

December 4, 2001

8900-4800-59240-07 OGC - 01235

Shauna J. Clarey Engineering Technician Calpine Canada Resources Ltd. 1800, 421 – Seventh Ave SW Calgary AB T2P 4K9

Encal Project (02)

Dear Ms. Clarey:

RE: CONCURRENT PRODUCTION APPROVAL, AMENDMENT #1
ZAREMBA HALFWAY "I" POOL

At the time of the original Approval this was a single well oil pool defined by b-69-L/94-H-7 (WA 10101). Subsequently, a gas cap location was drilled at b-79-L/94-H-7 (WA 10889). The b-79-L well was placed on production without prior approval from the Commission as required under section 87(6) of the *Drilling and Production Regulation*.

Reservoir damage due to unrestricted production from b-79-L has likely minimized the pool ultimate oil recovery. However, the Commission is of the opinion that shutting in the b-79-L well now would not benefit ultimate pool recovery. Granting of the requested amendment, that will include the b-79-L well in the approval, is considered reasonable at this point in the productive life of the reservoir.

Attached is a Concurrent Production scheme approval amendment for the subject pool, as requested in your application dated November 23, 2001.

The Approval 98-07-008 (Amendment #1) is hereby granted under section 97 of the <u>Petroleum and Natural Gas Act</u>.

Please note that the project allowables may be amended if another operator successfully completes an oil well outside the project area in the subject pool.

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Craig Gibson, P. Eng. Manager	Approval Letters to Industry GEP, SWD, CONCURRENT P PRESSURE MAINTENANCE, WATERFLOOD, ETC. Copy 9 Wellfile (originals) 59240	ROD,
Reservoir Engineering and Geology	Daily Resource Revenue	
Attachment	S. Chicorelli R. Stefik G. Farr P. Attariwala	
	D. Krezanoski	
ENGINEERING AND GEO		

APPROVAL 98-07-008 (Amendment #1)

THE PROVINCE OF BRITISH COLUMBIA <u>PETROLEUM AND NATURAL GAS ACT</u> OIL AND GAS COMMISSION

IN THE MATTER of a Concurrent Production scheme of Calpine Canada Resources Ltd. (Calpine) for producing the Zaremba Halfway "I" oil pool without spacing and target restrictions and without a project oil allowable.

NOW, THEREFORE, the Commission, pursuant to section 97 of the <u>Petroleum and Natural Gas Act</u>, hereby amends the Concurrent Production project of Calpine for production of oil without an allowable, as such scheme is described in

an Application from Calpine to the Commission dated April 23, 1998, and November 23, 2001 and related submission.

This scheme is approved, subject to the conditions herein contained and, in particular:

- 1. The area of the scheme shall consist of units 58, 59, 68, 69, 78, 79, 88 and 89 of Block L /94-H-7.
- 2. The daily oil allowable is waived.
- 3. Gas production from the project will be limited to 90 e³ m³/d.
- 4. The requirements of section 9 of the *Drilling and Production Regulation* are hereby waived, provided that oil wells within the scheme area are not completed nearer than 100 m to the sides of the approved area.
- 5. All produced gas must be conserved.
- 6. This approval may be modified or rescinded at a later date if deemed appropriate.

Craig Gibson Manager

Reservoir Engineering and Geology

DATED AT the City of Victoria, in the Province of British Columbia, this 9 day of December, 2001.