

Table B-2  
WAF System Base Case without Minto

WAF SALES AND GENERATION  
Base Case

Key Assumptions

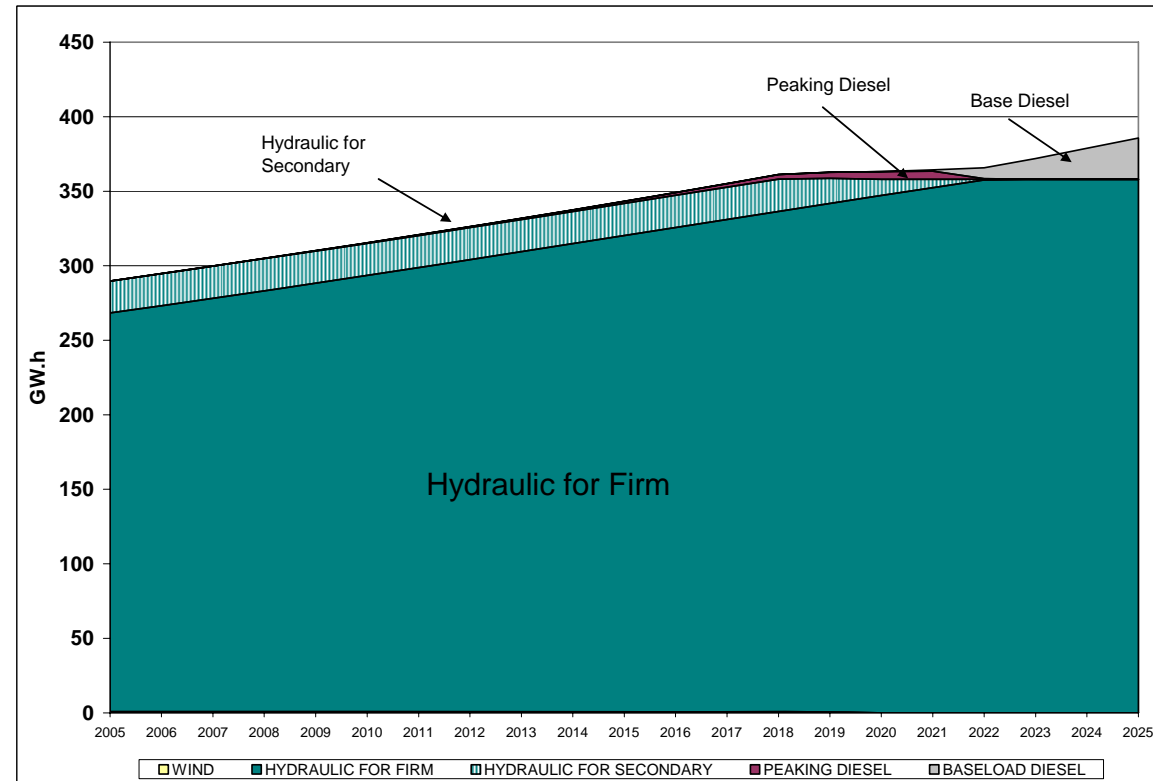
	year	Energy	Peak	loss
Industrial	Minto	no		12.70%
	PELLY	no		12.70%
	CC	no		12.70%
C - S connection	no			
Aishihik 3rd Turbine	no			
Load Forecast Sensitivity	1.85%			

Other Notes:

