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Silent Power...
WATER POWERS
BRITISH COLUMBIA
CANADA

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ELECTRIC POWER DEVELOPMENT

JULY, 1966

During the period covered by this review, the most massive hydro-electric construction program in the history of British Columbia has been proceeding on schedule. Four major dams, one on the Peace River and three in the Columbia River Basin, are being constructed to provide power, flood control and downstream flow regulation. Private industry also is increasing its potential; Cominco Limited, for instance, is installing a new unit at their Waneta Plant. Other companies are planning additions in the near future, and the City of Revelstoke recently doubled the capacity of its Walter Hardman Plant by the addition of a second four-megawatt unit.

Generation and Load Growth

During 1965, the total amount of energy generated by hydro-electric plants in British Columbia was 15,257,960 megawatt-hours, representing a decrease of 1.9% on the corresponding figure for 1964. Thermal-electric generation amounted to approximately 3,082,000 megawatt-hours, slightly over double the previous year's figure. Imports of electrical power, which in the past have been negligible, jumped to a substantial level, and amounted to 456,000 megawatt-hours (net). Thus, although the overall increase in power generated within the Province was 7.38%, the load grew by 10.01%.

Table I shows the statistics for generation and load in the Province over the last ten years. This Table has been revised this year to demonstrate the effects of imports and exports of power. In previous years, with one exception, it has been possible to ignore this and to assume that generation and load growth were equal. Table I also shows the overall percentage changes in the ten-year period and mean annual growth rates (compounded). It will be noted that the average increase in load is just over eight percent, or slightly higher than the 45-year average of 7.8% per annum.

Current details of operating hydro-electric generating plants in British Columbia appear in Tables II(a) and II(b), and additions over the last ten years are shown in Table III. It will be noted that no new hydro installations were placed in operation during 1965; however, a third unit of 150,000 kilowatt capacity was added to the Burrard thermal plant. A list of operating hydro-mechanical plants appears in Table IV.

Undeveloped and Developed Power

The Water Resources Branch of the Department of Mines and Technical Surveys, Government of Canada, and the Water Rights Branch of the Department of Lands, Forests and Water Resources, Government of British Columbia, recently prepared an Index of Undeveloped Hydro-electric Power Sites in British Columbia. This Index is part of a study covering the whole of Canada. Although this study is continually being revised as more information becomes available, a current summary has been prepared and appears in Table V. It must be pointed out that many of the sites have only received a cursory examination, and that an additional substantial potential, although not yet subject to study, is known to exist. Further details may be obtained from either of the two departments aforementioned by persons or organizations who require them. However, due to the doubtful material on which some of it is based, no data may be republished or quoted. This is due to the fact that the Index merely lists the figures derived by many investigators over the course of thirty years or so, and reference should therefore be made to the original work in order to assess the current validity and relevance of the conclusions. Table V also shows the developed power in British Columbia, classified in the same manner as the undeveloped power listing.

Development - Columbia River

Duncan Lake Project - The project was officially opened by Premier W.A.C. Bennett on May 19, 1965. By July 1965, a total of \$16,069,913 worth of contracts had been awarded and construction progress was ahead of schedule. During the period to July 1966, contracts totalling \$2,421,691 were let, the largest being \$1,250,000 for clearing 1887 acres of the reservoir.

On March 7, 1966, the diversion of the Duncan River took place. At this time, 3.5 million cubic yards of the earthfill embankment were in place, almost one-half of the estimated 7.2 million cubic yards required to complete the structure.

Arrow Lakes - Construction of the concrete section of the Arrow Lakes Dam began in early April following completion of the cofferdam. The 1200-foot long section will include a navigation lock and reservoir discharge works.

The earth section of the dam is being constructed simultaneously, with five bottom dump barges placing fill on the riverbed at present. During construction, log handling facilities are being provided to allow an uninterrupted flow of raw material to the Celgar plant downstream. The log handling overhead crane contract was let for \$779,481. Toyomenka Incorporated of Japan is providing low level ports, navigation lock equipment and a downstream gate under three separate contracts for a total of \$2,768,142. A number of reservoir clearing contracts have now been let covering 5875 acres for \$2,712,293. Contracts for a further 6000 acres will be let in the near future.

Mica Creek - On July 16, 1965, the contract for the two 45-foot diameter diversion tunnels was let to a consortium of Perini Pacific, Mannix, Northern and J.W. Stewart, and Morrison-Knudsen Company for \$21,155,388: this marked the start of the dam construction work. Prior to this, contracts had been let for houses and dormitories, and now more than 700 workers and their families are housed at Mica Village, six miles from the dam site. The contract for the main commercial area has now been let, and by 1972 the Village is expected to accommodate 4000 persons.

