerhouse

\$14,100,000



The federal government has committed up to \$14.1 million for refurbishments of the two generating plants at the Snare Forks Hydroelectric Facility through the Investing in Canada Infrastructure Program



A new backup diesel plant in Norman Wells was commissioned in 2019-20

2020-21 Objectives

With the election of a new government and the appointment of a new Board of Directors in 2019, NTPC will focus attention on reviews of its corporate governance as well as its mandate in 2020-21. An updated mandate for the Corporation will be aligned with the mandate letter to the Minister Responsible for NTPC as well as letters to other Ministers, where appropriate. The 2021-22 Corporate Plan will include the revised mandate.

NTPC's Strategic Plan has resulted in fundamental changes in the way we approach our work and how we measure success. The new Board of Directors is engaged in a review of the Strategic Plan. Any significant changes to the Plan resulting from this review will be provided to Members of the Legislative Assembly and other stakeholders. This review could also potentially impact the key performance measures put in place for 2021-22.

Currently, the Strategic Plan focuses on increasing reliability and providing long term economic and environmental sustainability. We will achieve success by strengthening our core services while managing costs and by addressing the challenge of aging infrastructure. We will also reduce greenhouse gas emissions (GHGs) through increased integrations of renewable technology and by establishing a revenue growth strategy for the future. The revenue growth strategy will provide tangible benefits to customers as well as our Shareholder.

The ultimate goals of the Plan are:

1. Reduce the gap between average electricity rates in the NWT and the Canadian national average
2. Achieve the 25% GHG emissions reduction target for electricity generation in diesel-powered communities, as outlined the Government of the Northwest Territories' 2030 Energy Strategy

Seven strategic objectives were established for the next several years. In 2020-21, NTPC will focus on advancing initiatives that support these strategic objectives, in addition to working on more targeted divisional objectives.

The seven strategic objectives are:

1. Reducing fuel consumption
2. Reducing controllable costs through efficiencies and continuous improvement
3. Increasing our distribution customer base
4. Increasing our industrial customer base
5. Investing in core assets
6. Executing on Investing in Canada Infrastructure Program (ICIP) projects
7. Supporting the Taltson Expansion and Great Slave Lake Intertie

Activities to Support Achievement of Strategic Objectives

1. Reducing fuel consumption

Electricity generation using diesel fuel is expensive and produces significant greenhouse gases. In addition to the integration of renewable technologies to offset diesel generation, NTPC has identified other actions it will implement to reduce the amount of diesel fuel consumed for electricity generation:

- Use of higher efficiency summer fuel in communities where it makes economic sense
- Placing greater emphasis on energy efficiency when purchasing new diesel generators
- Constructing an LNG plant in Fort Simpson, resulting in lower GHG emissions
- Continue to evaluate effectiveness of variable speed generator

2. Reduce controllable costs through efficiencies and continuous improvement

An internal review of NTPC's corporate structure began in 2019-20 to ensure that the Corporation can effectively deliver core services and simultaneously move the Strategic Plan forward. The first phase of the review resulted in changes to the structure of the senior leadership team, the most notable being the creation of a Chief Operating Officer position. This individual will be responsible for operation and oversight of the Hydro, Thermal, Transmission and Distribution Assets of the company.

A culture of innovation and improvement is being developed where all employees are encouraged to bring forward ideas to improve processes and reduce costs.

3. Increase distribution customer base

The Hay River Franchise continues to unfold with the date for final resolution being unknown. In May 2015, the Town of Hay River issued an RFP (Request for Proposal) for the supply of power to the community and chose NTPC as its future electricity distributor. Since October 2015, when NTPC was identified as the successful bidder, the process to transfer the Franchise from the current electricity distributor has been moving forward. By adding Hay River distribution customers to its customer base, NTPC anticipates it will achieve economies of scale which will benefit all customers by reducing upward pressure on electricity rates.

NTPC will also pursue opportunities to assume electricity franchises in other communities, including the City of Yellowknife, should a competitive bid process emerge.

4. Increase industrial customer base

NTPC will continue to meet with mining companies that are considering the establishment of new mines in the NWT. The Corporation aims to be the electricity provider of choice for all new industries in the NWT.

