

# Qulliq Alrujaqtuqtunik Ikumadjutiit



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Qulliq Energy Corporation  
Société d'énergie Qulliq  
Qulliq Alruyaktuqtunik Ikumatjutiit

## Uuktuutikhat Angijumut Havaakhamut Laisinik

**GENSET HIMMIQTAUJUKHAT NUNANGINI  
KUGAARUK, SALLIQ,  
IGLULIGAARJUK, TIKIRARJUAQ, HAMANILU MITTIMATALIK**

**Hikutirvia 2023**



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## Tukhiutit Angijunik Havaakhamik Pijunautimik Genset

### Himmautikhainik

#### 1 **Aulapkaijini Naittuq Naunaijaruti**

2 Qulliq Alrujaqtuqtunik Ikumadjutiit (QEC) talvuuna uuktuqpaktut Ministamun Munarijuq  
3 Qulliq Alrujaqtuqtunik Ikumadjutiit malikhugu ilangani 18.1 uvani *Qulliq Alrujaqtuqtunik*  
4 *Ikumadjutiit Maligarmi*, R.S.N.W.T. 1988, c.N-2 havaktaujukhanun laisikhanun  
5 himmautikhanik Kugaarjungmi, Salliq, Igluligaarjungmi, Tikirarjuami, Mittimatalingmilu.

6 Tamna tukhiqtauhimajuq genset himautikharnik ilituqhajaangat ihuarutikharnik  
7 katitirutikharnik hanaqidjutikharnik nunalaani aulahimajut talvuuna pidjutikharnik  
8 upautijaangat QEC-kut katitirutikharnik upalungairutikharnik atuqtakharnik,  
9 ilituqhajaangat iglukharnik taima talvaniitunluuniit atuguminaqtun, ihuaqhajaangatlu  
10 ihuarutikharnik hanaqidjutikharnik aulahimajut talvuuna pigiaqaqtunik inikhavikharnik  
11 himiqtaujukharnikluuniit ilaqaqtunik.

12 QEC-kut itqurniarutait akinga iniqtiriangani tallimat genset himmautikhanik havaakhat  
13 imaatut \$32.4 million. Una pidjutiqangniaqtuq itqungniaqhijamajut 1.47 cents/kWh  
14 akiturjuumijut maniliurnikkut pijakhat talvanga havaakhat tamaat kivgaqturnikkut.  
15 Havaakhat hulaqutilimaitut akiinun QECkut hivuliq Akiluangitigut Uuktuutinun malikhugit  
16 havaakhat ubluani. Havaakhangit maniiit atuqtaujukharnik havakhimajut talvuuna kingulirmi  
17 uuktuutikharnik havagiikhimajukhaq aadjikiiktumik havaaqhangit.

18 Genset ingniqutit himmautikhat havaakhat havaktauvaktut imaatut malrungni ukiungni  
19 iniqtiriangini pihimablugit ihariagijaitigut aquiqturiangini ingilrutikhat uvalu  
20 ihuaqhajamingni igluqpinirmun. Havaakhat niriuktaujut iniqtaulutik imaa 2025/26  
21 maniliqinikkut ukiungani.



Himmautikhainik

Naunaitkutaa Makpiraat Illulingit

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2 **1.0 Application** ..... Error! Bookmark not defined.

3 **2.0 Background** ..... Error! Bookmark not defined.

4 2.1 Kugaaruk.....**Error! Bookmark not defined.**

5 2.1.1 **Project Background**..... **Error! Bookmark not defined.**

6 2.1.2 **Genset Condition and Operation** ..... **Error! Bookmark not defined.**

7 2.1.3 **Required Firm Capacity** ..... **Error! Bookmark not defined.**

8 2.2 Coral Harbour.....**Error! Bookmark not defined.**

9 2.2.1 **Project Background**..... **Error! Bookmark not defined.**

10 2.2.2 **Genset Condition and Operation** ..... **Error! Bookmark not defined.**

11 2.2.3 **Required Firm Capacity** ..... **Error! Bookmark not defined.**

12 2.3 Chesterfield Inlet .....**Error! Bookmark not defined.**

13 2.3.1 **Project Background**..... **Error! Bookmark not defined.**

14 2.3.2 **Genset Condition and Operation** ..... **Error! Bookmark not defined.**

15 2.3.3 **Required Firm Capacity** ..... **Error! Bookmark not defined.**

16 2.4 Whale Cove.....**Error! Bookmark not defined.**

17 2.4.1 **Project Background**..... **Error! Bookmark not defined.**

18 2.4.2 **Genset Condition and Operation** ..... **Error! Bookmark not defined.**

19 2.4.3 **Required Firm Capacity** ..... **Error! Bookmark not defined.**

20 2.5 Pond Inlet.....**Error! Bookmark not defined.**

21 2.5.1 **Project Background**..... **Error! Bookmark not defined.**

22 2.5.2 **Genset Condition and Operation** ..... **Error! Bookmark not defined.**

23 2.5.3 **Required Firm Capacity** ..... **Error! Bookmark not defined.**

24 **3.0 Assessment of Project Options** ..... Error! Bookmark not defined.

25 **4.0 Impact of the Project on Ratepayers**..... Error! Bookmark not defined.

26 **5.0 Grounds in Support of the Application** ..... Error! Bookmark not defined.

27 **6.0 Project Timelines** ..... Error! Bookmark not defined.

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## Tukhiutit Angijunik Havaakhamik Pijunautimik Genset

### Himmautikhainik

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4	Naunaitkutaa 2.3-1: Igluligaarjuk Genset Line-up.....	8
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## Tukhiutit Angijunik Havaakhamik Pijunautimik Genset

### Himmautikhanik

## 1 1.0 Uuktuuti

2 Qulliq Alrujaqtuqtunik Ikumadjutiit (QEC) talvuuna uuktuqhimajuq Ministamun Munarijuq  
3 Qulliq Alrujaqtuqtunik Ikumadjutiit malikhugu Ilanga 18.1 uvani *Qulliq Alrujaqtuqtunik*  
4 *Ikumadjutiit Maligarmi*, R.S.N.W.T. 1988, cN-2 ukununga angijunun havaktaujukhanun  
5 laisikhanun himmautikhanik Kugaarungmi, Salliq, Igluligaarjungmi, Tikirarjuami,  
6 Mittimatalingmilu. QEC-kut tukhiliqpaktun angirutikharnik aulatitjaangat ukuninga  
7 havaakharnik. Naunairutikhangit ikajuutikharnik tukhiqtauhimajut havaaqhangit  
8 laisikhangit naunaijagiikhimajut ataani.

## 9 2.0 Kangiqhidjut

10 QEC-kut havakhimaarumajut upalungairutikharnik pivalliadjutikharnik akililaarutikharnik  
11 ihuaqtumik naunaitumik hanaqidjutikharnik naunaijaangat taima alrujaqtuutikhangit  
12 qajangirutiqarniaqtun, aturuminaqtun aulahimaagiaqaqtuniklu. QEC-kut atuqtut  
13 aturiaqaqtunik ihuaqhataqhimajumik ajuruiriagani (RFC) upalugaijarnirmik atuqtakhamik  
14 uqhurjuaqtuqtunik nautianik 110% nalautaagaujuq anginikhamik angitilaaganik  
15 pidjutaulaaqtuq anginikhamik atuni iglumiutaujumit ahivariangani ikajuutit,  
16 pidjutiqaqtumik hanajakhanik ihumaliurutinik. Una upalungaijainiq atugahaq ihuaqtuq  
17 atuqtaujuq hapkunanga Nunatsiamin Pauwakkut Kuapaliisit hapkununga unghiktunun  
18 attauhiinarnun-aulanikkut nunallaat.