The diversion tunnel contract is proceeding well, with overall excavation being 62% complete. The main contract covering the dam, spillway, outlet works and power intake tunnel, is expected to be called in November and awarded in February, 1967. This contract is estimated to cost \$150 million, and if so, will be the largest single contract awarded in Canada.

Development - Peace River

At the end of the 1965 season, a total of 22,249,000 cubic yards had been placed at the Portage Mountain Dam. This year a world record was achieved on May 27th when a total of 150,000 cubic yards were hauled, placed and compacted during a 24-hour period. An early start and a high placement rate have allowed the Kiewit-Dawson-Johnson consortium to place 4.7 million cubic yards during the 1966 season to date. This brings the embankment above the 250-foot mark, representing 42% of the ultimate height of 600 feet to be reached by the end of the 1967 season.

Other phases of the project are going well: the intake channel excavation is complete, blanket grouting and core contact area treatment are complete, the excavation for the powerhouse has begun. Powerplant excavation continued throughout the winter period, and although it is behind schedule, increased work forces and equipment are expected to overcome the time lost.

The 205-mile section of transmission line from Prince George to Kelly Lake is nearing completion, about five months ahead of schedule.

During the past year, contracts have been let for the power intake gates, power intake trashracks, powerhouse cranes, power intake gantry and circuit breakers, switches and bus supports. These contracts total \$6,355,371. The spillway and low level outlet contract is currently out to tender. Table VII lists the more important contracts awarded and some of the pertinent details.

TABLE 1

ELECTRICAL GENERATION AND LOAD IN BRITISH COLUMBIA
TEN-YEAR PERIOD 1955 - 1965

Year	Electrical Generation in B.C. (Gwh)			Net Import or Export (Gwh)	Total Electrical Load in B.C.		
	Hydro	Thermal	Total		(Gwh)	(Mw)	(% Change)
1955	7,860	605	8,465	156 (E)	8,309	948.5	22.4
1956	9,315	688	10,003	4 (I)	10,007	1,142.3	20.4
1957	10,161	542	10,703	508 (I)	11,211	1,279.8	12.0
1958	11,219	686	11,905	20 (E)	11,885	1,356.7	6.0
1959	11,750	712	12,462	20 (I)	12,482	1,424.9	5.0
1960	12,669	965	13,634	4 (I)	13,638	1,556.8	9.2
1961	12,371	1,001	13,372	25 (I)	13,397	1,529.3	- 1.8
1962	13,572	1,176	14,748	9 (I)	14,757	1,684.6	10.1
1963	14,262	1,347	15,609	27 (E)	15,582	1,778.8	5.5
1964	15,558	1,522(P)	17,080	6 (I)	17,086(P)	1,950.5	9.6
1965	15,258	3,082(P)	18,340	456 (I)	18,796(P)	2,145.7	10.0
Overall 10-year increase	94.1%	409.4%	116.6%	--	116.2%		
Mean annual increase	6.86%	17.68%	8.04%	--	8.02%		

(E) Net export to other provinces and/or U.S.A.
(I) Net import from other provinces and/or U.S.A.
(P) Preliminary figure subject to revision

Gwh = gigawatt-hour = 1 million kilowatt-hours
Mw = 1 thousand kilowatts (average output)

TABLE 11 (a)