5. Invest in core assets

NTPC will continue with its large-scale capital program that will help to address aging electricity infrastructure challenges in the NWT. The largest capital spending portfolio in the Corporation's history will be executed in 2020-21. Some of the work on core assets will be financially supported by the federal government through ICIP. Federal funding support will significantly reduce the costs that would otherwise be fully borne by electricity customers.

Among the key capital projects related to current assets that will continue or start in 2020-21 are:

- Refurbishment of Unit 2 at Snare Forks
- Engineering and other planning activities associated with a refurbishment of the Taltson Hydroelectric Facility
- Construction of new diesel plants in Sachs Harbour and Lutsel K'e

6. Execute on Investing in Canada Infrastructure Program projects

ICIP provides funding to support electricity projects that result in reduced GHG emissions. Under this program, the federal government will provide 75% of the funds to integrate renewable or low-carbon technologies in communities powered by diesel generation, to install new transmission lines and to overhaul existing hydroelectric dams. The remaining 25% will either be provided by GNWT or by NTPC.

ICIP funding for several electricity projects in the NWT has been announced and moving these projects forward will be a key area of focus. Applications for additional projects will be submitted in 2020-21.

Projects already approved under ICIP that are expected to advance in 2020-21 are:

- Inuvik Wind project
- A liquified natural gas plant in Fort Simpson
- New, higher-efficiency diesel plants in Sachs Harbour and Lutsel K'e.

7. Support the Taltson expansion and Great Slave Lake Intertie

The GNWT is assessing the potential of expanding the Taltson Hydroelectric Facility and creating an intertie between the North and South Slave electricity systems. NTPC provides support to the GNWT related to this potential infrastructure project whenever it is requested.

2020-21 Performance Measures

NTPC has developed performance measures to help track progress on execution of the Strategic Plan. These performance measures focus on the seven strategic objectives. Given that a review of the Strategic Plan is underway, NTPC will continue to monitor the same performance measures as last year, while acknowledging that new or different key performance indicators may be required.

NTPC Key Performance Indicators (KPIs) measuring progress on the strategic objectives include:

1. Average number of outages per customer on a rolling 12-month calendar (SAIFI)
2. Average cost of electricity per kilowatt hour for residential customers
3. Operation and Maintenance cost per kilowatt hour
4. Fuel efficiency
5. Greenhouse gas emissions per gigawatt hour of generation (tCO₂e/GWh)
6. Asset health index
7. Customer Service Satisfaction Rating

Expected Results

NTPC expects to see progress on all seven of the strategic objectives in 2020-21. Timing for measurable success will vary by strategic objective with some being fully reliant on activity by third parties (i.e. mining companies, distribution franchises). Initiatives to support the strategic objectives will be reviewed and updated on an annual basis to reflect any changes in circumstances such as new challenges or opportunities.

Evaluation of 2019-20 Corporate Objectives

Corporate objectives that were in place prior to development of the Strategic Plan became divisional initiatives in 2019-20, as indicated in last year's Corporate Plan.

2019-20 will serve as a base year for the performance measures that track progress on NTPC's Strategic Objectives. Specific targets for each performance measure will be developed

	Results as of December 31, 2019
Average number of outages per customer on a rolling 12-month calendar (SAIFI)	10.32
Average cost of electricity per kilowatt hour for residential customers	\$0.65
Operation and Maintenance cost per kilowatt hour	\$0.135
Fuel efficiency	\$0.078
Greenhouse gas emissions per gigawatt hour of generation (tCO ₂ e/GWh)	179
Asset health index	5.0

* Results are accurate as of the end of the third quarter of 2019-20

NT Hydro and NTPC -- Financial Information

Budget Summary
Statement of Operations – NT Hydro
Changes in Net Debt – NT Hydro
Statement of Operations – NTPC
Changes in Net Debt -- NTPC
Capital Expenditures

NT Hydro and NTPC Budget Summary

NT Hydro's third year of putting its Strategic Plan into action is represented in 2020-21. This year the focus will be on how NTPC and NT Hydro can deliver on the annual initiatives to support the longer term strategic objectives. NT Hydro's 2020-21 consolidated budget starts with NTPC's consolidated 2020-21 budget:

NTPC's Consolidated Budget

Revenues

Power revenues are budgeted at \$109.692 million – down just over 1% from 2019-20. Sales to NTPC's residential customers have been slowly decreasing over the past several years. In 2019-20, the number of customers accessing NTPC's net metering program increased significantly and expectations are that this trend will continue as customers access funding to support solar projects.