19 Auladjutikhangit ingilrutikhangit atuqtaugiaqaqtun qaffiujunik ihumaliurutikharnik, ilaujut:

- 20 1. Tamna nunagijaujuq piqarluangittuq naamangittuq iliuriami aktilangit pitariangi  
21 tapkuat RFC naunaipkutat.
- 22 2. Tamna genset tikiutivakhimajuq kiklivikhanga ihumagijaujuq inuuhinga ukiungit  
23 ikaakningitluuniit ikajuutikharnik.
- 24 3. Ihuaqhaidjutikhat ajuqhautit atuqtauliqtut ihuarninganik iglumut.
- 25 4. Ingilraaarutit himmauhirlugilluuniit ilangit pilimaiqqata himmautikhaiqqata.

26 QEC-kut uuktuliqtun angijunik havaktaujukhamik laisikhanik himmautikhanik gensets  
27 siksini nunallaani: Kugaaruk, Salliq, Igluligaarjuk, Tikirarjuaq Mittimataliklu. Humi ittuq  
28 hapkuat nunallaangit naunaiqtaujuq uumani Naunaitkut 2.0.1



Himmautikhainik

1 **Naunaitkut 2.0-1 – Genset Himmautikhat Nunallaani Humiittakhait**



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3

4 **2.1 Kugaaruk**

5 **2.1.1 Havaakhap Kangiqhidjuraa**

6 Kugaaruk najugaaqatuuq Kitikmeoni Nunavunmi. Tahapkununa kufiutilanginik nunalingni  
7 pihimajunik 1,033 uvani 2021 kihititaujuunik, ammigaikjumivaktunik 10.7% talvanga 2016  
8 kihititaujuunik.<sup>1</sup> Pijaangat nunalaani tingmitikkut talvani Kugaaruk milviani umiakkutluuniit.  
9 Naunaitkutinga 2.1-1 naittumik titiraqhimajaa nutaaq genset iliuraqhimajuq nunallaani.  
10 Tadjalu Volvo D16 500kW qilamiurnikkut ingniqutit najugaaqatut nunallaami.

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<sup>1</sup>Naunaijajit Kanadami. 2021 Naunaijainiq Kaanatami. Piinarialik:  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=9810000201#data> Piinarialik, Apitilirvia 11, 2023.



**Himmautikhainik**

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2 **Naunaitkutaa 2.1-1: Kugaaruk Genset Line-up**

Igluqpa Nampaa	Qanurituq Aqhaluutim Ingniquatingalu	Aktikut (kW)	Ukiuq Iliuraqtaujuq	Auladjutikkut Ikaarniit
G1	Detroit Diesel Series 60	320	2004	55,156
G2	Cat D 3508 B	550	2009	60,221
G3	Cat D 3508 B	550	2009	51,171

3

4 QEC-kut pihimajut agijumik havaamik pijunaunmik himauhiriagani nautiaq Kugaarukuvani  
5 Imaruqtirvia 2022. Tunijaukpata angijut havaakhat laisiit QEC-kut ihumaliuqtut himautaulimaitut  
6 pauwaqarvikhat hamani Kugaarjuk tadj. Naunaiqtauhijauq kiudjutimi URRC-QEC-2 (b)<sup>2</sup>  
7 talvanga Kugaaruk unalu Igluligaarjuk angijut havaakhat laisikhanut uuktuutikhat, Ukiuqtaqtumi  
8 Auladjutikhanut Maniliqtuutikhat (AEF) pinahuaruti ajurnaqtunik kiglikhanik atauttimut  
9 maniliqtuutikhanik tamainut havaakhat. Pauwaqarviup akiit akiturjuumijut talvanga hivuanin  
10 maniitigut upalungaijaqtauhimajut uvalu QEC-kut niguaqtaujuq hivuliulugit iniqtigutait aalat  
11 havaakhat piinagialgit AEF maniliqtuiniq. Taitaittumik, nutaaq genset Kugaarungmi pijariaqaqtut.  
12 QEC-kut himauhirumaliqtut Genset G1, a 320 kW unit nutaamik 550 kW unit.

13 Tamna havaakhaq ilaqaqtuq hanajukharnik, niuvigianganik auladjutikharniklu 550 kW genset  
14 piqaqtut imaqtuqtut uunaqtutit imaalu aanniarvingmilu qanuritunik nipiqqukhivaalliutit,  
15 auladjutikharnik tunngavikharnik ikajuutikharniklu auladjutikharnik talvani katitiqhimajunik  
16 ingilrutikharnik, iliurajaangat nutaanik genset tamainik ingilrutikharnik, kamisininik,  
17 ihivriudjutikharnik ilaujukharniklu nutaanik ingilrutikharnik talvani pauwaqarvikharnik  
18 ingilrutikharnik, ajuiqhautikharnik havaktunik tunijaangatlu hanajukharnik titiraujaqhimajunik.  
19 Aktikkulaanga tukhiqtauhimajuuq genset angitqijaujuq uumannga ittut atauhiq havauhikhaq  
20 qanurittaakhaanik ilaliutijuuq atuligtitauniq tunngavinganik ikajuutikhamiklu tunngavinga,  
21 nutaanguqtiqtuq uqhurjuaq timiqutigijangillu naunaijainiq munariniq (PLC) ihuaqhainiq.

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23 **2.1.2 Genset Ingniquitit Qanuriniit uvalu Auladjutait**

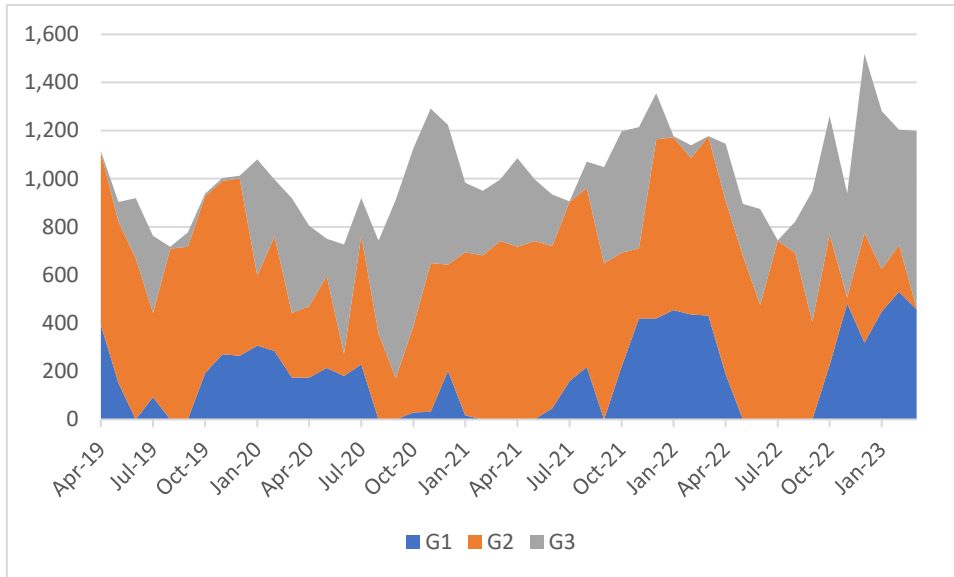
24 Kugaaruk genset G1 unaujuq 320kW unit ilijaujuq uvani 2004. Talvanga Qitiqqaujarvia 2019  
25 aulaniaqtuq naamavjaktuuq 25 pusat ikaangniit ukiumi (Naunaitkut 2.1-1).