PRINCIPAL PRODUCERS OF ELECTRIC POWER IN BRITISH COLUMBIA

<u>UTILITIES</u>	<u>Installed Capacity (kw)</u>	
	<u>Hydro</u>	<u>Thermal</u>
B.C. Hydro & Power Authority	1,303,002	738,506
The Corporation of the City of Nelson	8,670	
The Corporation of the City of Revelstoke	8,900	2,000
East Kootenay Power Co. Ltd.	13,600	
Mirror Lake Power Ltd.	150	
West Kootenay Power and Light Co. Ltd.	42,280	
 <u>INDUSTRIES</u>		
Aluminum Co. of Canada Ltd.	707,200	8,000
Anaconda Co. (Canada) Ltd.	6,150	
Bralorne Pioneer Mines Ltd.	1,475	
B.C. Forest Products Ltd.		12,800
B.C. Bridge & Dredging Co. Ltd.		2,272
B.C. Sugar Refining Co. Ltd.		3,750
Canadian Fishing Co. Ltd.	450	
Canadian Forest Products Ltd.		15,000
Cariboo Gold Quartz Mining Co. Ltd.		1,875
Carnegie Mining Corporation	200	
Columbia Cellulose of Canada Ltd.		15,000
Cominco Ltd.	496,235	4,500
Crown Zellerbach Ltd.	13,320	14,500
Crown Zellerbach Building Materials Ltd.		12,500
Dolly Varden Mines Ltd.	1,200	
Eagle Lake Sawmills Co. Ltd.		1,800
Elk Falls Co. Ltd.		1,600
Ocean Cement Co. Ltd.	375	
Giant Mascot Mines Ltd.	100	
Hillcrest Lumber Co. Ltd.		2,610
MacMillan, Bloedel and Powell River Ltd.	53,750	87,150
Rayonier Canada Ltd.	4,250	23,200
S.M. Simpson Ltd.		7,750
Totals	<u>2,661,307</u>	<u>954,813</u>
TOTAL Hydro plus Thermal		<u>3,616,120</u>

TABLE II (b)

PRINCIPAL PRODUCERS OF ELECTRIC POWER IN BRITISH COLUMBIA
DETAILS OF PLANTS IN OPERATION

Owner	Hydro Plant Code No.	Name of Plant	Locality	Type (1)	Nameplate Capacity in kw
B.C. Hydro & Power Authority (Hydro Plants)	7100	Alouette	Mission	H	8,000
	7150	Ash River	Alberni	H	25,200
	7310	Big Falls	Prince Rupert	H	6,800
	7360	Bridge River No. 1	Lillooet	H	180,000
	7410	Bridge River No. 2	Lillooet	H	248,000
	7570	Cheakamus	Squamish	H	140,000
	1870	Clayton Falls	Bella Coola	H	702
	7720	Clowhom	Squamish	H	30,000
	7770	Coquitlam-Buntzen	Port Moody	H	76,700
	8330	John Hart	Campbell River	H	120,000
	8380	Jordan River	Victoria	H	26,400 (2)
	8600	La Joie	Bralorne	H	22,000
	8650	Ladore Falls	Campbell River	H	54,000
	8980	Puntledge	Courtenay	H	27,000
	9040	Ruskin	Mission	H	105,600
	9100	Seton	Lillooet	H	42,000
	9150	Shawatlans	Prince Rupert	H	1,400
	9200	Shuswap Falls	Vernon	H	5,200
	9300	Spillimacheen	Golden	H	4,000
	9350	Stave Falls	Mission	H	52,500
9570	Strathcona	Campbell River	H	33,750	
9630	Wahleach	Chilliwack	H	60,000	
9730	Whatshan	Arrow Lakes	H	33,750	
B.C. Hydro & Power Authority (Thermal Plants)			Alert Bay/Port Hardy	D	3,900
			Bella Coola	D	1,057
			Blue River	D	725
			Boston Bar	D	950 (3)
			Burns Lake	D	4,072
			Chetwynd/Dawson Creek	D	35,000
			Fort Nelson	D	3,161
			Hazelton	D	2,050

TABLE II (b) Continued

Owner	Hydro Plant Code No.	Name of Plant	Locality	Type (1)	Nameplate Capacity in kw	
B.C. Hydro & Power Authority (Thermal Plants)			Houston	D	1,200	
			Lytton	D	954	
			McBride	D	1,800	
			Mica	D	6,175	
			Prince George	D	21,000 (3)	
			Prince Rupert	D	6,401	
			Queen Charlotte	D	306 (3)	
			Sandspit	D	1,200	
			Smithers	D	6,880	
			Stewart	D	725	
			Tofino	D	400 (3)	
			Valemont	D	1,050	
			Mobile Unit No. 80 (road)	D	500	
			Mobile Unit No. 81 (road)	D	500	
			Mobile Unit No. 82 (road)	D	500	
			Mobile Unit No. 83 (road)	D	500	
			Mobile Unit No. 84 (rail)	D	1,000	
			Mobile Unit No. 85 (rail)	D	1,000	
			Mobile Unit No. 86 (rail)	D	1,000	
			Mobile Unit No. 87 (semi-mobile)	T	5,000	
			Mobile Unit No. 88 (rail)	D	1,000	
			Mobile Unit No. 89 (rail)	D	1,000	
			Mobile Unit No. 90 (rail)	D	1,000	
			Mobile Unit No. 91 (rail)	D	1,000	
			Burrard	Port Moody	S	450,000 (4)
			Georgia	Chemainus	T	75,500 (3)
		Port Mann	Port Mann	T	100,000 (3)	