This is NTPC's second operational year outside of a General Rate Application (GRA) Test Year. Base electricity rates are not budgeted to change this year, although a fuel rider is currently in place as a result of increasing global fuel prices over the past few years, challenges with purchased power in Norman Wells and limitations experienced with transport of liquefied natural gas (LNG) to NTPC's plant in Inuvik.

Contributions include funding from the GNWT through the Federal Government's ICIP which started late in 2018-19. ICIP funding in 2020-21 will be used to support five projects: hydro overhauls at Snare Forks Unit #2 and the Taltson hydroelectric facility, replacement of the Sachs Harbour and Lutsel Ke diesel plants as well as the construction of a new LNG generation plant in Fort Simpson.

In 2020-21, NTPC is expecting to finalize its insurance claim for the Snare Forks bearing failure from October 2018.

Expenses

NTPC's implementation of the Strategic Plan is reflected in the \$118.949 million budget for operating expenses in 2020-21. Expenses are up by 5.6% from 2019-20. Compared to 2019-20 budgeted costs, all of NTPC's functions are reflecting budgeted cost changes from the following factors:

- Cost increases due to inflation

- Cost increases due to the implementation of the newly signed Collective Agreement.
- Cost increases associated with developing and training NTPC staff in technical and leadership skills
- Cost decreases resulting from restructuring and implementation of innovation.

Function specific increases built into NTPC's (and NT Hydro's) 2020-21 budget include:

Thermal generation costs are increasing as NTPC has factored in decreases to fuel costs from implementation of strategic initiatives such as summer fuel and replacement of less efficient generators; however those cost savings are not large enough to offset the forecast increase in the price of diesel fuel. NTPC's transportation costs for fuel is also expected to increase in 2020-21. Increases in interest and amortization costs associated with delivering the \$57 million capital plan from 2019-20 including the new diesel plant in Norman Wells as well as the over \$95 million capital program budgeted for 2020-21 including 25% of non-ICIP funded costs for new plants in Sachs Harbour, LutselKe and Fort Simpson. Cyclical costs increases for vegetation management also contribute to the \$4.8 million increase in thermal generation budget over the 2019-20 budget.

Hydro generation costs are increasing in part related to cyclical costs for vegetation management and operational maintenance deferred from 2019-20 due to extended time required for capital projects. Hydro generation costs also reflect increased costs for interest and amortization associated with delivering the \$57 million capital plan from 2019-20 including the 25% non-ICIP funded costs for the Snare Forks Unit 1 overhaul as well as the Snare Forks Unit 2 overhaul and the Taltson hydroelectric facility overhaul.

Corporate services costs reflect additional costs budgeted for developing and responding to regulatory requirements in 2020-21.

Transmission, Distribution and Retail costs are budgeted to increase to support cyclical costs for vegetation management in 2020-21 as well as the other factors driving costs for all functions.

Purchased Power costs are expected to decrease in 2020-21 as maintenance costs with the installation of the new diesel backup power plant in Norman Wells are expected to decrease from 2019-20.

NT Hydro

In addition to the work being driven by NTPC, NT Hydro's progress on the Strategic Plan through NT Energy will be delivered through pursuing new customer opportunities including new industrial customers. Mining and economic development is a key part of the GNWT's mandate and a small budget has been provided to support NT Hydro in pursuing generation opportunities with mining or other large industrial customers when they arise.

NT Hydro also continues to support the GNWT in 2020-21 as required on the development of the Taltson Expansion and Great Slave Lake Intertie projects. There is a small budget included in NT Hydro's Corporate Services costs to support these activities.