<sup>2</sup> URRC-QEC-2 (b). Qiqaijalirvia 4, 2022.



Himmautikhainik

1 **Naunaitkut 2.1-1 – Genset Run Ikaarniit – Qitiqqautijuq 2019 talvuuna**  
 2 **Qiqajalirvia 2023**



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5 **2.1.3 Pijumajajuq Hailihimajuq Angumadjutikhaq**

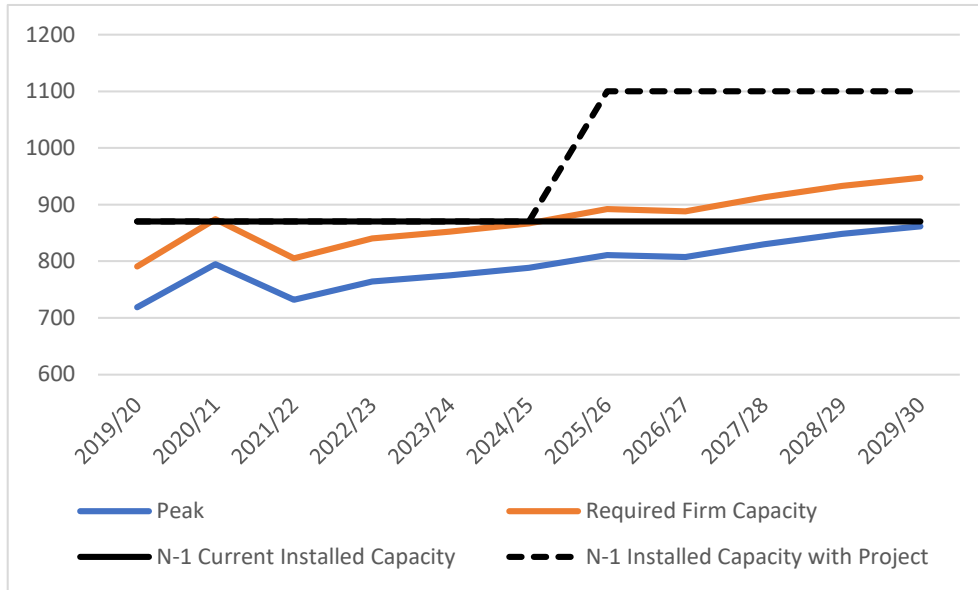
6 Kugaaruk nunallaangat anginiqhait amigairjuumijut hamanga 2021/22, piluqtauplutik  
 7 ihariahungnirmik angitqiamik iliuraqtaujukhamik. QEC-kut tadja nalautaagat havaat taja  
 8 igniqutiqaqvik pilimaginmat aturiaqaqtunik ajuruiriangani qanurinigit qanituani 2025,  
 9 takuukhajuq Naunaitkut 2.1-3. Himmauhirlugu tajja 320 kW unit nutaamik 550 kW unit  
 10 amigaigjuuminaqtuq hailijunik, pipkarlugu pauwaqarvikhaq angummadjutijaami nunallaap  
 11 angitqijajuunik pauwatuutikkut hivunikhani.





Himmautikhainik

1 **Naunaitkut 2.1-2 – Nunallaani Quijaqtunut Ihariagijaujut unalu**  
 2 **Ihariagijaujut Avikturvinga aktikkulaanga (kW)**



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5 **2.2 Salliq**

6 **2.2.1 Havaakhap Kangiqhidjutaa**

7 Salliq najugaa uvani Southampton Islandmi Kivallirmi Aviktungniani Nunavunmi  
 8 (Naunaitkut 2.0-1). Tahapkununa kufiutilanginik nunalingni pihimajunik 1,035 uvani 2021  
 9 kihititaujunik, ammigaikjumivaktunik 16.2% talvanga 2016 kinikhianikmun  
 10 naunaijainikmun naunaitkutaujunik.<sup>3</sup> Pijaangat nunallaani tingmitikkut talvani Salliq  
 11 milviani umiakkutluuniit. Naunaitkutaa 2.2-1 naitumik titraqhimajuq aulahimajuq Genset  
 12 innirviqaqtunik pauwaqarvingmi. Tadjalu Volvo D16 500kW qilamiurnikkut ingniqutit  
 13 najugaqaqtut nunallaami.

14 **Naunaitkutaa 2.2-1: Salliq Genset Line-up**

Igluqpa Nampaa	Brand and Model	Aktilanga (kW)	Ukiuq Iliuraqtaujuq	Auladjutikkut Ikaarniit
G1	MTU 12V4000	720	2019	19,361
G2	Cat D 3508	420	2005	67,350

<sup>3</sup>Naunaijajit Kanadami. 2021 Naunaijainiq Kaanatami. Piinarialik:  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=9810000201#data> Piinarialik, Apitilirvia 11, 2023.



**Tukhiutit Angijunik Havaakhamik Pijunautimik Genset**

**Himmautikhainik**

G3	Cat D 3508	420	2005	65,493
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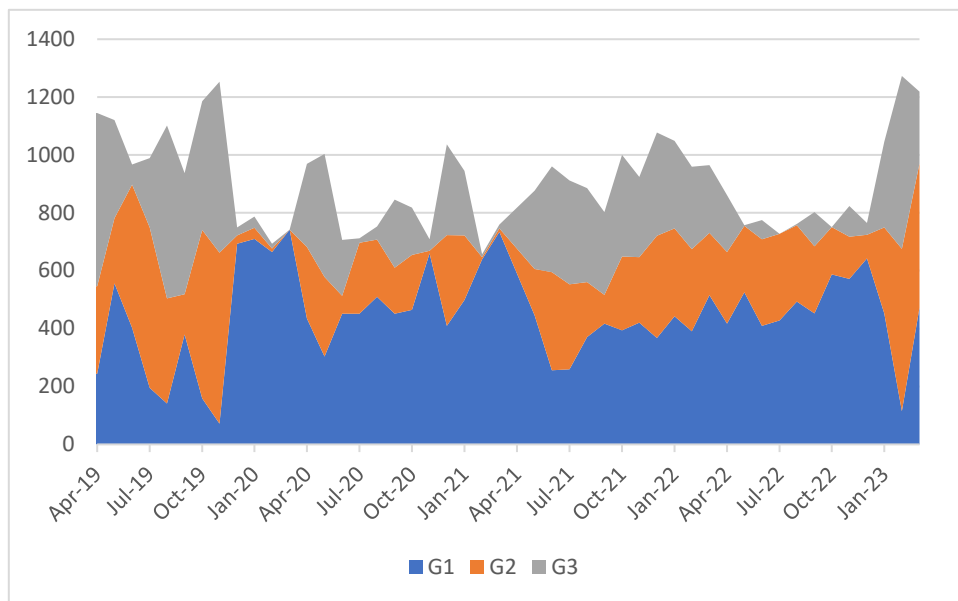
2 Salliq Genset G2 420 kW unit iliuraqtaujuq vani 2005.. QEC-kut himauhirumajut taja G2  
 3 unit angitqijamik ajuruirutikhamik 720 kW unit. Aktikkulaanga nutaaq Genset  
 4 angitqijaujuq uumangga ittut, talvuuna, pipkaidjutinga tunngavinga ikajuutingillu  
 5 tunngavingit, nutaanguqtirninga uqhurjuaq, niglaqhijuuq qanuriliurutinga, unagurnninga  
 6 qanuriliurutingit ilangitlu ihuaqhainiq PLC ihariagijauniaqtuq.