1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

Economic Assumptions

Peaking Diesel Efficiency	3.480	kWh/Litre
Baseload Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/Litre
MD Diesel Price per litre 2005	0.650	\$/Litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>SALES (GWh)</b>																					
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
2 firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
<b>3 INDUSTRIAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>4 TOTAL FIRM LOAD</b>	<b>268.4</b>	<b>273.3</b>	<b>278.3</b>	<b>283.3</b>	<b>288.5</b>	<b>293.8</b>	<b>299.2</b>	<b>304.7</b>	<b>310.2</b>	<b>315.9</b>	<b>321.7</b>	<b>327.6</b>	<b>333.6</b>	<b>339.7</b>	<b>345.9</b>	<b>352.3</b>	<b>358.7</b>	<b>365.3</b>	<b>372.0</b>	<b>378.8</b>	<b>385.8</b>
5 SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	15.7	10.1	5.2	0.4	0.0	0.0	0.0
6 losses	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.2	0.8	0.4	0.0	0.0	0.0	0.0
<b>7 TOTAL WAF LOAD</b>	<b>289.7</b>	<b>294.8</b>	<b>299.8</b>	<b>304.9</b>	<b>310.1</b>	<b>315.3</b>	<b>320.7</b>	<b>326.2</b>	<b>331.8</b>	<b>337.5</b>	<b>343.2</b>	<b>349.1</b>	<b>355.1</b>	<b>361.2</b>	<b>367.2</b>	<b>373.1</b>	<b>379.1</b>	<b>385.1</b>	<b>391.0</b>	<b>396.8</b>	<b>402.6</b>
<b>GENERATION (GWh)</b>																					
8 HYDRAULIC FOR FIRM	267.5	272.4	277.3	282.4	287.4	292.6	297.9	303.2	308.7	314.1	319.6	325.0	330.4	335.8	341.1	347.2	352.4	357.5	362.6	367.7	372.8
9 WIND	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
<b>10 PEAKING DIESEL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.6</b>	<b>0.8</b>	<b>1.0</b>	<b>1.4</b>	<b>1.9</b>	<b>2.4</b>	<b>3.2</b>	<b>4.1</b>	<b>5.1</b>	<b>5.6</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>11 BASELOAD DIESEL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>7.3</b>	<b>14.0</b>	<b>20.8</b>	<b>27.8</b>
<b>12 TOTAL GENERATION FOR FIRM</b>	<b>268.4</b>	<b>273.3</b>	<b>278.3</b>	<b>283.3</b>	<b>288.5</b>	<b>293.8</b>	<b>299.2</b>	<b>304.7</b>	<b>310.2</b>	<b>315.9</b>	<b>321.7</b>	<b>327.6</b>	<b>333.6</b>	<b>339.7</b>	<b>345.9</b>	<b>352.3</b>	<b>358.7</b>	<b>365.3</b>	<b>372.0</b>	<b>378.8</b>	<b>385.8</b>
13 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	16.9	10.8	5.6	0.5	0.0	0.0	0.0
<b>14 TOTAL GENERATION</b>	<b>289.7</b>	<b>294.8</b>	<b>299.8</b>	<b>304.9</b>	<b>310.1</b>	<b>315.3</b>	<b>320.7</b>	<b>326.2</b>	<b>331.8</b>	<b>337.5</b>	<b>343.2</b>	<b>349.1</b>	<b>355.1</b>	<b>361.2</b>	<b>367.2</b>	<b>373.1</b>	<b>379.1</b>	<b>385.1</b>	<b>391.0</b>	<b>396.8</b>	<b>402.6</b>
<b>SURPLUS HYDRO (GWh)</b>																					
15 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.7	358.7	358.7	358.7	358.7	358.7	358.0	358.0	358.0	358.0	358.0	358.0
16 Firm Load	268.4	273.3	278.3	283.3	288.5	293.8	299.2	304.7	310.2	315.9	321.7	327.6	333.6	339.7	345.9	352.3	358.7	365.3	372.0	378.8	385.8
<b>17 SURPLUS HYDRO/WIND FROM FIRM</b>	<b>90.5</b>	<b>85.6</b>	<b>80.6</b>	<b>75.6</b>	<b>70.4</b>	<b>65.1</b>	<b>59.7</b>	<b>54.2</b>	<b>48.5</b>	<b>42.8</b>	<b>37.0</b>	<b>31.1</b>	<b>25.1</b>	<b>19.0</b>	<b>12.8</b>	<b>5.7</b>	<b>(0.7)</b>	<b>(7.3)</b>	<b>(14.0)</b>	<b>(20.8)</b>	<b>(27.8)</b>
<b>ECONOMIC VALUES (\$000s) - WAF</b>																					
18 FUEL COSTS	6,938	0	4	18	37	60	87	122	168	231	316	430	577	765	998	1,283	1,606	1,825	3,332	5,055	6,877
19 VARIABLE O & M COSTS	639	0	0	2	3	5	7	10	14	20	27	37	49	66	86	110	139	174	320	485	660
20 SECONDARY ENERGY SALES	(12,889)	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,334)	(1,361)	(1,388)	(1,416)	(1,444)	(1,473)	(1,502)	(1,533)	(1,564)	(1,596)	(1,629)	(1,663)	(1,697)	(1,731)
<b>21 TOTAL</b>	<b>(5,311)</b>	<b>(1,174)</b>	<b>(1,208)</b>	<b>(1,228)</b>	<b>(1,238)</b>	<b>(1,243)</b>	<b>(1,240)</b>	<b>(1,229)</b>	<b>(1,206)</b>	<b>(1,165)</b>	<b>(1,101)</b>	<b>(1,007)</b>	<b>(876)</b>	<b>(702)</b>	<b>(440)</b>	<b>591</b>	<b>1,321</b>	<b>1,963</b>	<b>3,652</b>	<b>5,540</b>	<b>7,537</b>

Table B-3  
WAF System with Minto at 32.5 GW.h

**WAF SALES AND GENERATION**  
Minto 32.5 GWh starting 2009

**Key Assumptions**

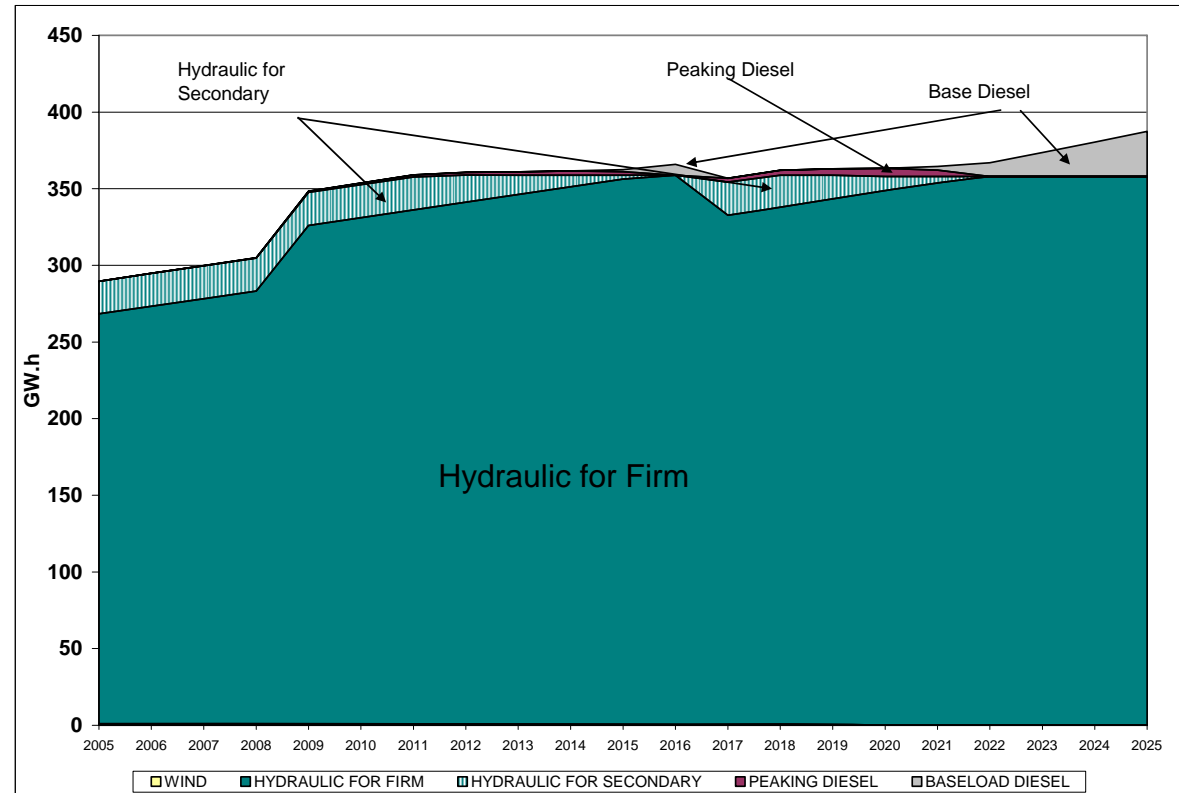
Industrial	year	Energy	Peak	loss
Minto	2008_3Q	32.5	4.4	12.70%
PELLY	2009	1.5	0.2	12.70%
CC	no			12.70%
C - S connection	no			
Aishihik 3rd Turbine	no			
Load Forecast Sensitivity	1.85%			