Government contributions of \$45.688 million for NT Hydro (\$24.068 million for NTPC) support NT Hydro and NTPC's execution of ICIP projects. Delivery of these projects will support this objective but also support NTPC's strategic objectives of reduction of diesel fuel and GHGs. Work on the Inuvik High Point Wind project is expected to continue in 2020-21. Some government contribution revenues have been estimated for projects supported by the GNWT in order to prepare the required applications for the Federal Government's ICIP program.

NT Hydro: 2020-21 Consolidated Statement of Operations

	2020-21 Budget	2019-20 Budget	2018-19 Actual
Revenues			
Sale of Power	\$ 109,692	\$ 111,345	\$ 110,391
Fuel Rider Revenue	2,008	2,093	0
Other Revenue and Customer Contributions	1,911	1,914	2,098
Interest Income	1,081	1,202	1,342
Income from Investment in Aadrii Ltd.	75	75	50
	<u>114,767</u>	<u>116,629</u>	<u>113,881</u>
Expenses			
Thermal Generation	67,272	62,491	68,995
Hydro Generation	22,245	22,030	18,882
Corporate Services	15,247	14,053	15,594
Transmission, Distribution and Retail	11,576	11,148	11,312
Purchased Power	2,806	3,092	1,451
Alternative Power Generation	249	226	236
	<u>119,395</u>	<u>113,040</u>	<u>116,470</u>
(Deficit)/Surplus for the Year before Contributions	<u>\$ (4,628)</u>	<u>\$ 3,589</u>	<u>\$ (2,589)</u>
Contributions			
Government Contributions	45,584	31,757	4,695
Insurance Proceeds	1,500	5,800	0
	<u>47,084</u>	<u>37,557</u>	<u>4,695</u>
Surplus for the Year	<u>\$ 42,456</u>	<u>\$ 41,146</u>	<u>\$ 2,106</u>
Accumulated surplus/equity, beginning of year	\$ 167,741	\$ 126,595	\$ 124,489
Accumulated surplus/equity, end of year	<u>\$ 210,197</u>	<u>\$ 167,741</u>	<u>\$ 126,595</u>

(All figures in \$000s)

NT Hydro 2020-21 Consolidated Statement of Changes in Net Debt

	2020-21 Budget
Surplus for the year	\$ 42,456
Tangible capital assets	
Additions	(102,504)
Capitalized overhead	(13,597)
Capitalized interest	(965)
Disposals	10,199
Amortization	19,897
	(86,970)
Additions of inventories	(7,500)
Use of inventories	7,500
Additions to prepaids	(1,700)
Use of prepaids	1,700
	-
Increase in net debt for the year	\$ (44,514)
Net debt, beginning of year	\$ (239,654)
Net debt, end of year	\$ (284,168)

(All figures in \$000s)

NTPC 2020-21 Consolidated Statement of Operations

	2020-21 Budget	2019-20 Budget	2018-19 Actual
Revenues			
Sale of Power	\$ 109,692	\$ 111,345	\$ 110,391
Fuel Rider Revenue	2,008	2,093	0
Other Revenue and Customer Contributions	1,911	1,914	2,098
Interest Income	1,081	1,202	1,342
Income from Investment in Aadrii Ltd.	75	75	50
	<u>114,767</u>	<u>116,629</u>	<u>113,881</u>
Expenses			
Thermal Generation	67,272	62,491	68,995
Hydro Generation	22,245	22,030	18,882
Corporate Services	14,801	13,626	14,582
Transmission, Distribution and Retail	11,576	11,148	11,312
Purchased Power	2,806	3,092	1,451
Alternative Power Generation	249	226	236
	<u>118,949</u>	<u>112,613</u>	<u>115,458</u>
(Deficit)/Surplus for the Year before Contributions	<u>\$ (4,182)</u>	<u>\$ 4,016</u>	<u>\$ (1,577)</u>
Contributions			
Government Contributions	23,618	13,857	3,259
Insurance Proceeds	1,500	5,800	0
	<u>25,118</u>	<u>19,657</u>	<u>3,259</u>
Surplus for the Year	<u>\$ 20,936</u>	<u>\$ 23,673</u>	<u>\$ 1,682</u>
Accumulated surplus/equity, beginning of year	\$ 149,486	\$ 125,813	\$ 124,131
Accumulated surplus/equity, end of year	<u>\$ 170,422</u>	<u>\$ 149,486</u>	<u>\$ 125,813</u>

