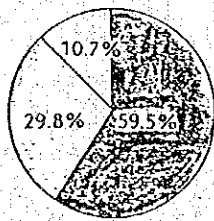


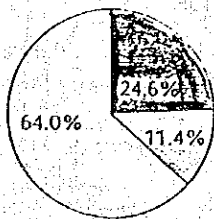
ON-GOING GENERATION PROJECTS

LUZON



KALAYAAN PUMPED STORAGE

- 2 x 150 MW
- June 1982
- € P2,016 M



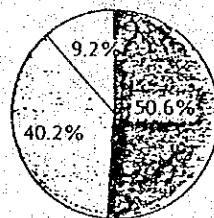
PHILIPPINE NUCLEAR

- 1 x 620 MW
- February 1985
- € P14,261 M b/

Notes & Legend

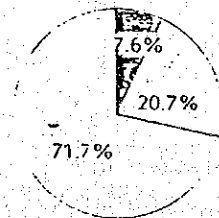
- - Completed in 1980
- - Accomplished in 1981
- - Still to be accomplished

- - Installed capacity
- - Commercial Operation of 1st unit
- € - Estimated project cost
- a/ - Includes 42.6% of dam cost allocated to power
- b/ - Cost of plant proper only



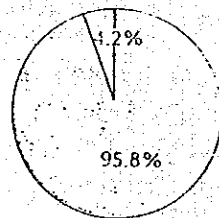
TIWI GEOTHERMAL 5 & 6

- 2 x 55 MW
- March 1982
- € P939 M



MAGAT HYDRO

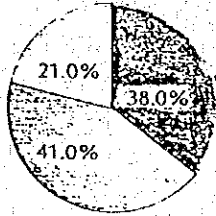
- 4 x 90 MW
- August 1983
- € P2,715 M a/



DENDRO (PILOT) THERMAL

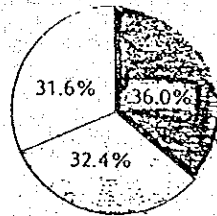
- 1 x 0.55 MW
- March 1982
- € P10 M

VISAYAS



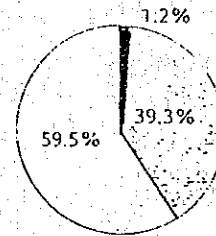
CEBU DIESEL II

- 3 x 18 MW
- April 1982
- P408 M



TONGONAN GEOTHERMAL II

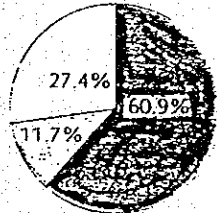
- 3 x 37.5 MW
- February 1983
- P900 M



PALIMPINON GEOTHERMAL I

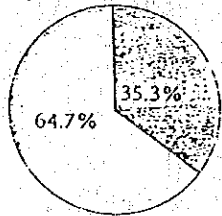
- 3 x 37.5 MW
- April 1983
- 848 M

MINDANAO



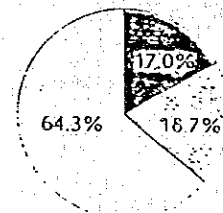
AGUS I HYDRO

- 2 x 40 MW
- April 1983
- P879 M



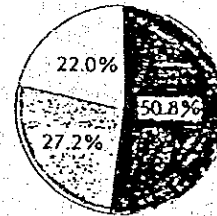
AGUS V HYDRO

- 2 x 27.5 MW
- August 1983
- P295 M



AGUS IV HYDRO

- 3 x 50 MW
- September 1984
- P803 M



AGUS VII HYDRO

- 2 x 27 MW
- November 1982
- P696 M

參考資料 5

HISTORICAL & PROJECTED ENERGY
GENERATION AND PEAK DEMAND
LUCON GRID

	CALENDAR YEAR	DEMAND (MW)	ENERGY (GWH)	LOAD FACTOR %
<u>ACTUAL</u>	1955	128	705	70.0
	1960	287	1750	69.6
	1965	569	3381	67.8
	1970	1111	6386	65.6
	1971	1205	7048	66.8
	1972	1331	7555	64.8
	1973	1335	8212	70.2
	1974	1379	8240	68.2
	1975	1513	9014	68.0
	1976	1659	9626	66.2
	1977	1709	10357	69.2
	1978	1780	11223	71.9
	1979	1926	12097	71.7
	1980	2070	13113	72.0
<u>FORECAST</u>	1981	2240	13750	70.0
	1982	2400	15080	70.0
	1983	2565	16140	70.0
	1984	2745	17240	70.0
	1985	2940	18420	70.0
	1986	3145	19680	70.0
	1987	3365	21030	70.0
	1988	3600	22475	70.0
	1989	3850	24020	70.0
	1990	4120	25675	70.0
	1991	4390	27320	70.0
	1992	4670	29070	70.0
	1993	4975	30930	70.0
	1994	5300	32915	70.0
	1995	5645	35030	70.0
	1996	5985	37105	70.0
1997	6340	39310	70.0	
1998	6725	41645	70.0	
1999	7125	44120	70.0	
2000	7555	46740	70.0	

AVERAGE ANNUAL GROWTH RATE

<u>ACTUAL</u>	1956 - 1960	17.5%	17.4%
	1961 - 1965	14.7%	14.1%
	1966 - 1970	14.3%	13.6%
	1971 - 1975	6.4%	7.1%
	1976 - 1980	6.5%	7.8%
<u>FORECAST</u>	1981 - 1985	7.0%	7.0%
	1986 - 1990	7.0%	6.9%
	1991 - 1995	6.5%	6.4%
	1996 - 2000	6.0%	5.9%

SPD-CORPLAN
3-19-81

LEYTE-SAMAR GRID
PEAK DEMAND & ENERGY GENERATION

CALENDAR YEAR	NPC		OTHERS		TOTAL UTILITIES		INDUSTRIES		TOTAL	
	MW	GWH	MW	GWH	MW	GWH	MW	GWH	MW	GWH
ACTUAL										
1968	-	-	3.1	12.7	3.1	12.7	-	-	3.1	12.7
1969	-	-	3.7	15.8	3.7	15.8	-	-	3.7	15.8
1970	-	-	3.9	17.6	3.9	17.6	-	-	3.9	17.6
1971	-	-	4.0	18.1	4.0	18.1	-	-	4.0	18.1
1972	-	-	3.9	20.0	3.9	20.0	-	-	3.9	20.0
1973	-	-	3.2	13.9	3.2	13.9	-	-	3.2	13.9
1974	-	-	3.4	14.8	3.4	14.8	-	-	3.4	14.8
1975	-	-	5.8	23.9	5.8	23.9	-	-	5.8	23.9
1971-1975	-	-	8.3%	6.3%	8.3%	6.3%	-	-	8.3%	6.3%
1976	-	-	6.6	27.5	6.6	27.5	-	-	6.6	27.5
1977	-	-	6.9	28.9	6.9	28.9	-	-	6.9	28.9
1978	2.0	6.0	11.0	37.0	13.0	43.0	-	-	13.0	43.0
1979	4.0	12.0	11.0	37.0	15.0	49.0	-	-	15.0	49.0
1980	6.0	19.0	11.0	37.0	17.0	56.0	-	-	17.0	56.0
1976-1980	-	-	13.6%	9.1%	24.0%	18.6%	-	-	24.0%	18.6%
FORECAST										
1981	8.0	27.0	11.0	37.0	19.0	64.0	-	-	19.0	64.0
1982	11.0	36.0	11.0	37.0	22.0	73.0	-	-	22.0	73.0
1983	25.0	83.0	-	-	25.0	83.0	5	105	30.0	188.0
1984	29.0	94.0	-	-	29.0	94.0	21	180	50.0	274.0
1985	33.0	108.0	-	-	33.0	108.0	37	235	70.0	344.0
1981-1985	41%	42%	-	-	14.2%	14.0%	-	-	32.7%	43.7%
1986	37.0	123.0	-	-	37.0	123.0	43	265	80.0	388.0
1987	42.0	140.0	-	-	42.0	140.0	48	290	90.0	430.0
1988	48.0	159.0	-	-	48.0	159.0	52	300	100.0	459.0
1989	55.0	182.0	-	-	55.0	182.0	65	335	120.0	517.0
1990	63.0	207.0	-	-	63.0	207.0	62	350	125.0	557.0
1986-1990	14%	14%	-	-	13.8%	13.9%	10.8%	8.3%	12.3%	10.1%
1991-1990	27%	27%	-	-	14.0%	13.9%	-	-	22.1%	25.8%