TABLE II (b) Continued

Owner	Hydro Plant Code No.	Name of Plant	Locality	Type (1)	Nameplate Capacity in kw
Corporation of the City of Nelson	7620	City of Nelson	Nelson	H	8,670
Corporation of the City of Revelstoke	7900	Walter Hardman	Revelstoke	H	8,000
	8270	Illecillewaet River	Revelstoke	H	900 (3)
			Revelstoke	D	2,000 (3)
East Kootenay Power Co. Ltd.	7050	Aberfeldie	Fernie	H	4,000
	7930	Elko	Fernie	H	9,600
Mirror Lake Power Ltd.	1420	Byerkness-Mirror	Kaslo	H	150
West Kootenay Power and Light Co. Ltd.	8050	Goat River	Creston	H	1,280 (3)
	8700	Lower Bonnington	Nelson	H	41,000
Aluminum Co. of Canada Ltd.	1090	Kemano	Kitimat	H	707,200
			Kitimat	D	8,000
Anaconda Co. (Canada) Ltd. (5)	7260	Beach Powerhouse	Britannia Beach	H	6,150
Bralorne Pioneer Mines	7520	Cadwallader-Bralorne	Bralorne	H	800
	8210	Hurley River No. 2	Bralorne	H	675
B.C. Forest Products Ltd.			Victoria	S	4,500
			Youbou	S	4,300
			Hammond	S	4,000
B.C. Bridge & Dredging Co. Ltd.			Vancouver	D	2,272
B.C. Sugar Refining Co. Ltd.			Vancouver	S	3,750
Canadian Fishing Co. Ltd. (5)	1660	Butedale Creek	Princess Royal Island	H	430
	4160	Mercantile Creek	Ucluelet	H	20

TABLE II (b) Continued

Owner	Hydro Plant Code No.	Name of Plant	Locality	Type (1)	Nameplate Capacity in kw
Canadian Forest Products Ltd.			Port Mellon	S	5,000
			Vancouver	S	10,000
Cariboo Gold Quartz Mining Co.Ltd.			Wells	D	1,875
Carnegie Mining Corporation (5)	5640	Slocan Star	New Denver	H	200
Columbia Cellulose of Canada Ltd.			Watson Island	S	15,000
Cominco Ltd.	7460	Brilliant	Nelson	H	81,600
	7820	Corra Linn	Nelson	H	40,500
	9250	South Slocan	Nelson	H	47,250
	9520	Upper Bonnington	Nelson	H	55,125
	9680	Waneta	Trail	H	270,000 (4)
	4760	Raging River	Port Alice Kimberley	H S	1,760 4,500
Crown Zellerbach Ltd. (5)	8820	Ocean Falls	Ocean Falls	H	13,320
			Ocean Falls	S	14,500
			New Westminster	S	12,500
Dolly Varden Mines Ltd.	8490	Kitsault River	Alice Arm	H	1,200
Eagle Lake Sawmills Co.Ltd.			Giscome	S	1,500
			Giscome	D	300
Elk Falls Co. Ltd.			Duncan Bay	S	1,600
Ocean Cement Ltd.	4220	Munro Creek	Port Moody	H	375
Giant Mascot Mines Ltd.	5520	Silverhope-Steelhead	Hope	H	100
Hillcrest Lumber Co. Ltd .			Mesachie Lake	S	2,610

TABLE II (b) Continued

Owner	Hydro Plant Code No.	Name of Plant	Locality	Type (1)	Nameplate Capacity in kw
MacMillan Bloedel & Powell River Ltd. (5)	8930	Powell River	Powell River	H	21,350
	9400	Stillwater	Powell River	H	32,400
			Powell River	S	16,450
			Vancouver	S	4,750
			Chemainus	S	3,750
			Port Alberni	S	27,000
			Harmac	S	35,200
Rayonier Canada Ltd.	880	Port Alice	Port Alice	H	2,000
	9780	Woodfibre	Squamish	H	2,250
			Port Alice	G	16,200
			Woodfibre	S	7,000
S.M. Simpson Ltd.			Peachland	S	750
			Kelowna	S	7,000

- NOTES: (1) Type of plant: H=Hydro; D=Diesel; G=Gas diesel; T= Gas turbine; S=Steam.
- (2) Head conditions normally only permit 25,000 kw. of capacity at Jordan River.
- (3) Used for stand-by or peaking.
- (4) See text for details of impending plant additions.
- (5) Also hydro-mechanical power development - see Table IV