**Other Notes:**

1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

**Economic Assumptions**

Peaking Diesel Efficiency	3.480	kWh/Litre
Baseload Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/Litre
MD Diesel Price per litre 2005	0.650	\$/Litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>SALES (GWh)</b>																					
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
2 firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
3 INDUSTRIAL	0.0	0.0	0.0	0.0	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
4 TOTAL FIRM LOAD	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	371.7	377.5	383.3	389.1	395.0	400.9	406.8	412.7	418.6
5 SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	16.4	11.6	6.9	2.2	0.0	20.0	19.2	14.2	8.7	3.8	0.0	0.0	0.0	0.0
6 losses	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	0.9	0.5	0.2	0.0	1.5	1.5	1.1	0.7	0.3	0.0	0.0	0.0	0.0
7 TOTAL WAF LOAD	289.7	294.8	299.8	304.9	348.4	353.7	359.0	360.7	361.0	361.7	362.4	365.9	366.8	367.0	367.9	368.3	368.5	369.0	369.7	370.4	371.1
<b>GENERATION (GWh)</b>																					
8 HYDRAULIC FOR FIRM	267.5	272.4	277.3	282.4	325.2	330.2	335.3	340.3	345.5	350.6	355.6	358.0	362.0	367.4	372.7	378.0	383.3	388.6	393.9	399.2	404.5
9 WIND	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
10 PEAKING DIESEL	0.0	0.0	0.0	0.1	0.8	1.0	1.3	1.8	2.3	2.9	2.4	0.0	2.5	3.3	4.2	5.3	4.1	0.0	0.0	0.0	0.0
11 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.2	0.0	0.0	0.0	0.0	2.4	9.0	15.7	22.5	29.5
12 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	371.7	377.5	383.3	389.1	395.0	400.9	406.8	412.7	418.6
13 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	17.7	12.5	7.4	2.4	0.0	21.5	20.6	15.3	9.3	4.1	0.0	0.0	0.0	0.0
14 TOTAL GENERATION	289.7	294.8	299.8	304.9	348.4	353.7	359.0	360.7	361.0	361.7	362.4	365.9	366.8	367.0	367.9	368.3	368.5	369.0	369.7	370.4	371.1
<b>SURPLUS HYDRO (GWh)</b>																					
15 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.0	358.0	358.0	358.0	358.0	358.0
16 Firm Load	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	371.7	377.5	383.3	389.1	395.0	400.9	406.8	412.7	418.6
17 SURPLUS HYDRO/WIND FROM FIRM	90.5	85.6	80.6	75.6	32.1	26.8	21.4	15.9	10.2	4.5	(1.3)	(7.2)	23.5	17.3	11.1	4.0	(2.4)	(9.0)	(15.7)	(22.5)	(29.5)
<b>ECONOMIC VALUES (\$000s) - WAF</b>																					
18 FUEL COSTS	8,979	0	0	18	157	211	283	378	500	653	812	1,487	602	796	1,036	1,327	1,610	2,098	3,734	5,465	7,296
19 VARIABLE O & M COSTS	828	0	0	2	13	18	24	32	43	56	72	143	52	68	89	114	144	201	358	525	700
20 SECONDARY ENERGY SALES	(10,498)	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,334)	(1,117)	(803)	(488)	(162)	0	(1,502)	(1,468)	(1,112)	(690)	(311)	0	0	0
21 TOTAL	(691)	(1,174)	(1,208)	(1,228)	(1,238)	(1,112)	(1,079)	(1,027)	(707)	(261)	221	722	1,629	(848)	(604)	13	751	1,442	2,299	4,093	5,990

Table B-4  
WAF System with Minto at 32.5 GW.h with Aishihik in service 2010

**WAF SALES AND GENERATION**  
Minto 32.5 GWh starting 2009 and Aishihik 3rd Turbine in service in 2010

**Key Assumptions**

Industrial

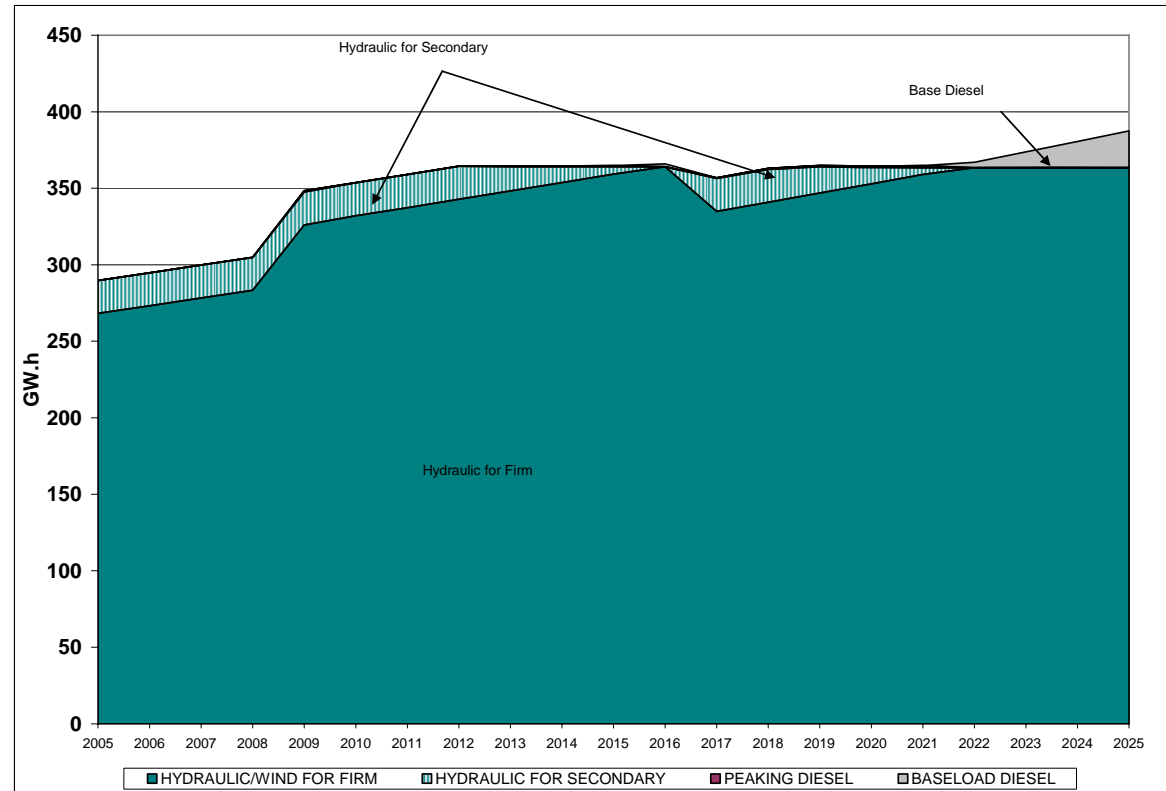
	year	Energy	Peak	loss
Minto	2009	32.5	4.4	12.70%
PELLY	2009	1.5	0.2	12.70%
CC	no			12.70%
C - S connection	no			
Aishihik 3rd Turbine	2010	5.4	7	
Load Forecast Sensitivity	1.85%			