MINDANAO HISTORICAL & PROJECTED ENERGY
GENERATION AND PEAK DEMAND

CALENDAR YEAR	DEMAND (MW) ^{1/}	GENERATION LEVEL		
		ENERGY TOTAL	GWH NFC	OTHERS ^{2/}
<u>ACTUAL</u>				
1970	68	505	362	143
1971	74	544	372	172
1972	77	574	368	206
1973	88	704	483	221
1974	95	734	520	214
1975	120	821	574	247
1971-1975 Growth Rate	12.0%	10.2%	9.7%	11.5%
1976	126	1038	768	270
1977	162	1188	891	297
1978	174	1411	1065	346
1979	194	1520	1140	380
1980	264	1705	1620	85
1976-1980 Growth Rate	17.1%	15.7%	23.1%	-19.2%
1971-1980 Growth Rate	14.5%	12.9%	16.2%	- 5.0%
<u>FORECAST</u>				
1981	355	2215	2130	85
1982	405	2485	2435	50
1983	465	2785	2785	-
1981-1983 Growth Rate	20.7%	17.8%	19.8%	-
1984	520	3115	3115	-
1985	580	3490	3490	-
1986	650	3910	3910	-
1987	730	4380	4380	-
1988	815	4905	4905	-
1989	915	5495	5495	-
1990	1025	6150	6150	-
1984-1990 Growth Rate	12.0%	12.0%	12.0%	-
1981-1990 Growth Rate	14.5%	13.7%	14.3%	-

1/ - Energy Loss is estimated at 5.0% and Annual Load Factor at 68.5% (NFC Demand Only)

2/ - Davao Light & Power Co., Cotabato Light & Power Co. and Zamboanga City Electric Cooperative.

SPD - CORFLAN
10-22-81

參考資料 6

MAJOR NPC INDUSTRIAL PROSPECTS IN MINDANAO

<u>YEAR</u>	<u>NATIONAL STEEL CORPORATION (after Minimum Recycle)</u>		<u>PHIL. ALUMINUM</u>	
	<u>MW</u>	<u>GWH</u>	<u>MW</u>	<u>GWH</u>
1983	20	259	-	-
1984	80	712	-	-
1985	214	1723	-	-
1986	185	1502	60	518
1987	140	1163		
1988	203	1638		
1989	203	1638		
1990	254	2022		
1991	315	2481		
1992	315	2481		
1993	315	2481		
1994	315	2481		
1995	315	2481		

NOTES:

1. National Steel Corporation will generate part of their power requirement by utilizing the plant's process steam.
2. The power requirement of Phil. Aluminum shown is approximately one fourth of its original requirement of 220 MW pending final decision on the plant's capacity.

參考資料 7

LOAD FORECAST AND KW/KWH BALANCE
LEYTE - SAMAR GRID

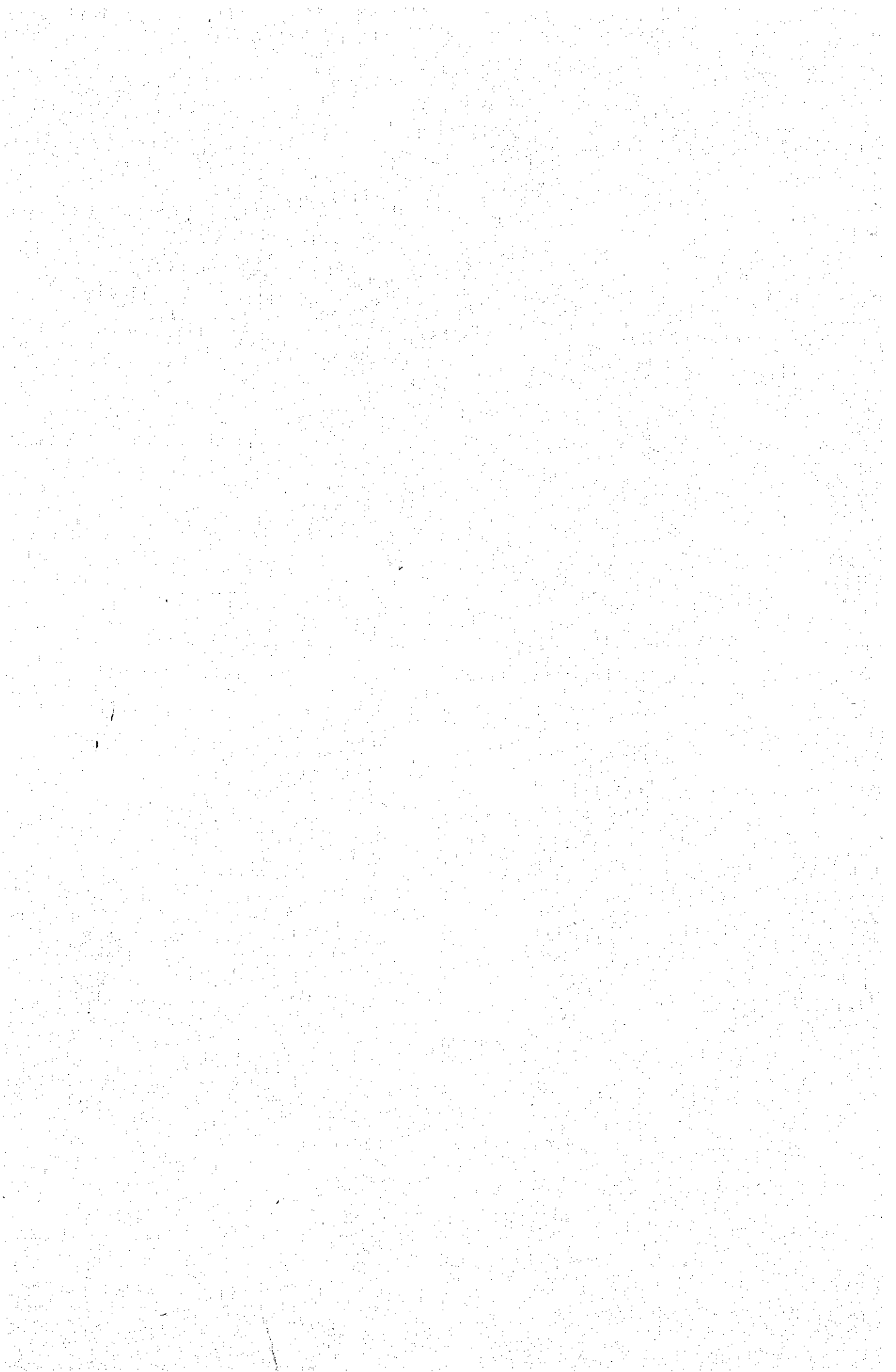
YEAR	POWER SUPPLY			LOAD			SURPLUS	
	INSTALLED (MW)	DEPENDABLE		GENERATION LEVEL			MW	GWH
		MW	GWH	MW	GWH	(L.F.%)		
1981	35	30.5	216	20	40	(23)	-	176
1982	35	30.5	216	36	186	(59)	-	30
1983	147.5	137	951	80	434	(62)	57	517
1984	147.5	137	951	105	565	(61)	32	386
1985	147.5	137	951	108	577	(61)	29	374
1986	587.5	537	4,127	110	789	(82)	427	3,338
1987	587.5	537	4,127	113	804	(81)	424	3,323
1988	587.5	537	4,127	117	822	(80)	420	3,305
1989	587.5	537	4,127	120	841	(80)	417	3,286
1990	587.5	537	4,127	123	864	(80)	414	3,263
1991	807.5	737	5,715	126	883	(80)	611	4,832
1992	1,027.5	937	7,303	130	911	(80)	807	6,392
1993	1,137.5	1,037	8,097	133	932	(80)	904	7,165
1994	1,137.5	1,037	8,097	137	960	(80)	900	7,137
1995	1,137.5	1,037	8,097	141	988	(80)	896	7,109
1996	1,137.5	1,037	8,097	144	1,009	(80)	893	7,088
1997	1,137.5	1,037	8,097	148	1,037	(80)	889	7,060
1998	1,137.5	1,037	8,097	152	1,065	(80)	885	7,032
1999	1,137.5	1,037	8,097	156	1,093	(80)	881	7,004
2000	1,137.5	1,037	8,097	161	1,128	(80)	876	6,969