7 Tamna havaakhaq ilauqaqtuq hanajukharnik, niuvigianganik auladjutikharniklu 720 kW  
 8 genset, piqaqtut imaqtuqtut uunaqtit imaalu aanniarvingitlu qanuritun  
 9 nipiqqukhivaalliutit, auladjutikharnik tunngavikharnik ikajuutikharniklu auladjutikharnik  
 10 talvani katitiqhimajunik ingilrutikharnik, iliurajiangat nutaamikgenset tamainik  
 11 ingilrutikharnik, kamisinanik, ihivriudjutikharnik ilautitijaangatlu nutaanik ingilrutikharnik  
 12 talvani pauwaqarvikharnik ingilrutikharnik, ajuiqhautikharnik havaktunik tunijaangatlu  
 13 hanahimajunik titiraujaqhimajunik.

14 **2.2.2 Genset Ingniqtit Qanuriniit uvalu Auladjutait**

15 Salliq Genset G2 420 kW unit iliuraqtaujuq vani 2005.. Talvanga Qitiqqautijuuq 2019 aullaniaqtuq  
 16 imaatut 32% ikarniinnik ukiungani (Naunaitkut 2.2-1).

17 **Naunaitkut 2.2-1 – Genset Run Ikaarniit – Qitiqqautijuuq 2019 talvuuna**  
 18 **Qiqaijalirvia 2023**



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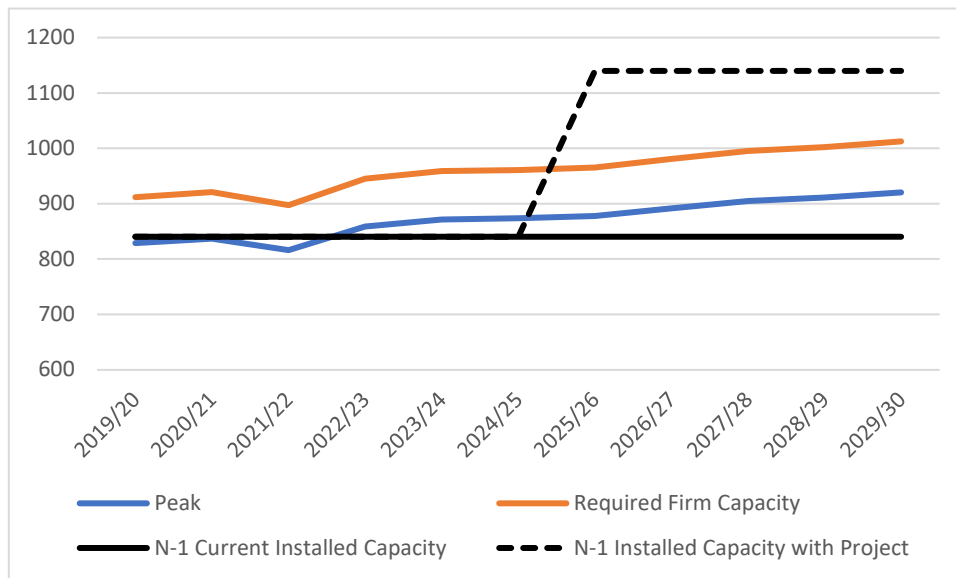
**Himmautikhainik**

1 **2.2.3 Pijumajaujuq Hailihimajuq Angumadjutikhaq**

2 Salliq nunallaat amigairjuumijut hamanga 2021/22, piluqtauplutik ihariahungniq  
 3 angitqiamik iliuraqtauhimajukhaq aktilaanganik. QEC-kut tadsa pauwaqarvat naamangittuq  
 4 aturiaqaqtaanik aktilanganik naunaitkutikhanik, takuukhaujuq uvani Naunaitkut 2.2-3.  
 5 Himmauhirlugu tadsa 420 kW unit piqartuq nutaamik 720 kW unit angiklijuumirniaqtuq  
 6 tamna pittaarnianik.

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10 **Naunaitkut 2.2-2 – Nunallaani Quiliqtaaqtuq Ihariagijaujuullu**  
 11 **Piliuqhimajuq Aktikkulaanga (kW)**



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13 **2.3 Igluligaarjuk**

14 **2.3.1 Havaakhap Kangiqhidjutaa**

15 Igluligaarjuk najugaa hinaani Hudson Bay Kivallirmi Aviktungniani Nunavunmi (Naunaitkut  
 16 2.0-1). Tamna inugiangningit nunalingni pihimajunik 397 uvani 2021 kihititaujuunik,  
 17 ikiklijumiliqhimajuq 9.2% talvanga 2016 kihititaujuunik.<sup>4</sup> Pijaangat nunalaani talvuuna ikiani  
 18 Igluligaarjuk milvingmi umiakkutluuniit. Naunaitkutaa 2.3-1 naittumik titiraqhimajuq

<sup>4</sup>Naunaijajit Kanadami. 2021 Naunaijainiq Kaanatami. Piinarialik:  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=9810000201#data> Piinarialik, Apitilirvia 11, 2023.



**Himmautikhainik**

- 1 aulahimajuq genset innirviqaqtunik iliuraqtauhimajuq nunangani pauwaqarvingmi. Tadjalu
- 2 Volvo D16 500kW qilamiurnikkut ingniqutit najugaqaqtut nunallaami.

**3 Naunaitkutaa 2.3-1: Igluligaarjuk Genset Line-up**

Igluqpa Nampaa	Brand and Model	Aktilanga (kW)	Ukiuq Iliuraqtaujuq	Auladjutikkut Ikaarniit
G1	Detroit Diesel Series 60	320	2010	60,650
G2	Detroit Diesel Series 60	320	2013	46,007
G3	Volvo TWD1643GE	400	2019	14,532

- 4
- 5 QEC-kut pihimajut agijumik havaamik pijunaunmik himauhiriagani nautiaq Igluligaarjuk Imuvani
- 6 aruqtirvia 2022. Tunijaugumik angijunik havaaqharnik laisikharnik - QEC-kut ihumaliurniaqtun
- 7 himautilimaitun pauwaqarvikharnik talvani Igluligaarjuk talvuunalu naunairutikharnik
- 8 ingniqutikharnik himautikharnik pigiaqarumik. QEC-kut himauhirumaliqtut Genset G1, a 320 kW
- 9 unit nutaamik 320 kW unit.