**Other Notes:**

1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

**Economic Assumptions**

Peaking Diesel Efficiency	3.480	kWh/Litre
Baseload Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/Litre
MD Diesel Price per litre 2005	0.650	\$/Litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
<b>SALES (GWh)</b>																						
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2	
2 WAF firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6	
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	14.8	9.7	4.4	0.0	20.0	20.0	16.1	9.7	4.1	0.0	0.0	0.0	0.0	
6 losses	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.1	0.7	0.3	0.0	1.5	1.5	1.2	0.8	0.3	0.0	0.0	0.0	0.0	
7 TOTAL WAF LOAD	289.7	294.8	299.8	304.9	348.4	353.7	359.0	364.5	364.5	364.6	364.8	365.9	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5	
<b>GENERATION (GWh)</b>																						
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.2	283.3	326.1	332.1	337.4	342.7	348.2	353.7	359.4	364.1	334.9	340.8	346.8	352.9	359.0	363.4	363.4	363.4	363.4	
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	0.8	0.1	0.1	0.2	0.4	0.5	0.7	0.0	0.4	0.6	0.8	1.1	1.4	0.0	0.0	0.0	0.0	
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	3.6	10.3	17.1	24.1	
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	15.9	10.4	4.8	0.0	21.5	21.5	17.3	10.5	4.4	0.0	0.0	0.0	0.0	
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	348.4	353.7	359.0	364.5	364.5	364.6	364.8	365.9	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5	
<b>SURPLUS HYDRO (GWh)</b>																						
14 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	364.3	364.3	364.3	364.1	364.1	364.1	364.1	364.1	364.1	364.1	363.4	363.4	363.4	363.4	363.4	363.4	
15 Firm Load	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
16 SURPLUS HYDRO/WIND FROM FIRM	90.5	85.6	80.6	75.6	32.1	32.2	26.8	21.3	15.6	9.9	4.1	(1.8)	28.9	22.7	16.5	9.4	3.0	(3.6)	(10.3)	(17.1)	(24.1)	
<b>ECONOMIC VALUES (\$000s) - WAF</b>																						
18 FUEL COSTS	4,256	0	0	4	18	157	12	30	52	79	111	151	368	98	139	192	265	363	838	2,449	4,154	5,958
19 VARIABLE O & M COSTS	401	0	0	0	2	13	1	3	4	7	9	13	35	8	12	16	23	31	80	235	399	572
20 SECONDARY ENERGY SALES	(11,061)	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,334)	(1,361)	(1,027)	(683)	(321)	0	(1,502)	(1,533)	(1,255)	(777)	(332)	0	0	0	0
21 TOTAL	(6,404)	(1,174)	(1,208)	(1,228)	(1,238)	(1,112)	(1,295)	(1,302)	(1,304)	(942)	(563)	(156)	403	(1,396)	(1,382)	(1,047)	(490)	62	918	2,684	4,553	6,530

Table B-5  
WAF System with Minto at 32.5 GW.h with Aishihik in service in 2013

**WAF SALES AND GENERATION**  
Minto 32.5 GWh starting 2009 and Aishihik 3rd Turbine in service in 2013

**Key Assumptions**

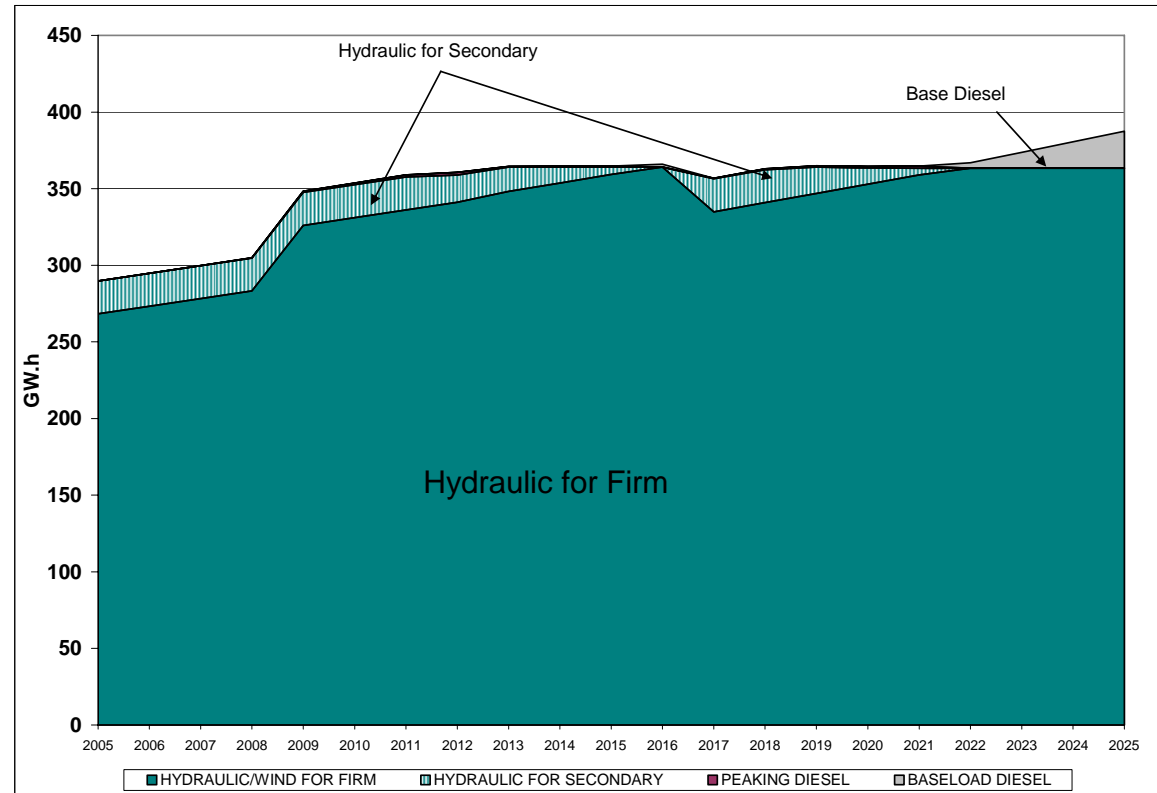
Industrial	year	Energy	Peak	loss
Minto	2009	32.5	4.4	12.70%
PELLY	2009	1.5	0.2	12.70%
CC	no			12.70%
C - S connection	no			
Aishihik 3rd Turbine	2013	5.4	7	
Load Forecast Sensitivity		1.85%		