TABLE III
 ADDITIONS TO PRINCIPAL ELECTRICAL GENERATING PLANTS OF BRITISH COLUMBIA DURING TEN-YEAR PERIOD 1956-1965

Year (1)	Plant	Capacity Added (kw)	Details
1956	Ladore Falls	27,000	First unit
	Seton	42,000	New plant
	Whatshan	11,250	Third unit
	Kemano	202,060	Fourth and fifth units
1957	Ladore Falls	27,000	Second unit
	Cheakamus	140,000	New plant
	La Joie	22,000	One unit (2)
	Kemano	101,030	Sixth unit
1958	Clowhom	27,000	Rebuilt (total 30,000 kw)
	Strathcona	33,750	New plant
	Kemano	101,030	Seventh unit
	Georgia (thermal)	37,000	First two units
1959	Ash River	25,200	New plant
	Port Mann (thermal)	100,000	
	Bridge River No. 2	124,000	First two units
	Georgia (thermal)	38,500	Third and fourth units
1960	Bridge River No. 2	124,000	Third and fourth units
	Walter Hardman	4,000	First unit
	Big Falls	3,900	Second unit
1961	Clayton	702	New plant
1962	Burrard (thermal)	300,000	First two units
	Raging River	1,760	Rebuilt
1963	Waneta	90,000	Third Unit
1964		None	
1965	Burrard (thermal)	150,000	Third unit
	Walter Hardman	4,000	Second unit
Total installed during 10-year period		1,737,182	

(1) Year of commencement of operation, or availability for operation.
 (2) Added to existing storage dam

TABLE IV

OPERATING HYDRO-MECHANICAL POWER PLANTS IN BRITISH COLUMBIA

Owner	Hydro Plant Code No.	Name of Plant	Locality	Installation in Hp
Anaconda Co. Canada Ltd.	9460	Tunnel Powerhouse	Brittania Beach	1,100
Crown Zellerbach Ltd.	8820	Ocean Falls	Ocean Falls	12,600
James J. Donaldson	2720	Georgetown Creek	Prince Rupert	230
MacMillan, Bloedel & Powell River	8930	Powell River	Powell River	26,760
Canadian Fishing Co. Ltd.	1660	Butedale Creek	Princess Royal Island	245
Total for BRITISH COLUMBIA				40,935 Hp

TABLE V

SUMMARY OF UNDEVELOPED & DEVELOPED POWER SITES IN BRITISH COLUMBIA

	Area	Description	Undeveloped Power (kw)	Developed Power (Av. kw)
7E	Upper Peace River Basin	Above Hudson Hope	1,980,000	--
7F	Lower Peace River Basin	Below Hudson Hope	570,000	--
8B	Northern Coast	Includes Yukon Diversion	3,930,000	--
8C	Lower Northern Coast	Includes Stikine & Iskut Rivers	890,000	--
8D	Nass River Basin Area		870,000	1,200
8E	Skeena River Basin		1,010,000	8,200
8F	Central Coastal Area	Rivers Inlet north to Skeena Basin	270,000	14,452
8G	Lower Coastal Area	Vancouver north to Rivers Inlet	1,070,000	309,225
8H	Vancouver Island		220,000	290,130
8J	Nechako River Basin		550,000	707,200
8K	Upper Fraser River Basin	Above Macalister, B.C.	1,000,000	--
8L	Thompson River Basin		1,440,000	5,200
8M	Lower Fraser River Basin	Below Macalister, B.C.	5,130,000	719,675
8N	Columbia River Basin		2,590,000	602,025
8O	Queen Charlotte Island		10,000	--
10B	Upper Liard River Basin		2,400,000	--
		TOTAL	23,930,000	2,657,307

NOTE: This summary covers known undeveloped sites only and is based in many cases on very preliminary information. Some sites may prove to be not feasible or not representative of best resource development. See page 2 of text.