- 10 Tamna havaakhaq ilauqaqtuq hanajukharnik, niuvigianganik auladjutikharniklu 320 kW genset,
- 11 imaqtuqtut uunaqutit, aanniarvingitlu qanuritun nipiqqukhivaalliutit, auladjutikharnik
- 12 tunngavikharnik ikajuutikharniklu auladjutikharnik talvani katitiqhimajunik ingilrutikharnik,
- 13 iliurajjaangat nutaamikgenset tamainik ingilrutikharnik, kamisininik, ihivriudjutikharnik
- 14 ilaujukharniklu nutaanik ingilrutikharnik talvani pauwaqarvikharnik ingilrutikharnik,
- 15 ajuiqhautikharnik havaktunik tunijaangatlu hanahimajunik titiraujaqhimajunik.

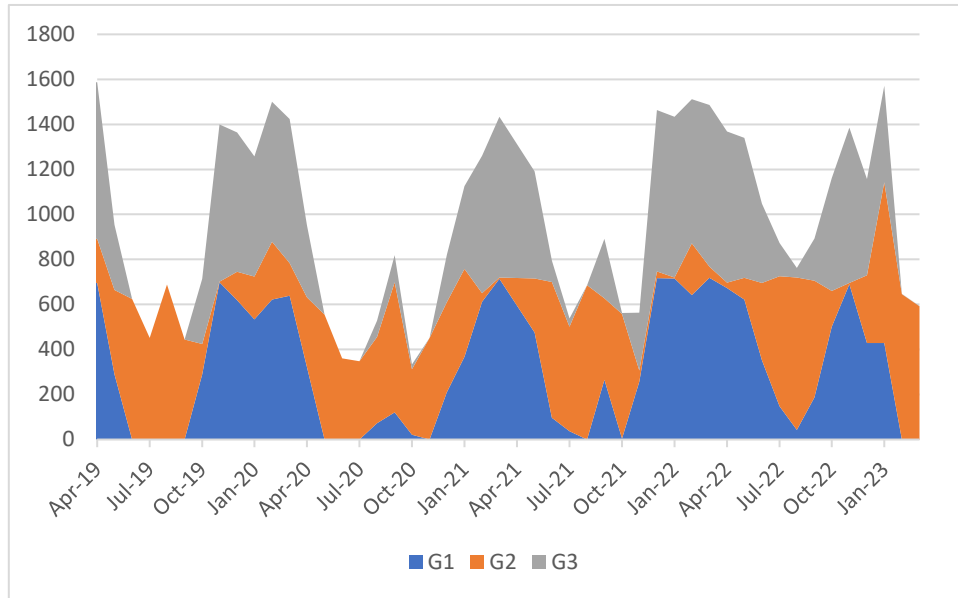
**16 2.3.2 Genset Ingniqtutit Qanuriniit uvalu Auladjutait**

- 17 Igluligaarjuk genset G1 320kW unit iliuraqtaujuq 2010. Upautiliqtuq nungunianun
- 18 aturuminaqtut inuuhiqqattiarutit pihimajut auladjutaini. Talvanga Qitiiqaujuq 2019
- 19 aulaniaqtuq naamavjaktuq 20 pusat ikaangniit ukiumi (Naunaitkut 2.3-1).



Himmautikhainik

1 **Naunaitkut 2.3-1 – Genset Run Ikaarniit – Qitiqqautijuq 2019 talvuuna**  
 2 **Qiqajalirvia 2023**



3

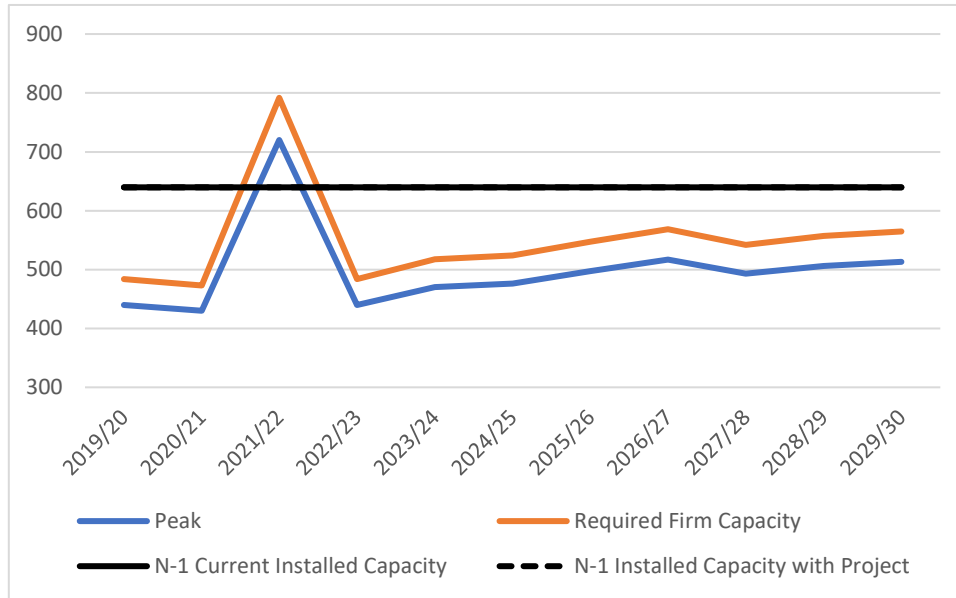
4 **2.3.3 Pijumajajuq Hailihimajuq Angumadjutikhaq**

5 Igluligaarjuk nunallaat anginiqhait aalangungitut uvani Naunaitkut 2.3-2. Himmauhirlugu  
 6 tatja 320 kW unit piqaqhuni nutaamik 320 kW unit pihimaniaqtuq havagvingmi  
 7 aktikkulaanganik nunallaami tunitillugu ihuaqtumik unit.



Himmautikhainik

1 **Naunaitkut 2.3-2 – Nunallaani Quijaqtunut Ihariagijaujut unalu**  
 2 **Ihariagijaujut Avikturvinga aktikkulaanga (kW)**



3

4 **2.4 Tikirarjuaq**

5 **2.4.1 Havaakhap Kangiqhidjutaa**

6 Tikirarjuaq najugaa hinaani Hudson Bay Kivallirmi Aviktungniani Nunavunmi (Naunaitkut  
 7 2.0-1). Tahapkununa kufiutilanginik nunalingni pihimajunik 470 uvani 2021 kihititaujuunik,  
 8 ammigaikjumivaktunik 8.0% talvanga 2016 kinikhianikmun naunaijainikmun  
 9 naunaitkutaujunik.<sup>5</sup> Pijaangat nunalaani tingmitikkut talvani Tikirarjuaq milviani  
 10 umiakkutluuniit. Naunaitkutaa 2.3-1 naittumik titiraqhimajuq aulahimajuq genset  
 11 innirviqaqtunik iliuraqtauhimajuq nunangani pauwaqarvingmi.

12 **Naunaitkutaa 2.4-1: Tikirarjuaq Genset Line-up**

Igluqpa Nampaa	Brand and Model	Aktilanga (kW)	Ukiuq Iliuraqtaujuq	Auladjutikkut Ikaarniit
G1	Cat D3412	300	1991	121,331
G2	Cat C 3412	300	2022	3,793
G3	Cat D 3406	150	1991	69,338
G4	Detroit Diesel Series 60	320	2017	40,078

<sup>5</sup>Naunaijajit Kanadami. 2021 Naunaijainiq Kaanatami. Piinarialik:  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=9810000201#data> Piinarialik, Apitilirvia 11, 2023.