**Other Notes:**

- Secondary sales cap is 20.0 GW.h
- Peaking dispatch assumes 56.0 MW

**Economic Assumptions**

Peaking Diesel Efficiency	3.480	kWh/Litre
Baseload Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/Litre
MD Diesel Price per litre 2005	0.650	\$/Litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	



SALES (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
2 WAF firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	16.4	14.8	9.7	4.4	0.0	20.0	20.0	16.1	9.7	4.1	0.0	0.0	0.0	0.0
6 losses	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.1	0.7	0.3	0.0	1.5	1.5	1.2	0.8	0.3	0.0	0.0	0.0	0.0
7 TOTAL WAF LOAD	289.7	294.8	299.8	304.9	348.4	353.7	359.0	360.7	364.5	364.6	364.8	365.9	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5

GENERATION (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.2	283.3	326.1	331.1	336.2	341.2	348.2	353.7	359.4	364.1	334.9	340.8	346.8	352.9	359.0	363.4	363.4	363.4	363.4
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	0.8	1.0	1.3	1.8	0.4	0.5	0.7	0.0	0.4	0.6	0.8	1.1	1.4	0.0	0.0	0.0	0.0
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	3.6	10.3	17.1	24.1
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	17.7	15.9	10.4	4.8	0.0	21.5	21.5	17.3	10.5	4.4	0.0	0.0	0.0	0.0
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	348.4	353.7	359.0	360.7	364.5	364.6	364.8	365.9	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5

SURPLUS HYDRO (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
14 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	364.1	364.1	364.1	364.1	364.1	364.1	364.1	363.4	363.4	363.4	363.4	363.4	363.4
15 Firm Load	268.4	273.3	278.3	283.3	326.8	332.1	337.5	343.0	348.6	354.2	360.0	365.9	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5
16 SURPLUS HYDRO/WIND FROM FIRM	90.5	85.6	80.6	75.6	32.1	26.8	21.4	15.9	15.6	9.9	4.1	(1.8)	28.9	22.7	16.5	9.4	3.0	(3.6)	(10.3)	(17.1)	(24.1)

ECONOMIC VALUES (\$000s) - WAF	NPV to 2005	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
18 FUEL COSTS	4,755	0	0	4	18	157	211	283	378	79	111	151	368	98	139	192	265	363	838	2,449	4,154	5,958
19 VARIABLE O & M COSTS	444	0	0	0	2	13	18	24	32	7	9	13	35	8	12	16	23	31	80	235	399	572
20 SECONDARY ENERGY SALES	(10,915)	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,334)	(1,117)	(1,027)	(683)	(321)	0	(1,502)	(1,533)	(1,255)	(777)	(332)	0	0	0	0
21 TOTAL	(5,716)	(1,174)	(1,208)	(1,228)	(1,238)	(1,112)	(1,079)	(1,027)	(707)	(942)	(563)	(156)	403	(1,396)	(1,382)	(1,047)	(490)	62	918	2,684	4,553	6,530

Table B-6  
WAF System with Minto at 42 GW.h  
**WAF SALES AND GENERATION**  
Minto 42.0 GWh starting 2009

**Key Assumptions**

Industrial  
Minto  
PELLY  
CC  
C - S connection  
Aishihik 3rd Turbine  
Load Forecast Sensitivity