Average Annual Growth Rate (%)

1981 - 1984	73.8	141.7
1981 - 2000	11.6	19.2
1984 - 1990	2.7	7.3
1984 - 2000	2.7	4.4

NOTE: (1) Load forecast was made by NAPOCOR for 1981-1990 and by JICA for 1991-2000.

(2) Estimate of energy requirement (GWH) for 1991-2000 was made by JICA by assuming the load factor of 80%.



NPC - MINDANAO GRID
POTENTIAL LOAD FORECAST
BY BULK SUBSTATION

参考資料 8

AREAS/CUSTOMERS	1981		1982		1983		1984		1985		1986		1987		1988		1989		1990	
	KW	MWH	KW	MWH	KW	MWH	KW	MWH	KW	MWH	KW	MWH	KW	MWH	KW	MWH	KW	MWH	KW	MWH
I. NORTHEASTERN MINDANAO AREA																				
Lugait	47,180	214,070	49,235	221,495	50,620	229,750	51,520	235,260	53,440	247,855	55,730	256,290	57,690	270,130	58,925	276,650	64,375	306,366	70,505	327,858
Amlaya	26,740	135,260	29,280	148,780	31,160	163,750	32,530	176,860	35,300	191,480	38,100	206,810	39,700	219,230	41,900	232,380	44,500	246,350	47,100	260,850
PSC	35,000	210,000	35,000	210,000	35,000	210,000	35,000	210,000	35,000	210,000	35,000	210,000	35,000	210,000	35,000	210,000	35,000	210,000	35,000	210,000
Taoloan	-	-	10,000	52,500	26,700	105,300	33,000	172,000	67,000	358,000	90,500	531,700	91,500	560,158	91,500	619,000	91,500	619,000	91,500	619,000
Suluan	29,280	129,300	30,050	136,700	32,440	147,280	34,350	161,780	35,100	177,300	36,600	183,440	37,900	192,500	39,000	203,800	40,900	216,900	43,100	232,400
Manila Paper Mills	-	-	-	-	-	-	-	-	-	-	-	-	35,500	124,392	36,000	141,912	45,000	177,390	45,000	177,390
Suricao	-	-	-	-	-	-	13,000	54,300	14,300	59,800	15,400	65,400	16,200	70,100	17,100	74,800	18,100	79,600	19,100	84,700
MHC	-	-	-	-	-	-	15,000	65,700	20,000	87,600	20,000	105,000	22,000	115,600	34,000	178,704	40,000	210,240	48,000	252,288
SUB-TOTAL	137,200	688,630	152,065	769,475	175,920	856,080	204,400	1,026,900	250,140	1,272,035	281,330	1,498,640	325,490	1,599,110	343,025	1,869,246	362,375	1,989,316	387,395	2,088,496
II. SOUTHEASTERN MINDANAO AREA																				
Davao	79,129	347,000	75,000	327,900	73,300	325,900	77,700	399,000	83,100	428,600	87,700	452,400	92,700	478,700	98,400	507,300	119,100	594,590	132,800	631,056
Kenet	-	-	-	-	13,800	49,800	14,400	62,000	15,300	65,600	20,700	97,700	21,400	104,600	22,000	107,400	22,700	110,300	23,400	113,600
APEX	-	-	-	-	1,800	9,500	1,800	9,500	1,800	9,500	1,800	10,200	1,800	10,200	1,800	10,200	1,800	10,200	1,800	10,200
NEPC	-	-	5,000	26,300	10,000	52,600	16,000	84,000	20,000	105,000	30,000	170,800	30,000	170,000	40,000	227,760	40,000	227,760	40,000	227,760
Kibawe	2,400	5,400	2,600	6,000	4,200	9,300	4,600	11,100	6,500	19,200	6,900	20,600	7,200	21,700	7,600	22,700	7,900	23,900	8,400	25,200
Bislio	-	-	-	-	2,150	6,800	3,450	11,950	3,800	13,100	4,140	14,200	4,480	15,800	4,780	16,800	5,050	17,800	5,380	19,000
PICOP	-	-	-	-	-	-	-	-	-	-	-	-	30,000	157,639	50,500	218,896	80,000	416,275	100,000	543,120
SUB-TOTAL	72,529	352,400	83,600	410,200	95,250	505,990	117,950	578,150	130,500	640,800	151,240	765,900	187,580	958,680	215,080	1,111,056	276,550	1,400,925	317,780	1,631,736
III. NORTHWESTERN MINDANAO AREA																				
Zamboanga City	8,000	31,500	14,000	55,138	15,895	55,219	17,299	73,785	18,263	78,840	18,942	82,426	20,249	87,641	21,545	92,530	22,489	97,564	26,478	113,798
Aurora	16,963	61,910	20,550	77,931	23,406	75,390	24,576	102,573	26,234	109,135	28,101	116,861	29,275	122,514	30,481	128,506	31,942	133,740	37,666	155,575
Kebesalan	2,000	7,100	3,000	12,270	5,400	19,890	6,550	23,650	6,850	24,440	7,150	25,230	7,550	26,280	7,950	27,330	8,450	28,640	10,050	34,335
MC-Abasa	171,398	880,360	174,321	916,753	177,847	934,365	169,855	909,209	172,760	925,751	175,798	944,321	178,322	964,467	182,249	988,920	191,517	1,064,940	219,637	1,222,521
Agus I	-	-	-	-	-	-	12,057	43,840	13,256	47,508	13,877	51,309	14,751	54,579	15,509	57,853	16,395	61,325	23,540	87,488
Agus IV	-	-	-	-	-	-	-	-	-	-	-	-	-	35,000	109,000	35,000	110,376	40,000	126,144	
SUB-TOTAL	198,271	983,970	212,271	1,052,242	222,548	1,115,985	230,337	1,153,057	237,363	1,185,674	243,868	1,220,147	250,147	1,255,481	293,734	1,404,139	305,793	1,496,585	357,371	1,739,861
IV. SOUTHWESTERN MINDANAO AREA																				
General Santos City	-	-	9,000	33,363	13,573	49,990	14,534	51,400	15,858	53,300	16,908	62,200	17,879	65,800	18,951	69,700	21,150	79,289	27,000	92,505
Tacubong	-	-	-	-	3,000	7,834	3,450	10,275	3,970	12,529	4,560	15,179	5,250	18,400	6,030	21,130	7,940	31,299	10,100	39,814
Nalire	-	-	9,050	39,700	24,750	103,216	27,500	109,810	28,705	115,730	30,070	122,905	31,531	129,529	33,686	138,439	43,090	172,972	49,440	195,955
SUB-TOTAL	-	-	18,050	73,063	41,323	155,050	45,484	171,425	48,533	179,559	51,538	199,284	54,660	203,729	60,667	219,269	74,180	283,559	85,540	312,275
GRAND TOTAL (CUSTOMER LEVEL)	409,000	2,025,000	465,995	2,315,000	535,041	2,645,015	598,171	2,960,592	666,536	3,315,058	727,976	3,714,771	817,877	4,160,000	932,596	4,659,710	1,024,398	5,220,415	1,147,986	5,815,169

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial reporting and compliance with regulatory requirements. The text highlights that without reliable records, organizations risk mismanagement, fraud, and legal consequences.