## Himmautikhainik

1

2 Tamna havaakhaq ilauqaqtuq himautikharnik aulahimajunik G1 300 kW genset nutaamik  
3 anginirmik katitirutikharnik 400 kW genset. Tamna aulajuq tunngavikhangit ikajuutikharnik  
4 hanaqidjutikhangit atuqtauniaqtun. Uqhurjuanic atuqtunik nutaanguqtiqtaujukhaq ihuaqhigiami  
5 hapkuat aadlangurninngit.

### 6 **2.4.2 Genset Ingniqutit Qanuriniit uvalu Auladjutait**

7 Tamna atuqtaujuq tadjat Tikirarjuaq Pauwaqarvikhat piqaqtun hitamanik ingniqutinik.  
8 Atauhiq ukua gensets avatqutugu hanajit pitqujauhimajuq aulapkainirmut inuuhikhanut.  
9 Piqaqtuq angijumik qajangnautinik nakuuhuiqtaaqtuq una ingniqutimut, kitut  
10 pidjutiqangniaqtut angijumik qajangnautinik pauwaqarviup pidjutigilimaitait nunallaat  
11 atuqtakhangit pauwatuutikhatik. Atuqtaujuq G1 genset iliuraqtaujuq uvani 1991 tadjalu  
12 aulajut ikaarniit avatqumajut 120,000. Tamna ingniqutit atuqpakhimajut angijunik  
13 ihuaqhaidjutikharnik. Himmautikhat ilakangit ingniqutit piliuqtaujungnaiqtut. Qamitpat una  
14 ingniqutit pidjutiqarniaqtuq angijumik pauwaliurutikhairlutik nunallaami.

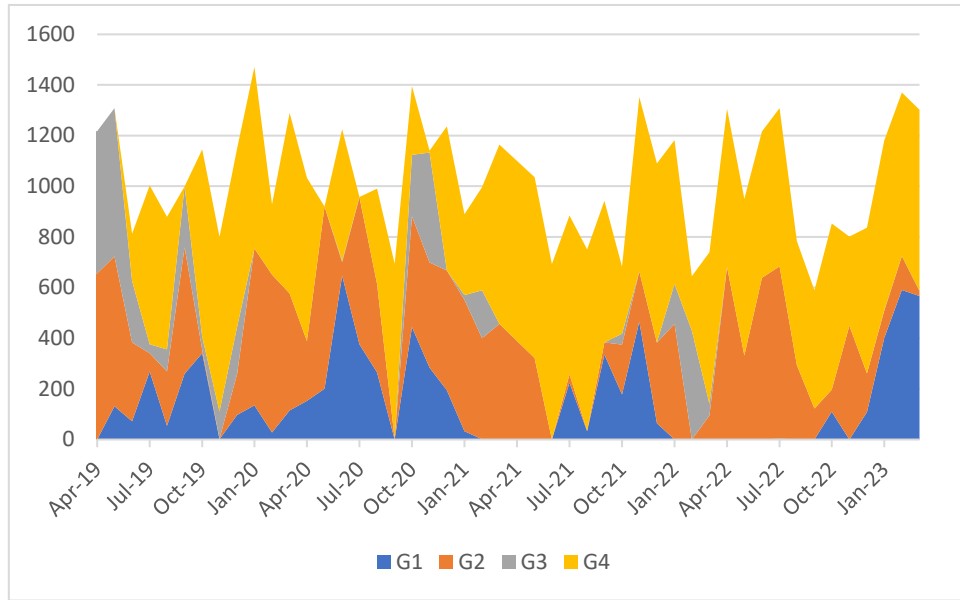
15 Talvanga Qitiqqaujuq 2019 unit G1 aulahimajuq imaavjak 44 pusat ikaarniit ukiumi  
16 (Naunaitkut 2.4-1).

17



Himmautikhainik

1 **Naunaitkut 2.4-1 – Genset Run Ikaarniit – Qitiqqautijuq 2019 talvuuna**  
 2 **Qiqaijalirvia 2023**



3

4

5 **2.4.3 Pijumajajuq Hailihimajuq Angumadjutikhaq**

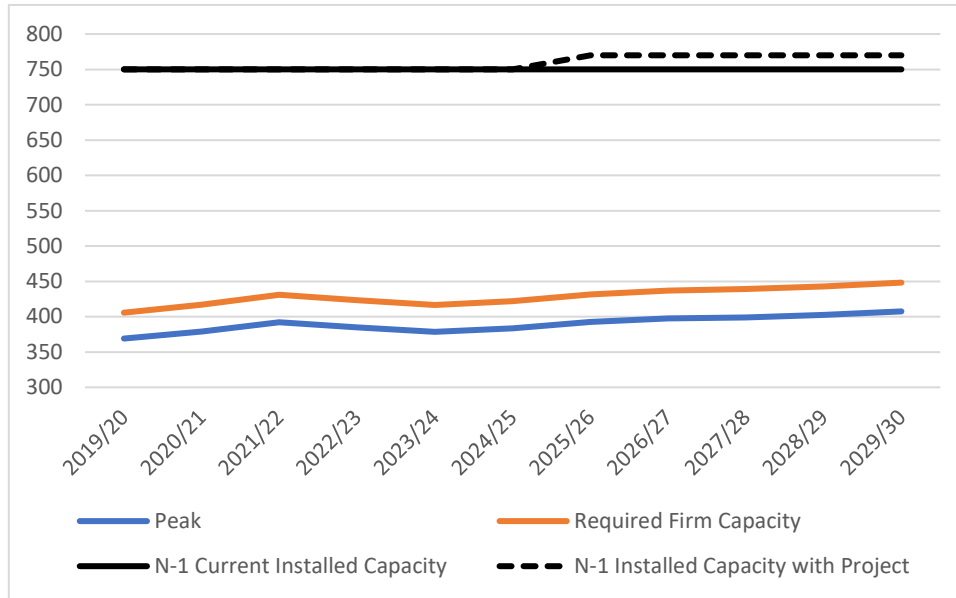
6 Tikirarjuaq nunallaaq anginiqhaq ihualuangituq. Himauhiqlugu utuqanguligtuq G1  
 7 pihimaniaqtuq nunallaaq aulahimaaqtumik pidjutigilugu pijakhat aktilaangitigut qanuriniit  
 8 tautungnaqtut uvani Naunaitkut 2.4-2.





Himmautikhainik

1 **Naunaitkut 2.4-2 – Nunallaani Quijaqtunut Ihariagijaujut unalu**  
 2 **Ihariagijaujut Avikturvinga aktikkulaanga (kW)**



3  
4

5 **2.5 Mittimatalik**

6 **2.5.1 Havaakhap Kangiqhidjutaa**

7 Mittimatalik talvaniittuq Qikiqtaaluk Avikturanni Nunavunmi (Naunaitkut 2.0-1).  
 8 Tahapkununa kufiutilanginik nunalingni pihimajunik 1,555 uvani 2021 kihititaujuinik,  
 9 ikiklijumiliqhimajuq 3.8% talvanga 2016 kihititaujuinik.<sup>6</sup> Pijaangat nunallaani talvuuna ikiani  
 10 Mittimatalik milvingmi umiakkutluuniit. Naunaitkutaa 2.5-1 naitumik titiraqhimajuq  
 11 aulahimajuq genset innirviqaqtunik pauwaqarvingmi.