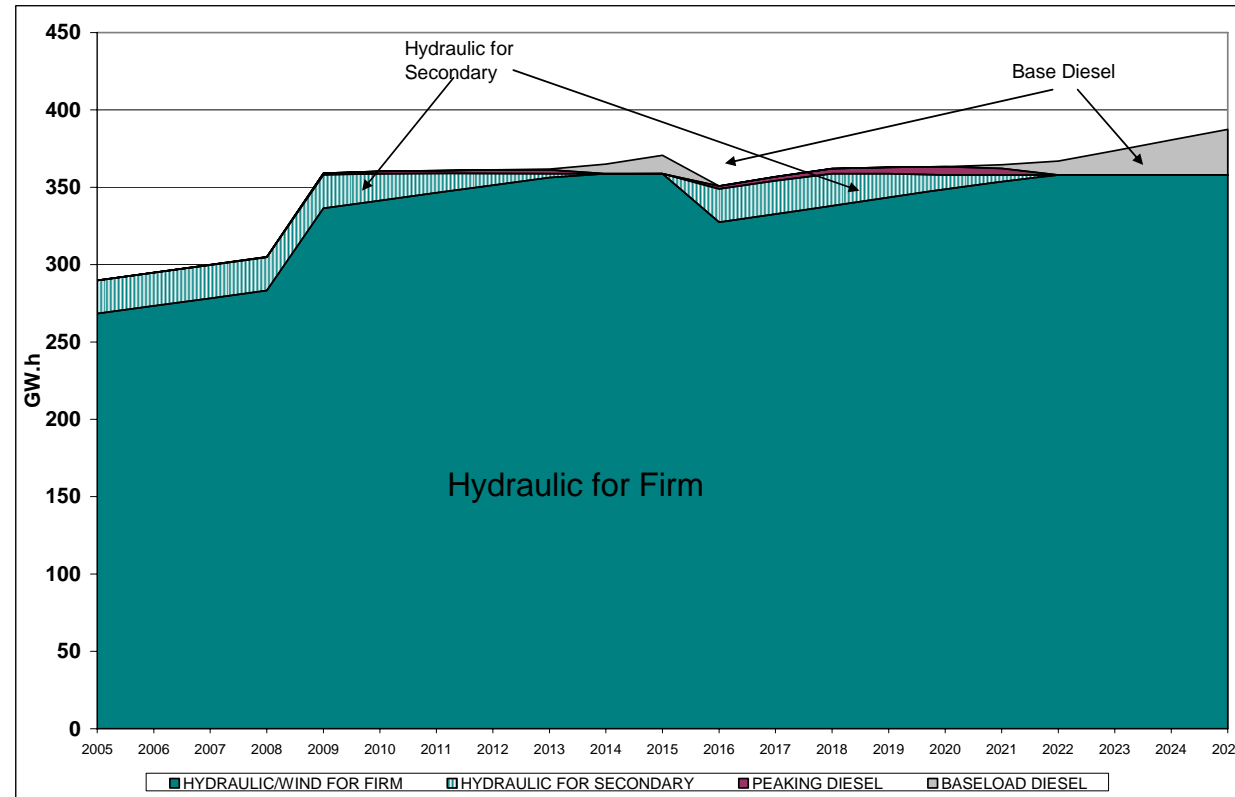
year	Energy	Peak	loss
2009	42	5.7	12.70%
2009	1.5	0.2	12.70%
no			12.70%
no			
no			
	1.85%		

**Other Notes:**

- Secondary sales cap is 20.0 GW.h
- Peaking dispatch assumes 56.0 MW

**Economic Assumptions**

Peaking Diesel Efficiency	3.480	kWh/Litre
Baseload Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/Litre
MD Diesel Price per litre 2005	0.650	\$/Litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
<b>SALES (GWh)</b>																						
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2	
2 WAF firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6	
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	16.2	11.6	7.0	2.3	0.0	0.0	20.0	20.0	19.2	14.2	8.7	3.8	0.0	0.0	0.0	0.0	
6 losses	1.5	1.5	1.5	1.5	1.5	1.2	0.9	0.5	0.2	0.0	0.0	1.5	1.5	1.5	1.1	0.7	0.3	0.0	0.0	0.0	0.0	
7 TOTAL WAF LOAD	289.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	361.7	364.9	370.7	350.8	356.8	362.0	362.9	363.3	364.5	367.0	373.7	380.5	387.5	
<b>GENERATION (GWh)</b>																						
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.2	283.3	336.5	341.4	346.4	351.3	356.3	358.7	358.7	327.3	332.7	338.1	343.4	348.7	353.9	358.0	358.0	358.0	358.0	
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	1.1	1.4	1.8	2.3	2.5	0.0	0.0	1.9	2.5	3.3	4.2	5.3	4.1	0.0	0.0	0.0	0.0	
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	6.2	12.0	0.0	0.0	0.0	0.0	0.0	2.4	9.0	15.7	22.5	29.5	
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	17.5	12.5	7.6	2.5	0.0	0.0	21.5	21.5	20.6	15.3	9.3	4.1	0.0	0.0	0.0	0.0	
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	361.7	364.9	370.7	350.8	356.8	362.0	362.9	363.3	364.5	367.0	373.7	380.5	387.5	
<b>SURPLUS HYDRO (GWh)</b>																						
14 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.7	358.7	358.7	358.7	358.7	358.7	358.7	358.0	358.0	358.0	358.0	358.0	358.0	
15 Firm Load	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
16 SURPLUS HYDROWIND FROM FIRM	90.5	85.6	80.6	75.6	21.3	16.1	10.7	5.2	(0.5)	(6.2)	(12.0)	29.5	23.5	17.3	11.1	4.0	(2.4)	(9.0)	(15.7)	(22.5)	(29.5)	
<b>ECONOMIC VALUES (\$000s) - WAF</b>																						
18 FUEL COSTS	9,921	0	0	4	18	217	289	383	504	642	1,236	2,436	450	602	796	1,036	1,327	1,610	2,098	3,734	5,465	7,296
19 VARIABLE O & M COSTS	920	0	0	0	2	19	25	33	43	56	119	234	39	52	68	89	114	144	201	358	525	700
20 SECONDARY ENERGY SALES	(9,550)	(1,174)	(1,208)	(1,233)	(1,257)	(1,061)	(775)	(478)	(159)	0	0	(1,473)	(1,502)	(1,468)	(1,112)	(690)	(312)	0	0	0	0	0
21 TOTAL	1,292	(1,174)	(1,208)	(1,228)	(1,238)	(1,047)	(747)	(359)	69	539	1,354	2,669	(985)	(848)	(604)	13	751	1,442	2,299	4,093	5,990	7,996

Table B-7  
WAF System with Minto at 42 GW.h with Aishihik in service in 2010

**WAF SALES AND GENERATION**  
Minto 42.0 GWh starting 2009 and Aishihik 3rd Turbine in service in 2010

**Key Assumptions**

Industrial	
	Minto
	PELLY
	CC
C - S connection	
Aishihik 3rd Turbine	
Load Forecast Sensitivity	1.85%