2. The second section focuses on the role of internal controls in preventing errors and detecting fraud. It outlines various control mechanisms such as segregation of duties, authorization procedures, and regular audits. The document stresses that a robust internal control system is not only a defensive measure but also a tool for improving operational efficiency and reducing costs.

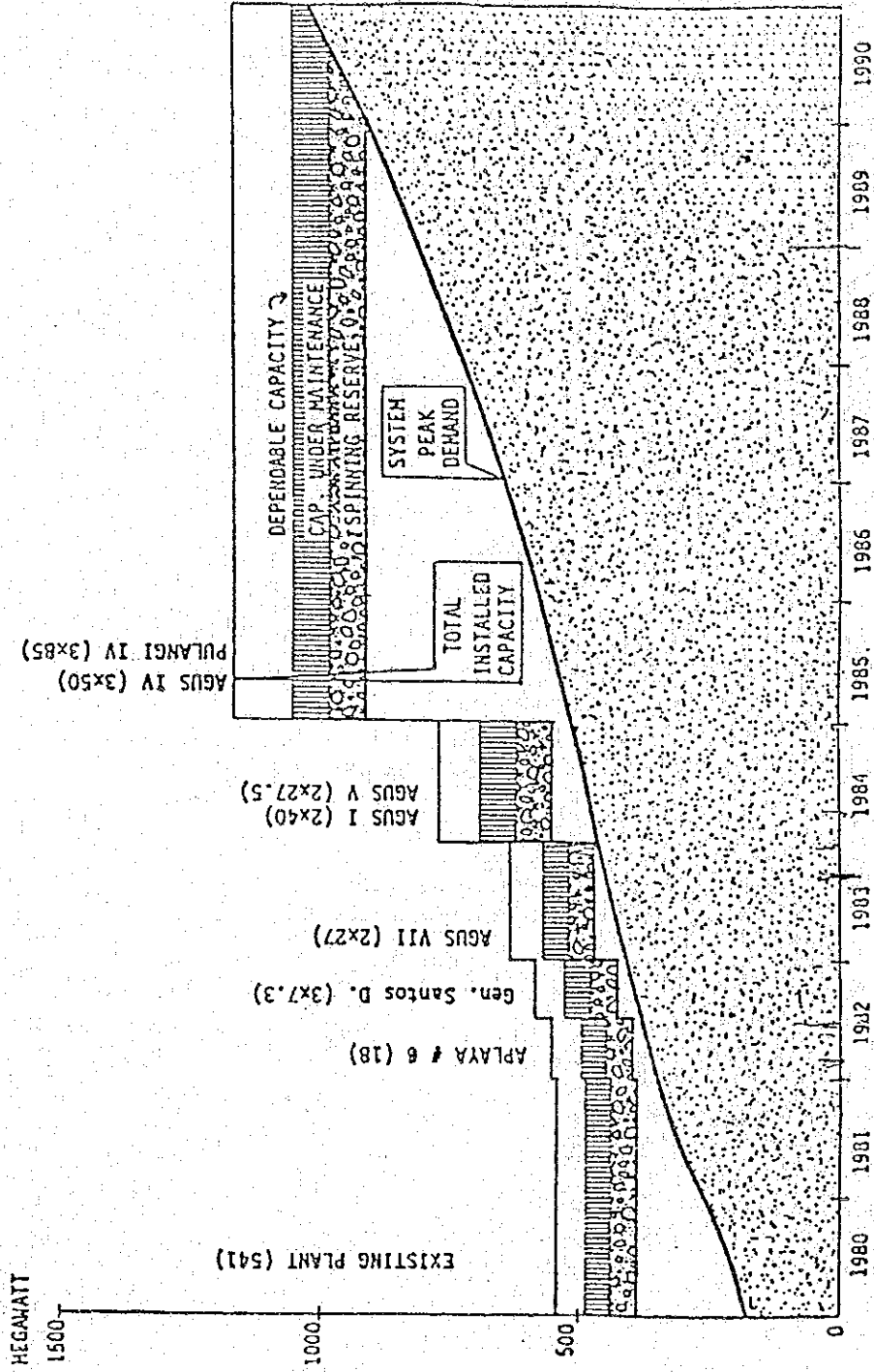
3. The third part of the document addresses the challenges of data security and privacy in the digital age. It discusses the risks associated with data breaches, including financial loss, reputational damage, and legal liabilities. The text provides guidance on implementing strong security protocols, such as encryption, access controls, and regular security updates, to protect sensitive information.

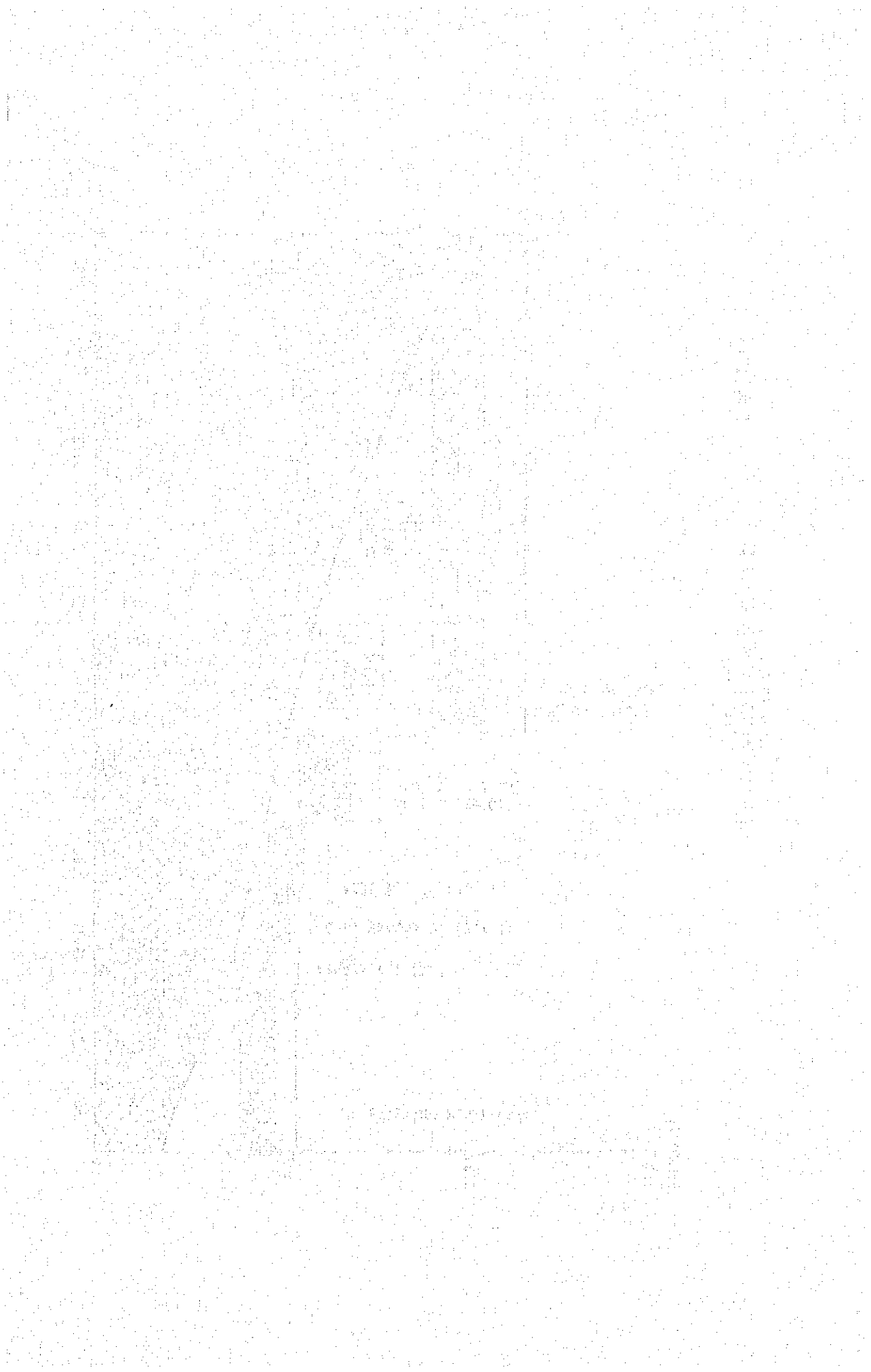
4. The fourth section explores the impact of technology on business operations and decision-making. It highlights how digital tools and automation can streamline processes, reduce human error, and provide valuable insights through data analytics. However, it also notes the need for ongoing training and investment in technology to stay competitive in a rapidly changing market.