TABLE VI

MAJOR HYDRO-ELECTRIC PROJECTS UNDER CONSTRUCTION

	Mica Creek	Arrow Lakes	Duncan Lake	Portage Mountain
Electrical installation in megawatts	1820	none	none	2300 ^(a)
Height of dam (feet)	645 ^(b)	190	120	600 ^(c)
Volume of dam (million cu.yds.)	37.0	8.5	6.4	56.7 ^(d)
Type of dam	Rockfill	Earthfill	Earthfill	Earthfill
Reservoir storage volume - live (Millions acre-feet) - gross	12.0 20.0	7.1 7.1	1.4 1.4	32.0 62.0 ^(e)
Average flow (c.f.s.)	20,700	39,800	3,600	35,000
Drainage area (sq. miles)	8,220	14,100	925	27,000
Scheduled to commence operation	April 1973 (storage only)	April 1969	April 1968	October 1968

<u>Feature</u>	<u>World Rank</u>
(a) Underground powerhouse installation	First
(b) Height of fill	Third
(c) Height of fill	Fourth
(d) Volume of fill	Seventh
(e) Gross storage volume	Fifth

TABLE VII

PRINCIPAL CONTRACTS AWARDED FOR HYDRO-ELECTRIC CONSTRUCTION
JULY 1965 - JULY 1966

Project	Nature of Contract	Successful Contractor	Contract Price	Total
Peace River	Isolated Phase Bus	I-T-E Circuit Breaker (Canada)Ltd.	1,019,066.00	
	Transmission Line Towers	East Asiatic Co.(Canada) Ltd.	1,682,765.00	
	500 K.V.Transformers (10)	Mitsui & Co. Ltd.	1,558,750.00	
	500 K.V.Transformers (6)	Canadian General Electric Co.Ltd.	2,342,897.00	
	Transmission Line Conductor	Canada Wire & Cable Co.Ltd.	4,767,000.00	
	Upper Section-Transmission Line #2	Lacal Industries Ltd.	1,075,000.00	
	Section <u>II</u> Foundations	Chapman Long Construction Ltd.	1,605,090.00	
	Section <u>II</u> Towers	Cedon Construction	1,417,393.00	
	Section <u>V</u> Foundations & Towers	J.D. Dutton Inc.	1,239,786.00	
	Section <u>IV</u> Foundations & Towers	Cedon Construction	6,533,048.00	
	Transmission Clearing Sec.2B	Cattermole-Trethwey Const.Ltd.	1,540,000.00	
	Transmission Clearing Sec. 3	Cattermole-Trethwey Const.Ltd.	1,423,000.00	
	Transmission Clearing Sec. 19	Lodon & MacArthur Construction	1,310,000.00	
	Transmission Clearing Sec. 20	Trethwey-Wells Timber Ltd.	1,152,000.00	
	Transmission Clearing Sec. 21	Trethwey-Wells Timber Ltd.	1,580,000.00	
Misc. Transmission Contracts under \$1,000,000			6,934,063.00	
	Sub-total Transmission Contracts			37,179,858.00

TABLE VII (Continued)

Project	Nature of Contract	Successful Contractor	Contract Price	Total
Duncan Lake	Clearing 1887 Acres	A.O. Farstad	1,250,000.00	
	Misc. Contracts under \$1,000,000.00		1,171,691.00	
		TOTAL		2,421,691.00
Arrow Lakes	Low Level Port Gates & Hoists	Toyomenka Inc.	1,398,350.00	
	Lock Downstream Gates	Toyomenka Inc.	1,132,766.00	
	Lock Bulkhead Gates	Dominion Bridge Co. Ltd.	2,035,000.00	
	Sluice Gates	Nissho (Canada) Ltd.	1,456,405.00	
	Misc. Contracts under \$1,000,000.00		2,237,864.00	
		TOTAL		8,260,385.00
Mica Creek	Major Townsite Buildings	Bennett & White Const. Co. Ltd.	1,168,724.00	
	Catering	Western Catering Ltd.	1,068,472.00	
	Bridge Substructure	H.B. Contracting & Grimwood	1,215,290.00	
	Bridge Steelwork	Dominion Bridge Co. Ltd.	1,257,424.00	
	Diversion Tunnels	Perini Pacific & Associates	21,269,580.00	
	Highway Reconstruction	-	7,578,284.00	
	Misc. Contracts under \$1,000,000.00		2,157,321.67	
		TOTAL		35,715,095.67

TABLE VII (Continued)

Project	Nature of Contract	Successful Contractor	Contract Price	Total
Peace River (Con'd)	Spillway & Low Level Outlets	Kiewit-Dawson-Johnson	43,868,331.00	
	Power Intake Gates	Mitsubishi Canada Limited	1,380,000.00	
	Misc. Dam and Powerhouse contracts under \$1,000,000.00			3,616,243.20
	Sub-total Dam and Powerhouse Contracts			48,864,574.20
		TOTAL		86,044,432.20