(All figures in \$000s)

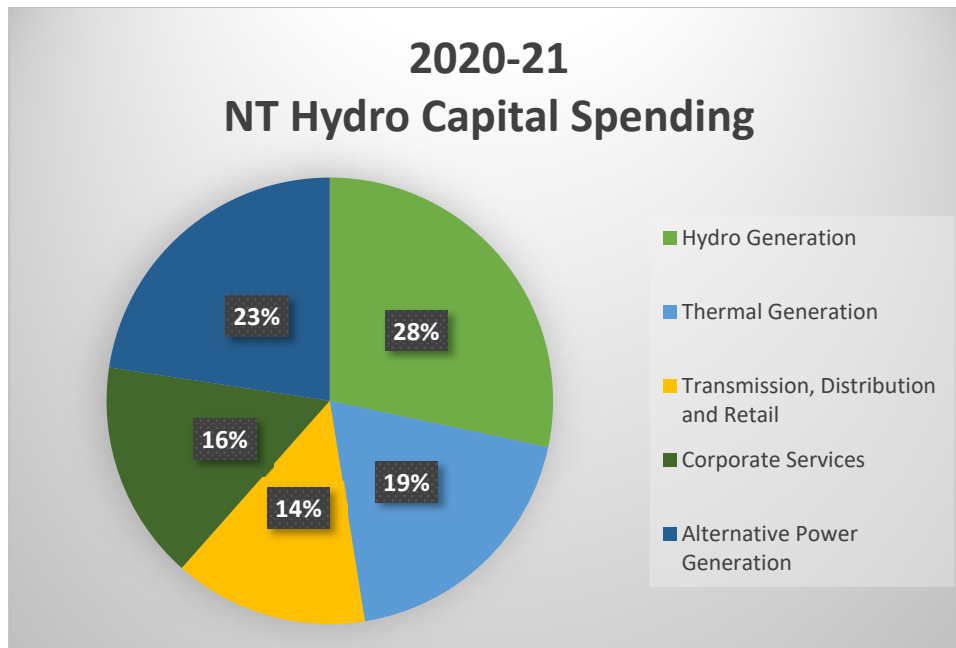
NTPC 2020-21 Consolidated Statement of Changes in Net Debt

	2020-21 Budget
Surplus for the year	\$ 20,936
Tangible capital assets	
Additions	(80,884)
Capitalized overhead	(13,597)
Capitalized interest	(965)
Disposals	10,199
Amortization	19,897
	(65,350)
Additions of inventories	(7,500)
Use of inventories	7,500
Additions to prepaids	(1,700)
Use of prepaids	1,700
	-
Increase in net debt for the year	\$ (44,414)
Net debt, beginning of year	\$ (242,977)
Net debt, end of year	\$ (287,391)

(All figures in \$000s)

2020-21 Consolidated Capital Expenditures

	in \$000s		in \$000s	
	2020-21 NTPC Budget	2020-21 NT Hydro Budget	2019-20 NTPC Revised Budget	2019-20 NT Hydro Revised Budget
Hydro Generation	\$ 33,161	\$ 33,161	\$ 29,235	\$ 29,235
Thermal Generation	22,425	22,425	19,041	19,041
Transmission, Distribution and Retail	16,453	16,453	6,568	6,568
Corporate Services	18,557	18,557	2,298	2,298
Alternative Power Generation	4,850	26,470	-	4,000
2020-21 Total PSAS Capital Budget	\$ 95,446	\$ 117,066	\$ 57,142	\$ 61,142
GNWT Funding	(24,068)	(45,688)	(14,080)	(18,080)
2020-21 Net Capital Budget after Government Contributions	\$ 71,378	\$ 71,378	\$ 43,062	\$ 43,062





NORTHWEST TERRITORIES
HYDRO
CORPORATION

Power for Generations



NORTHWEST TERRITORIES
POWER
CORPORATION

Empowering Communities