5. The final part of the document discusses the importance of ethical leadership and corporate social responsibility (CSR). It argues that ethical behavior is not just a moral imperative but also a strategic advantage that can enhance a company's reputation, attract talent, and build long-term relationships with stakeholders. The text encourages leaders to set a clear ethical tone and to integrate CSR into the core business strategy.

MINDANAO GRID
 SYSTEM PEAK DEMAND & CAPABILITY CURVE
 (1981-1990)

參考資料 9

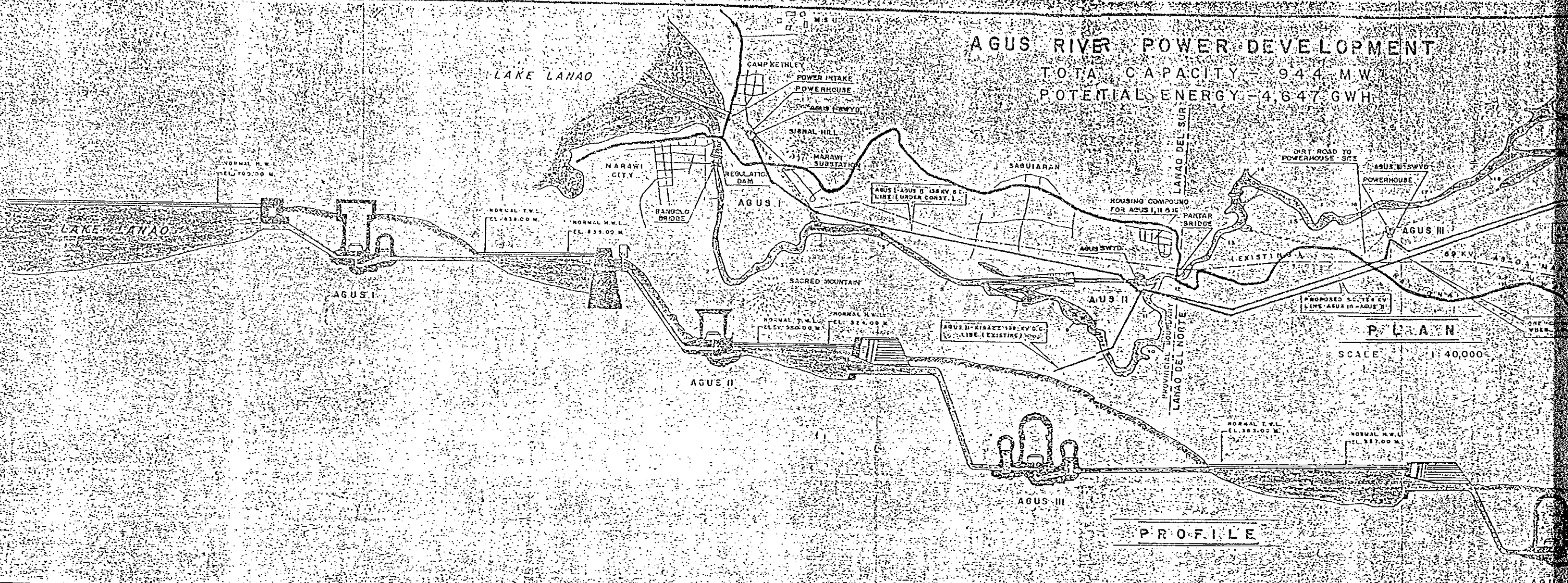






AGUS RIVER POWER DEVELOPMENT

TOTAL CAPACITY - 944 MW
POTENTIAL ENERGY - 4,647 GWH

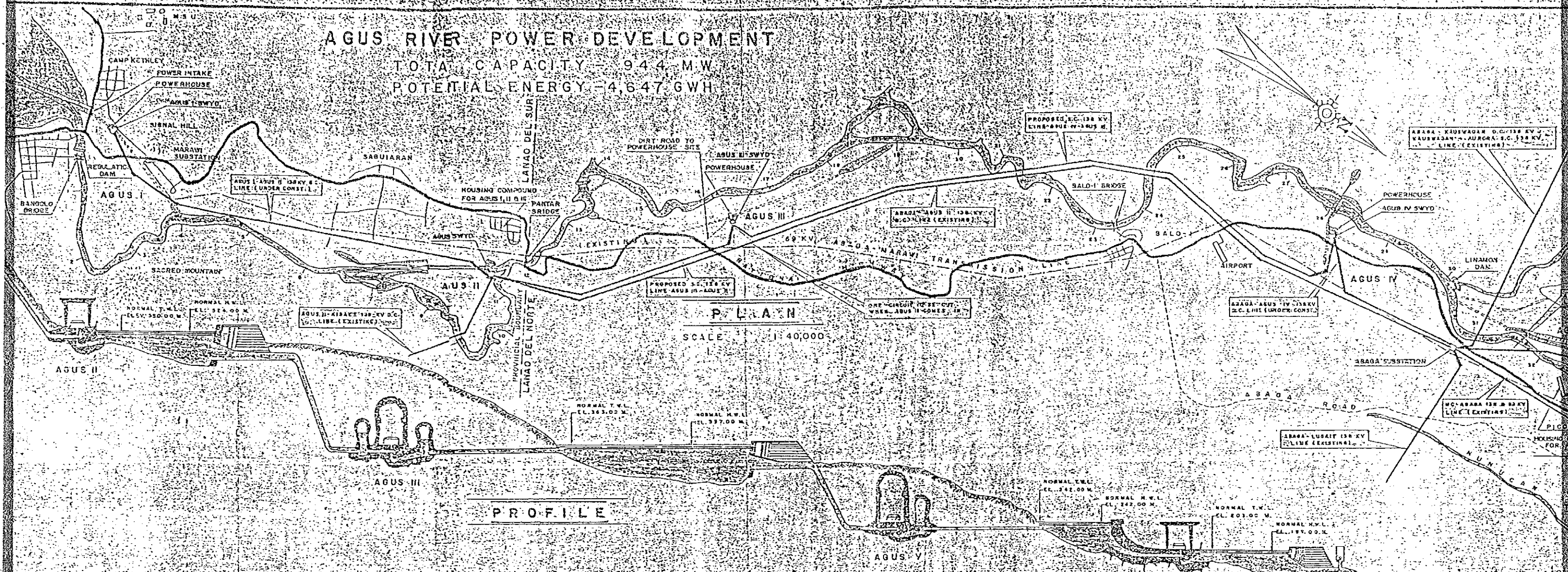


SUMMARY DATA OF AGUS RIVER POWER DEVELOPMENT

PROJECT	NUMBER OF UNITS	GEN. RATING (MW)	INSTALLED CAPACITY (MW)	TURBINE RATING (HP)	GENERAL VOLTAGE (KV)	SPEED (RPM)	ENERGY (GWH)	ELEVATION (M)						GROSS HEAD (M)			HEAD LOSS (%)	NET HEAD (M)			INTAKE INVERT ELEV. (M)	DRAINAGE AREA (SQ. KM)	STORAGE VOLUME (MCM)			MAX. RESERVOIR AREA (SQ. KM)	YEAR OF COMP. N.	REMARKS	
								FOREBAY			TAILWATER												L.V. ELEV.						
								MAX.	NOR.	MIN.	MAX.	NOR.	MIN.	MAX.	NOR.	MIN.		MAX.	NOR.	MIN.			MAX.	NOR.	MIN.				MAX.
US-I	2	40	40	33,800	13.8	120	408	702.00	700.00	697.00	659.00	638.00	635.00	67.00	62.80	58.00	5	63.85	59.47	55.10	694.00	16.31	0.015	1715.00	1215.00	20.00	361.00	1982	UNDER CONSTRUCTION
US-II	3	60	180	82,600	13.8	200	758	839.00	838.00	835.00	825.50	825.00	824.80	114.40	113.00	109.50	3	110.97	109.81	106.22	626.00	17.11	0.015	1799	1405	0.705	0.3683	1979	IN OPERATION
US-III	3	75	225	104,000	13.8	327	1065	525.50	524.00	516.00	366.00	363.00	360.70	164.80	161.00	150.00	5	156.36	152.95	142.30	505.60	17.39	1.220	4.550	4.080	2.900	0.3368	1982	READY FOR CONSTRUCTION
US-IV	2	27.50	27.50	38,100	13.8	100	270	244.00	242.00	242.00	203.00	203.00	203.00	41.00	39.00	39.00	(2)	112.10	109.25	105.45	340.00	18.73	0.397	24.205	17.203	12.437	2.7150	1985	UNDER CONSTRUCTION