12 **Naunaitkutaa 2.5-1: Mittimatalik Genset Line-up**

Igluqpa Nampaa	Brand and Model	Aktilanga (kW)	Ukiuq Iliuraqtajuq	Auladjutikkut Ikaarniit
G1	MTU 12V4000	720	2020	6,445
G2	MTU 12V4000	850	2014	63,448
G3	Guascor SF360TA	550	2009	40,270
G4	Cat 3508	550	2021	7,268

<sup>6</sup>Naunaijajit Kanadami. 2021 Naunaijainiq Kaanatami. Piinarialik:  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=9810000201#data> Piinarialik, Apitilirvia 11, 2023.



**Himmautikhainik**

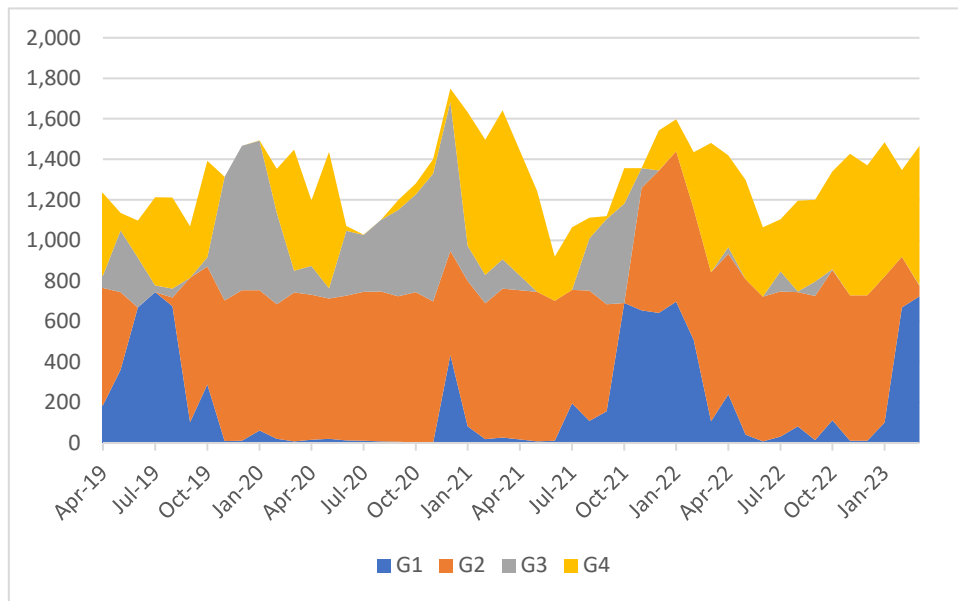
1  
 2 Tamna havaakhaq ilauqaqtuq himautikharnik aulahimajunik G3 Guascor 550 kW ingniqutikharnik  
 3 iliugaqtauhimajut nutaamik anginirmik katitirutikharnik 750 kW genset.

**2.5.2 Genset Ingniqtutit Qanuriniit uvalu Auladjutait**

5 Mittimatalikmi Pauwaqarvikhaq piqaqtuq 4nik ingniqutinik. Tamna aulajuq Guascor G3  
 6 genset taima 550 kW generator iliuraqtauhimajuq uvani 2009. Tamna genset ihualuangituq  
 7 taima pidjutigiplugit ahirruqattaqpalirmata. Munaqtiujut units naunaigtut nalunaqtut  
 8 ajurnaqtullu pihimajaangani.

9 Talvanga Qitiqqaujuq 2019 unit G3 aulahimajuq imaavjak 25 pusat ikaarniit ukiumi  
 10 (Naunaitkut 2.5-1).

**Naunaitkut 2.5-1 – Genset Run Ikaarniit – Qitiqqautijuq 2019 talvuuna Qiqajalirvia 2023**



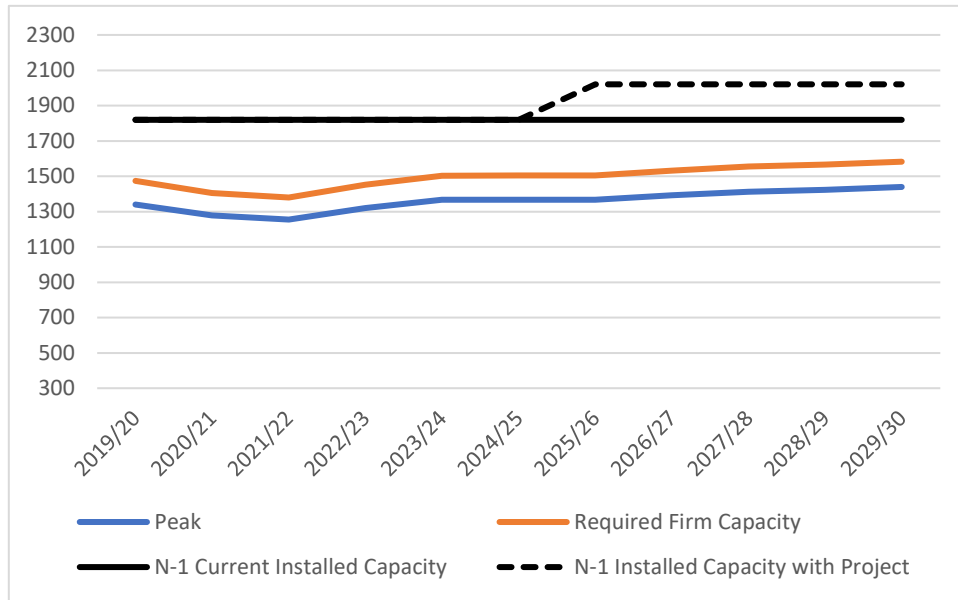
14  
 15  
 16 **2.5.3 Pijumajajuq Hailihimajuq Angumadjutikhaq**  
 17 Mittimatalik nunallaat anginiqhait amigairjuumijut hamanga 2021/22, piliuqtauplutik  
 18 ihariahungnirmik angitqiamik iliuraqtaujukhamik. Himmauhirlugu tajja unit



**Himmautikhainik**

1 ihuaqhijuumirniaqtuq ihuarninnga naunairiamilu pauwaqarvinga pijuq nunallaani  
 2 quulitqiamik nalunaqtuq hivunirmi.

**Naunaitkut 2.5-2 – Nunallaani Quijaqtunut Ihariagijaujut unalu  
 Ihariagijaujut Avikturvinga aktikkulaanga (kW)**



5

**3.0 Ilituqharnigit Havaakhat Aturniaqtut**

7 QEC-kut ilihimajut ihariagijauninganik hivunikhami pigiarutunik atuqaarniginik  
 8 anginiqhamiklu ikajuutauninganik akitujunik akiligakhanik qajangnairutikharnik  
 9 nakuujumiklu pauwaliurutikanik.

10 QEC-kut ihumagijait hapkuat qanuriliurutikhat piniarungnarhijun ihuaqhaidjutikhat  
 11 kiunikkut ihuitjutainnik tadjat atuqtaujut gensets.