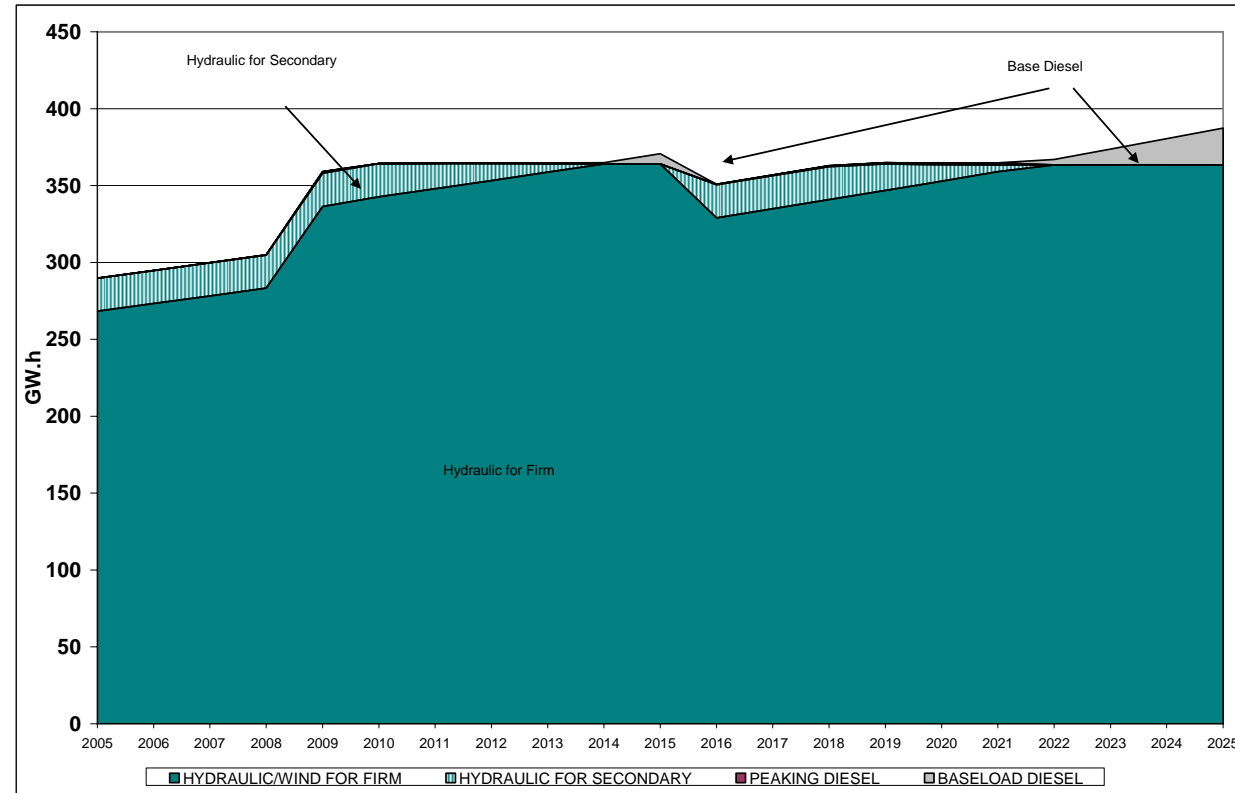
year	Energy	Peak	loss
2009	42	5.7	12.70%
2009	1.5	0.2	12.70%
no			12.70%
no			
2010	5.4	7	
1.85%			

**Other Notes:**

1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

**Economic Assumptions**

Peaking Diesel Efficiency	3.480	kWh/Litre
Baseload Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/Litre
MD Diesel Price per litre 2005	0.650	\$/Litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
<b>SALES (GWh)</b>																						
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2	
2 WAF firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6	
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	15.2	10.2	5.0	0.0	0.0	20.0	20.0	20.0	16.1	9.7	4.1	0.0	0.0	0.0	0.0	
6 losses	1.5	1.5	1.5	1.5	1.5	1.5	1.2	0.8	0.4	0.0	0.0	1.5	1.5	1.5	1.2	0.8	0.3	0.0	0.0	0.0	0.0	
7 TOTAL WAF LOAD	289.7	294.8	299.8	304.9	359.1	364.4	364.6	364.7	364.6	364.9	370.7	350.8	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5	
<b>GENERATION (GWh)</b>																						
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.2	283.3	336.5	342.7	347.9	353.3	358.7	364.1	364.1	329.0	334.9	340.8	346.8	352.9	359.0	363.4	363.4	363.4	363.4	
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	1.1	0.2	0.3	0.4	0.5	0.0	0.0	0.3	0.4	0.6	0.8	1.1	1.4	0.0	0.0	0.0	0.0	
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	6.6	0.0	0.0	0.0	0.0	0.0	0.0	3.6	10.3	17.1	24.1	
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	16.4	11.0	5.4	0.0	0.0	21.5	21.5	21.5	17.3	10.5	4.4	0.0	0.0	0.0	0.0	
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	359.1	364.4	364.6	364.7	364.6	364.9	370.7	350.8	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5	
<b>SURPLUS HYDRO (GWh)</b>																						
14 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	364.3	364.3	364.3	364.1	364.1	364.1	364.1	364.1	364.1	364.1	363.4	363.4	363.4	363.4	363.4	363.4	
15 Firm Load	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
16 SURPLUS HYDRO/WIND FROM FIRM	90.5	85.6	80.6	75.6	21.3	21.5	16.1	10.6	4.9	(0.8)	(6.6)	34.9	28.9	22.7	16.5	9.4	3.0	(3.6)	(10.3)	(17.1)	(24.1)	
<b>ECONOMIC VALUES (\$000s) - WAF</b>																						
18 FUEL COSTS	4,831	0	0	4	18	217	32	54	80	111	160	1,339	66	98	139	192	265	363	838	2,449	4,154	5,958
19 VARIABLE O & M COSTS	456	0	0	0	2	19	3	5	7	10	15	128	6	8	12	16	23	31	80	235	399	572
20 SECONDARY ENERGY SALES	(10,224)	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,013)	(694)	(347)	0	0	(1,473)	(1,502)	(1,533)	(1,255)	(777)	(332)	0	0	0	0
21 TOTAL	(4,936)	(1,174)	(1,208)	(1,228)	(1,238)	(1,047)	(1,273)	(954)	(608)	(226)	175	1,467	(1,402)	(1,396)	(1,382)	(1,047)	(490)	62	918	2,684	4,553	6,530



Table B-8  
WAF System with Minto at 42 GW.h with Aishihik in service in 2013

**WAF SALES AND GENERATION**  
Minto 42.0 GWh starting 2009 and Aishihik 3rd Turbine in service in 2013

**Key Assumptions**

Industrial	
	Minto
	PELLY
	CC
C - S connection	
Aishihik 3rd Turbine	
Load Forecast Sensitivity	