US-V	2	27	27	38,100	13.8	100	270	203.00	197.00	192.00	36.10	35.10	30.10	172.90	161.90	153.90	4	165.98	159.42	149.66	188.50	18.91	0.003	1.170	0.456	0.115	0.1981	1977	IN OPERATION
US-VII	2	27	27	38,100	13.8	100	228	36.10	35.10	30.10	1.57	1.00	-0.35	36.45	35.10	28.43	5	34.63	33.35	27.00	16.50	18.83	0.003	0.0028	0.003	0.0410	1982	UNDER CONSTRUCTION	

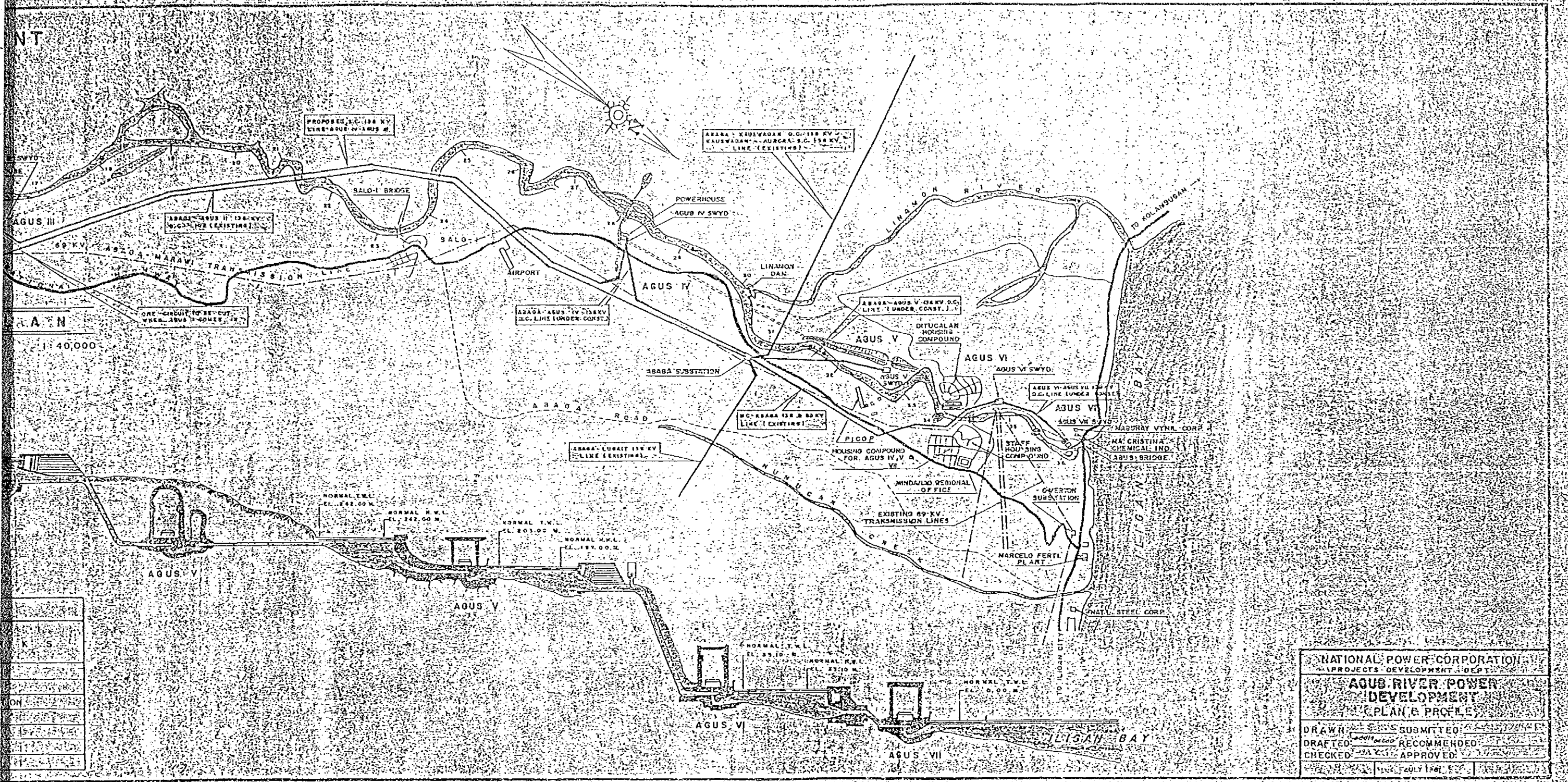
AGUS RIVER POWER DEVELOPMENT

TOTAL CAPACITY - 944 MW
 POTENTIAL ENERGY - 4,647 GWH



PROFILE

S HEAD (M)		HEAD LOSS %	NET HEAD (M)			INTAKE INVERT ELEV (M)	DRAINAGE AREA (SQ KM)	STORAGE VOLUME (MCM)			MAX RESERVOIR AREA (SQ KM)	YEAR OF COMP N	REMARKS	
NOR.	MIN.		MAX.	NOR.	MIN.			MAX.	NOR.	MIN.				
62.80	58.00	5	63.95	59.47	55.10	694.00	1631	1715.00	1215.00	20.00	361.00	1982	UNDER CONSTRUCTION	
113.00	109.50	3	110.97	109.81	106.22	626.00	1711	11799	1405	0.705	0.3583	1979	IN OPERATION	
161.00	150.00	5	1156.36	152.95	142.30	505.60	1739	14550	4.080	1.900	0.3368	1982	READY FOR CONSTRUCTION	
115.00	111.00	5	112.10	109.25	105.45	340.00	1873	0.397	24.205	17.203	12.437	2.7150	1985	UNDER CONSTRUCTION
39.00	39.00	(2)	40.18	38.22	38.22	236.00	—	—	—	—	—	—	1983	UNDER CONSTRUCTION
61.90	153.90	4	165.98	159.42	149.66	188.50	1891	1.170	0.456	0.115	0.1981	—	1977	IN OPERATION
35.10	28.43	5	34.63	33.35	27.00	16.50	1883	0.003	0.0028	0.003	0.0410	—	1982	UNDER CONSTRUCTION



NATIONAL POWER CORPORATION
 PROJECTS DEVELOPMENT DEPT.
AGUS RIVER POWER DEVELOPMENT
 PLAN & PROFILE

DRAWN: [Signature] SUBMITTED: [Signature]
 DRAFTED: [Signature] RECOMMENDED: [Signature]
 CHECKED: [Signature] APPROVED: [Signature]

JULY 1961

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in the context of public administration and government operations. The text highlights that without reliable records, it becomes difficult to track expenditures, manage resources effectively, and ensure that public funds are used for their intended purposes.