**Pijakhaq 1 – Tuuliiqpaliajut Genset Himmauhiqtaujut**

13 Una pidjutikhaq ilauqaqtuq naunaijijaangat tukhiqtauhimajut genset ingilrutikharnik. Una  
 14 pijakhaq pitqujaungituq.

- 15 • Kugaaruk nunallaat anginiqhait itqurniarutait avatqulugu atuqtaujuq iliuraqtaujuq  
 16 aktilaanga imaa 2025.
- 17 • Salliq nunallaani avatquhimajuq hadja iliugaqtauhimajuq katitirutikharnik
- 18 • Igluligaarjuk genset G1 pigiarut ihulinigani inuujuhirmikni aturlugit aulaningani.



**Himmautikhainik**

- 1 • Tikirarjuaq genset G1's auladjutait ikaarniit avatqumaut 120,000 uvalu anginiqhakkut
- 2 qajangnautiqaqtuq ihuinaarnirmun.
- 3 • Mittimatalik genset G3 atuqpakhimajait aviktuqattaqattaqhugit imaalu ihuangittut.

**Pijakhaq 2 – Iniqtirugit Genset Ingniqutit IHimmautikhainik**

5 Una pidjutikhaq naunairutiqaqtuq himmautikhanik gensets tamaini nunalaani.  
 6 Naunaitkutaa 3.2-1 tunijuq hivulliqpaanga manik itqurnarutingit hapkununga  
 7 havauhikhat. Maniit atuqtaujukhat havakhimajut talvuuna kingulirmi atuqhimajanik  
 8 akikhainik aadjikiiktumik havaaqhangit.

**9 Naunaitkutaa 3.2-1 – Havaakhamut Maniit Atugakhat (\$000)**

	Kugaaruk 550kW	Salliq 720kW	Igluligaarjuk 320kW	Tikirarjua q 400kW	Mittimatalik 750kW
QEC-kut Manikhaakhait – Tamainit	278	165	184	165	220
QEC-kut Manikhaakhait – OT	78	65	53	85	90
Hunavaluit & Nunakkut Pilaarutingit	27	25	10	105	100
Tingmitikkut uhidjutat	0	0	0		0
QEC-kut Tingmidjutikhait & Itiqtirvikhanut	65	40	45	70	75
QEC-kut Niridjutait unalu Ihariattailidjutit	23	20	21	34	32
Akhaluutit & Ingilrutit Atuqtaujut	82	35	35	50	50
Ingilrutingit Niuviqhimajangit	0	0	0	0	0
Kaantraktut Havaktut	1,089	1,970	1,325	1,635	1,775
Kantraqaqtut Hunavaluit	2,204	3,145	2,125	2,265	3,690
Kantraqaqtuq Tingmidjutikhanut & Itiqtirviit	316	285	265	220	295
Kantraqaqtut Niridjutait & Ihariattailidjutit	76	125	89	68	78
Tugliata-atauttimut	4,238	5,875	4,152	4,697	6,405
Ihuaqhautaujukhat 15%	636	881	623	705	961
Aulapkaininnga unalu IDC 11%	536	743	525	594	810
<b>Atauttimut</b>	<b>5,409</b>	<b>7,499</b>	<b>5,300</b>	<b>5,996</b>	<b>8,176</b>



Himmutikhainik

1 **4.0 Akturningat Havaakhamut Akiliqtuijunut**

2 QEC-kut ilituqhahimajut akturninginik havaakhat akiliqtuijunik. Qaujimajaujukhat  
3 havaakhamut aktunigimajut akituninginik QEC-kuni Hunaliqaa Akituninginik  
4 Tuukhiqtuut pijauniganik havaakhaq atuqtaulirigani. QEC-kut havakhimajait akiit  
5 hulaqtijut naunajautit pihimajut aviktuqhimajumi akiit idjuhikhait ihumagijaujut  
6 havaakhat iniqtajut haffumanga 2026/27 maniliqinikkut ukiungani.

7 Tamna akikhanga ajungnautigivakhimajait ihivriudjutikhangit naunajagiikhimajuq talvuuna  
8 QEC-kut nallautiqhimajuq akikhangit ukuninga havaaqhangit taima \$32.380 milion.

9 Naunaitkutaa 4.1-1 nainaaqhugit kititijutaujuq nalautaaganik kiguliriinik manikhaakhanik  
10 aturiaqaqtunik akturiarniginik havaami \$2.791 million. Itqurniarutait akiit akiturjuumijut  
11 ataani aviktuqhimajumi-tamainun akiit imaa 1.47 cents/kWh.

12 **Naunaitkutaa 4.1-1 Nutaaq Genset Havaakhaq Itqurnarutaujuq Akinga**  
13 **Pilaqutinga**

Project Characteristics	
Capital Cost (\$ 000)	32,380
Amortization Period (year)	25
GRA Approved Return on Ratebase	4.62%
<u>Revenue Requirement Impacts</u>	
Amortization Expense (\$ 000)	1,295
Return on Ratebase (\$ 000)	1,495
sub-total: Revenue Requirement Increase (\$ 000)	<b>2,791</b>
<b>Total Revenue Requirement Impact (\$ 000)</b>	<b>2,791</b>
2026/27 Forecast Sales (MWh)	190,023
<b>Average Territorial Rate Increase (c/kWh)</b>	<b>1.47</b>

14  
15 Qaujimajaujariaqaqtuq una ilituqhaut pipkagaujuq naunajautuajaagani talvatuq.  
16 Akituninginut akturningit pijutiqarniaqtut tamaini manikhaanik aturiaqaqtunik  
17 akituninginulu ihuaqharniginait agiqtauhimajut Akiluangitigut Uuktuutit.



**Himmautikhainik**

1 **5.0 Nallautikhangit Ikajuutigiaqaqtun tapfuminga**

2 **Uuktuutikharnik**

3 Atulirninga atulirumajaujuq havaat atuqniqaqtuq QEC-kut kivgaqtugainik. Tamna  
4 havaakhangit ilituqhainiaqtun pidjutikharnik munarijaangat ihuarutikharnik upautijangat  
5 katitirutikharnik upalungairutikharnik atuqtakharnik.

6 Pauwatuutit ihariagijaujut kivgaqtuqtut Nunavunmi QEC-kullu upalungaijajukhat  
7 tunihilutik ihuaqtunik alrujaqtuutinik. Tamna havaakhangit ilituripkainiaqtun aulahimajunik  
8 hivunikhangit ikianiitunik katitirutikharnik, tamna pidjutikharnik himautijaangat iglukharnik  
9 haniani talvangaluuniit ihumagijauhijamajunik atuqtakharnik inuuhikharnik,  
10 ilituqhajiangatlu ihuaqhaidjutikharnik hanaqidjutikharnik aulahimajut ihualuangitumik  
11 ingniqtutikharnik unalu pigiaqaqtunik himautikharnik ilakharnik.

12 **6.0 Havaktakhat Kiklikhait**

13 Pidjutigiplugu akuniraalukmik hivuliqtinga tadjajaujut niuvirnirmut tuniqhaininnganullu  
14 hunavaluit, hapkuat havauhikhat ihumagijaujut iniqtiqtaujukhaq uumani 2025/26  
15 maniliqinirmut ukiungani. Nappaktirinirmun akiliqtuinirmun genset himmauhiqtauvaktut  
16 imaattut naatarangata malruungni ukiungni.