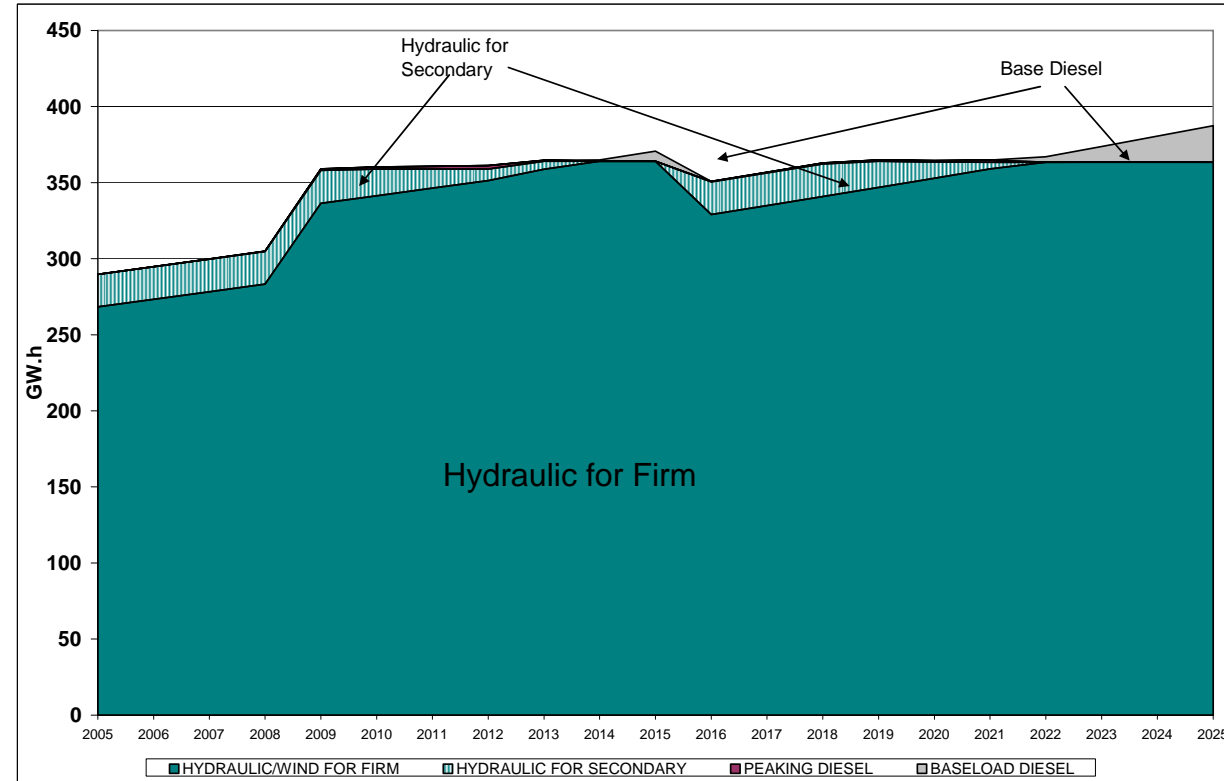
year	Energy	Peak	loss
2009	42	5.7	12.70%
2009	1.5	0.2	12.70%
no			12.70%
no			
2013	5.4	7	
1.85%			

**Other Notes:**

1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

**Economic Assumptions**

Peaking Diesel Efficiency	3.480	kWh/Litre
Baseload Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/Litre
MD Diesel Price per litre 2005	0.650	\$/Litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
<b>SALES (GWh)</b>																						
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2	
2 WAF firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6	
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	16.2	11.6	7.0	5.0	0.0	0.0	20.0	20.0	20.0	16.1	9.7	4.1	0.0	0.0	0.0	0.0	
6 losses	1.5	1.5	1.5	1.5	1.5	1.2	0.9	0.5	0.4	0.0	0.0	1.5	1.5	1.5	1.2	0.8	0.3	0.0	0.0	0.0	0.0	
7 TOTAL WAF LOAD	289.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	364.6	364.9	370.7	350.8	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5	
<b>GENERATION (GWh)</b>																						
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.2	283.3	336.5	341.4	346.4	351.3	358.7	364.1	364.1	329.0	334.9	340.8	346.8	352.9	359.0	363.4	363.4	363.4	363.4	
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	1.1	1.4	1.8	2.3	0.5	0.0	0.0	0.3	0.4	0.6	0.8	1.1	1.4	0.0	0.0	0.0	0.0	
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	6.6	0.0	0.0	0.0	0.0	0.0	3.6	10.3	17.1	24.1		
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	17.5	12.5	7.6	5.4	0.0	0.0	21.5	21.5	21.5	17.3	10.5	4.4	0.0	0.0	0.0	0.0	
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	364.6	364.9	370.7	350.8	356.8	362.9	364.9	364.5	364.8	367.0	373.7	380.5	387.5	
<b>SURPLUS HYDRO (GWh)</b>																						
14 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	364.1	364.1	364.1	364.1	364.1	364.1	364.1	363.4	363.4	363.4	363.4	363.4	363.4	
15 Firm Load	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	329.3	335.3	341.4	347.6	354.0	360.4	367.0	373.7	380.5	387.5	
16 SURPLUS HYDRO/WIND FROM FIRM	90.5	85.6	80.6	75.6	21.3	16.1	10.7	5.2	4.9	(0.8)	(6.6)	34.9	28.9	22.7	16.5	9.4	3.0	(3.6)	(10.3)	(17.1)	(24.1)	
<b>ECONOMIC VALUES (\$000s) - WAF</b>																						
18 FUEL COSTS	5,478	0	0	4	18	217	289	383	504	111	160	1,339	66	98	139	192	265	363	838	2,449	4,154	5,958
19 VARIABLE O & M COSTS	511	0	0	0	2	19	25	33	43	10	15	128	6	8	12	16	23	31	80	235	399	572
20 SECONDARY ENERGY SALES	(9,768)	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,061)	(775)	(478)	(347)	0	0	(1,473)	(1,502)	(1,533)	(1,255)	(777)	(332)	0	0	0	
21 TOTAL	(3,778)	(1,174)	(1,208)	(1,228)	(1,238)	(1,047)	(747)	(359)	69	(226)	175	1,467	(1,402)	(1,396)	(1,382)	(1,047)	(490)	62	918	2,684	4,553	6,530