2. The second part of the document addresses the challenges associated with data collection and analysis. It notes that while modern technology offers powerful tools for gathering and processing information, the quality and consistency of the data are often problematic. Incomplete or outdated information can lead to flawed decision-making and inefficient operations. The document suggests that organizations should invest in training and infrastructure to improve data management practices and ensure that the information used is current and accurate.

3. The third part of the document focuses on the role of communication in organizational success. It argues that clear and effective communication is crucial for aligning goals, coordinating efforts, and resolving conflicts. The text stresses that communication should be a two-way process, involving not only the dissemination of information but also the active listening and feedback from all stakeholders. This approach helps to build trust, foster collaboration, and ultimately drive the organization towards its mission and vision.

4. The fourth part of the document discusses the importance of continuous learning and improvement. It states that in a rapidly changing environment, organizations must be willing to learn from their experiences and adapt to new challenges. This involves creating a culture of learning where employees are encouraged to share their knowledge and insights, and where mistakes are viewed as opportunities for growth. The document also mentions that regular training and development programs are essential for keeping the workforce skilled and motivated.

5. The fifth and final part of the document concludes by summarizing the key points discussed. It reiterates that success is achieved through a combination of accurate record-keeping, effective data management, clear communication, and a commitment to continuous learning. The document ends with a call to action, urging all stakeholders to work together to address the challenges and opportunities ahead, and to strive for excellence in all aspects of their work.

NAPOCOR 面会者リスト

1 本 社

Sr. Vice President	M. S. BOCANEGRA
Assistant Engineer to Vice President	ANTOLIN CANO
Manager, Projects Development Dept	EDUARDO P. ABESAMIS
Manager, Electrical Planning Division	RUPERTO C. DELA CRUZ
Planning Manager Visayas Transmission Project	MANUEL C. MARIANO
Planning Manager Mindanao Transmission Project	DOMINADOR S. GEONZON
Supervising Engineer Electrical Planning Div.	RENE V. GUARIN
Principal Engineer Geodesy & Cartography Div.	FELICIANO SAGUIPED

2 ヴィサヤス 支 店

Project Manager Talaveda Diesel	CANICO S. SANIEL
Helicopter Pilot	WILLIAM CAMINS

3 ミンダナオ 支 店

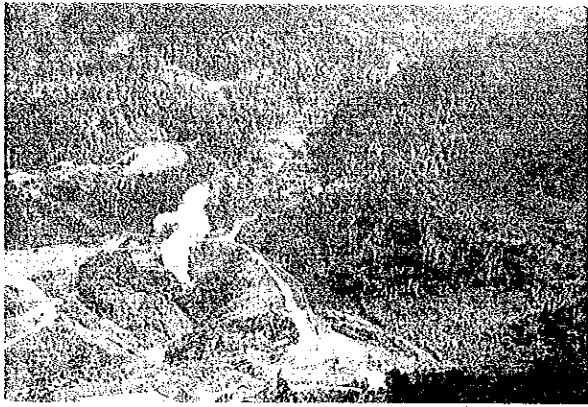
Project Manager	
Mindanao Transmission Project	JAIME P. VILLANUEVA
Principal Engineer II	JESUS O. OCLARET

レイテ・ミンダナオ送電線計画事前調査

現地写真記録

1982年8月

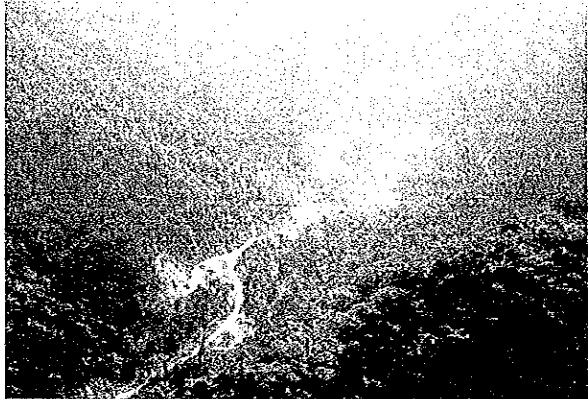
Tongonan Geo-Thermal Plant Site



3 MW × 1 地熱パイロットプラン



建設中の地熱プラント (37.5 MW × 3)



Tongonan 地区の地熱開発状況

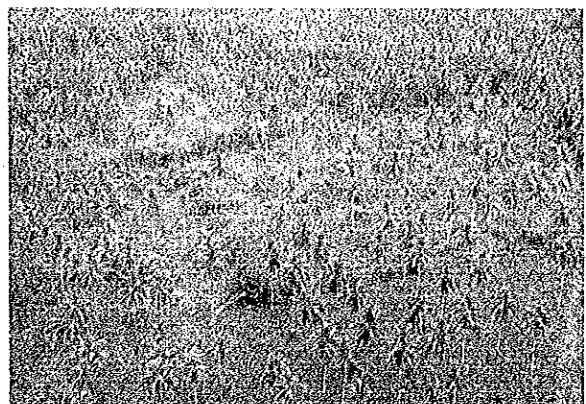


Tongonan 地区の地熱開発状況

Transmission Line Route in Leyte



Tongonan 地区の地熱開発状況



Jaro 変換所予定地

Transmission Line Route in Leyte



ラワン密集の山裾



Lake Bito 付近の平地部



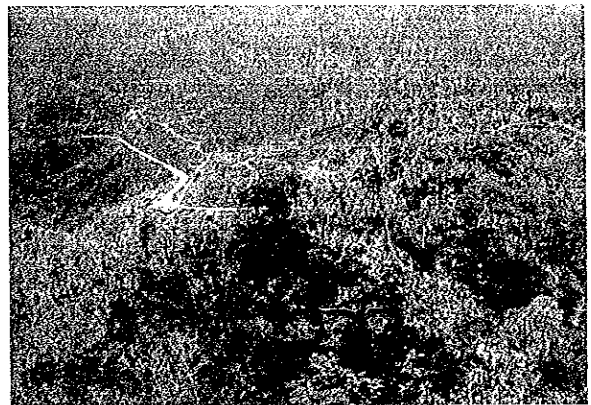
平地部はほぼ道路に平行してルートが選定されている。



ココナツ畑の中の道路

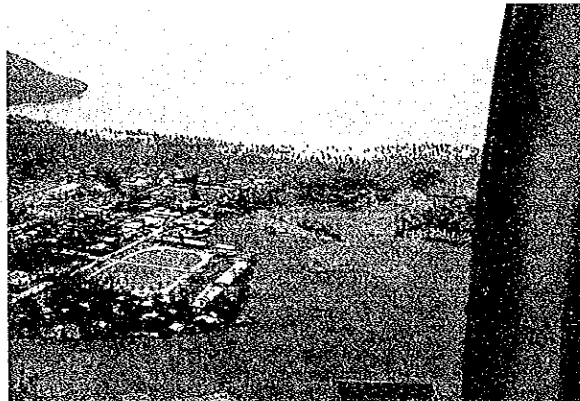
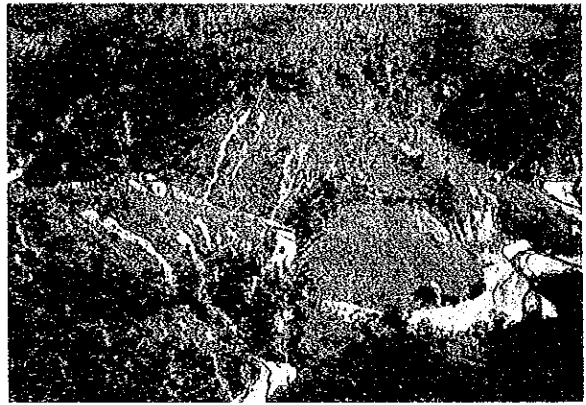


平地部を過ぎて、山脈地帯に向かう

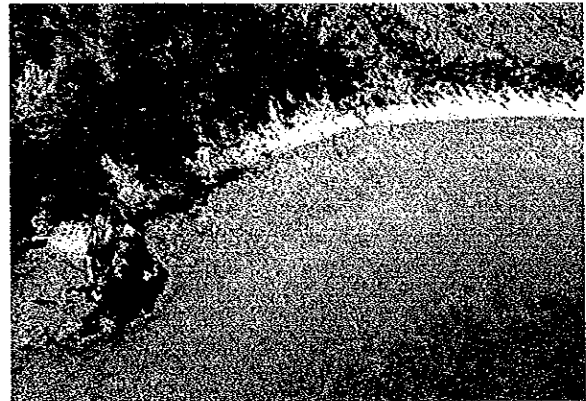


山脈地帯の道路

Transmission Line Route in Leyte



Hinundayan Landing Point を望む平地部



Hinundayan Landing Point 付近

Albor (Submarine Cable Landing Point)



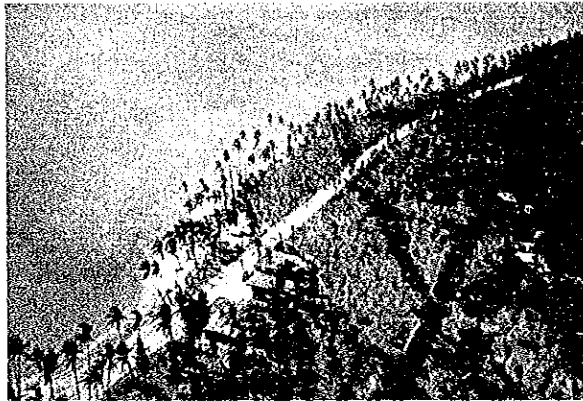


Dinagat.I.~Awasan.I.間の架空横過予定地付近(径間500m程度と想われる)



Awasan.IからHanigad.Iを望む

Bilan Bilan (Submarine Cable Landing Point)



Hanigad.I.のSubmarine Cable Landing Point



ミンダナオ島側の海底ケーブル陸揚地点 Bilan Bilan

Bilan Bilan (Submarine Cable Landing Point)

Transmission Line Route in Mindanao



Bilan Bilanの陸上部分



Butuan変電所近傍

Transmission Line Route in Mindanao



山地部分も既設送電線路（写真中央に道路のように見える）と平行してルートが選定されている。



Kalingagan 上空よりミンダナオ北部工業地の川重関連プラントを見る。

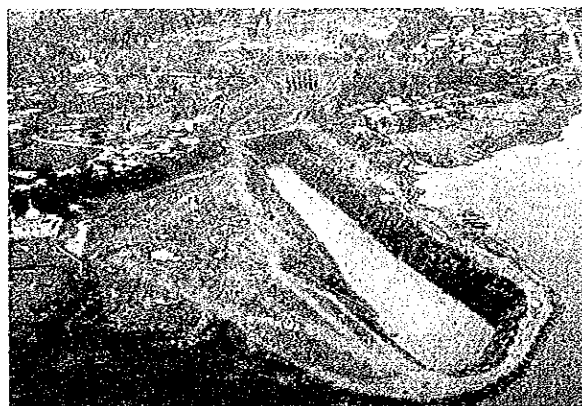


Kalingagan 変換所予定地

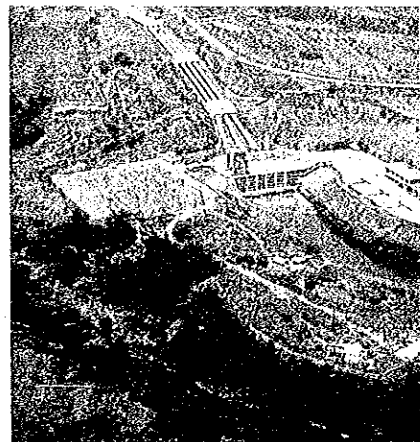


Kalingagan 変換所予定地全景
（海外線を走る国道から2～3 Kmの地点）

Agus River Development

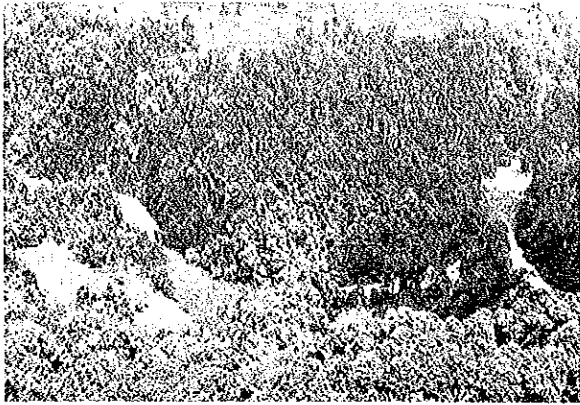


建設中の Agus I
（80MW）

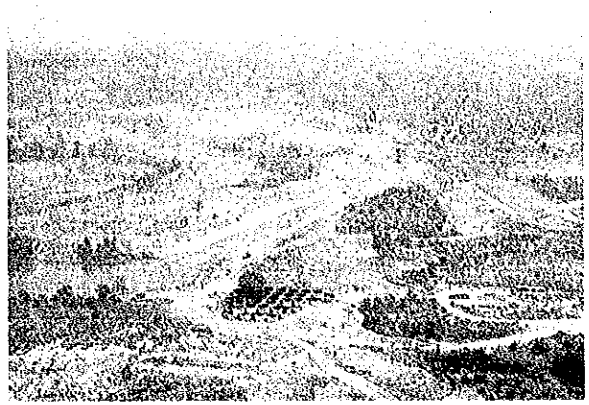


Agus II 全景
（180MW）

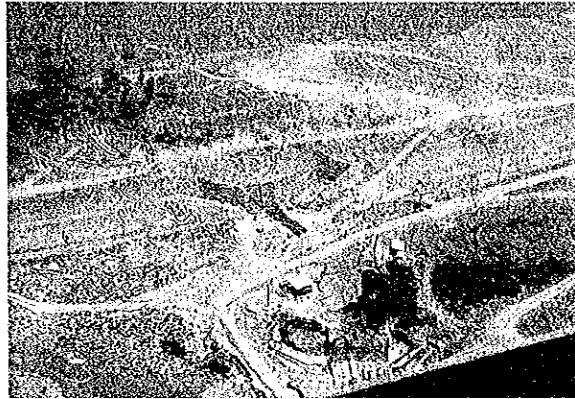
Agus River Development



Agus III 建設予定地
(225MW)



建設中の Agus IV
(150MW)



建設中の Agus V
(55MW)



Agus VI (200MW)



建設中の Agus VII
(54MW)

[The page contains extremely faint and illegible text, likely due to low contrast or scanning quality. The text is arranged in several paragraphs across the page, but no specific words or phrases can be discerned.]

JICA