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Richard A. Neufeld and Robert G. Grant, Q.C. Drainage Issues in the Atlantic Canada Offshore Petroleum Industry

In this article, the authors examine the issue of drainage in the Atlantic Canada offshore. The offshore statutory regimes for production of oil and gas, together with the common law, are analyzed for their approaches to dealing with drainage issues. In addition, the law of drainage in Alberta is comprehensively reviewed to provide some guidance as to how the law of drainage may develop in Atlantic Canada.

Dans cet article, les auteurs se penchent sur le problème du drainage dans le secteur pétrolier extracôtier sur la côte Atlantique. Ils analysent les lois et règlements régissant l'exploitation pétrolière et gazière extracôtière ainsi que la common law pour faire le point sur les approches préconisées. De plus, ils se livrent à un examen approfondi de la loi sur le drainage de l'Alberta pour cerner les grandes orientations que pourrait prendre la loi concernant le drainage au Canada Atlantique.

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Introduction

In recent years, the Atlantic Canada offshore has evolved from a frontier region of speculative oil and gas exploration to an area of significant commercial production. Increased knowledge of the offshore reserves coupled with the success of producing ventures has propelled interest and activities connected with further exploration and development. These increased activities will give rise to the emergence of legal issues prevalent in regions having a mature oil and gas industry. These include issues relating to drainage. Drainage refers to "the migration of oil or gas within a reservoir towards areas of lower pressure which are the result of production from wells in that reservoir." The legal problem caused by the physical act of drainage is the balancing of the rights of persons having interests in the reservoir.

The statutory regimes for the production of oil and gas in offshore Atlantic Canada do not provide a comprehensive regime for dealing with legal issues associated with drainage. In the absence of judicial or administrative decisions concerning the legislation, there are a number of uncertainties as to how drainage issues will be resolved in the offshore. An analysis of the legal rights of persons affected by drainage in the Atlantic Canada offshore must begin with a review of the common law. Some guidance may be gained, as well, from well-developed jurisprudence arising out of legislation in Alberta, where a mature oil and gas industry exists. Comparisons respecting the law of drainage in the Atlantic Canada offshore with that of Alberta must carefully consider the different statutory regimes under which a person acquires the rights to produce oil and gas and the substantially higher costs and risks of drilling wells offshore rather than on land.²

I. Common Law: Rule of Capture

Because of the inherent migratory nature of oil and gas, a landowner cannot produce oil or gas from a common reservoir without displacing or draining some of the resource from under his neighbour's property.³ This problem of drainage has plagued the oil and gas industry for as long as the industry has existed. Under the common law, drainage was governed by the rule of capture, as enunciated by the Privy Council in *Borys* v. *Canadian Pacific Railway and Imperial Oil Limited*.⁴ Under this rule, if a producer, in the course of draining the oil and gas from under its

^{1.} C.D. Hunt & A.R. Lucas, *Canada Energy Law Service*, looseleaf (Scarborough: Carswell, 1998) at 30-3025.

^{2.} For an overview of the legal structure of land rights in Saskatchewan, British Columbia and Manitoba see Hunt & Lucas, *ibid.*, at 122-38.

^{3.} F. Pilcher, "Oil and Gas: H.B. 1221: Protection of Correlative Rights in the Absence of Waste" (1987) 40 Okla. L. Rev. 127 at 129.

^{4. [1953]} A.C. 217, 7 W.W.R. (N.S.) 546, [1953] 2 D.L.R. 65, [1953] 2 W.L.R. 224, [1953] 1 All E.R. 452 (P.C.) [hereinafter Borys]. The rule of capture as stated in Borys has been further commented on by the Canadian courts. For a further review of the rule of capture please see Anderson v. Amoco Canada Oil & Gas (1998), 63 Alta. L.R. (3d) 1, 225 A.R. 277, [1999] 3 W.W.R. 255 (Q.B.); Prism Petroleum v. Omega Hydrocarbons (1994), 18 Alta. L.R. (3d) 225, 149 A.R. 177, 63 W.A.C. 177, [1994] 6 W.W.R. 585 (C.A.); and Lickatz v. Magna Petroleums (1994), 160 A.R. 193 (Q.B.) [hereinafter Lickatz].

property, recovers oil and gas which has filtered over from an adjoining property, the owner of the adjoining property has no remedy against the producer apart from the self-help remedy of drilling its own well. The owner of a tract of land acquires title to the oil and gas produced from wells on its land, even though part of such oil and gas migrated from adjoining lands.5

The rule of capture applies equally to those who own the land and those who lease it. Thus, even if land is leased for the purpose of producing the oil or gas, lessees only receive that oil or gas reduced to their possession, regardless of what quantities of oil and gas were in fact under the land at the time of the lease.6

Both the Canadian and American courts have recognized the rule of capture. Unlike their Canadian counterparts, American courts have developed a series of exceptions to the rule. Further, they have established correlative rights for the owners of property interests in the production of oil and gas.7 In Canada, legislation and case law developed from the rule have been used to settle the interests of persons affected by drainage.8

The rule of capture has the potential to cause great inefficiencies in the oil and gas industry. It encourages producers to produce and capture as much of the resource as possible, as quickly as possible, which can lead to waste. Waste can be divided into two subgroups: physical and economic waste. 9 Physical waste is the reduction of the total recoverable hydrocarbons from the oil or gas reservoir. 10 Over-utilization of a reservoir will also lead to significant physical waste. The result of having too many wells in place is that a smaller percentage of the oil or gas that exists in the reservoir will be recovered. During the production of oil and gas, the natural migration of the oil or gas is towards the producing well.

^{5.} R.E. Pelzer & R. A. Lehodey "Horizontal Drilling: Regulatory and Contractual Implications" (1992) 30 Alta. L. Rev. 272 at 278.

^{6.} J. B. Ballem, The Oil and Gas Lease in Canada, 3rd ed. (Toronto: University of Toronto Press, 1999) at 106.

^{7.} Pilcher, supra note 3 at 131. See also K. Wilson, "Conservation Acts and Correlative Rights: Has the Pendulum Swung Too Far?" (1989) 35 Rocky Mt. Min. Law Inst. 181 at §18.01 to §18.02 and W.R. Richards, T.A. Mitchell & M. S. Johnson, "Oil and Gas Conservation in Utah After Cowling: The Law of Capture Receives a New Lease on Life" (1994) 14 J. Energy, Nat. Res. & Envtl. L. 1 at 2-9 for a review of the American approach to correlative rights.

^{8.} This effect can be seen through mandatory pooling agreements. See N. Bankes, "Pooling Agreements in Canadian Oil and Gas Law" (1995) 33 Alta. L. Rev. 493 at 494-99. Also see Lickatz, supra note 4, for judicial interpretation of the retroactive effect of legislation on the rule of capture.

^{9.} J. Lowe, Oil and Gas Law in a Nutshell (Minnesota: West Publishing Co., 1995) at 16.

^{10.} R.C. Maxwell et al., Cases and Materials on the Law of Oil and Gas, 6th ed. (Westbury, Foundation Press Inc., 1992) at 841.

If the oil or gas is dissipated among too many wells or too quickly, oil and gas may be left in the formation.¹¹ If oil or gas is produced more slowly, using the appropriate number of wells, a greater percentage of the oil or gas may be recovered, albeit over a longer period of time.¹²

Economic waste is the production of oil or gas in excess of the reasonable market demand.¹³ Over-production of oil or gas causes the market to be flooded with the commodity and thus causes the price of oil and gas to drop significantly. Physical and economic waste in the oil and gas industry have resulted in increased production costs and lower market prices for the resource.¹⁴ Legislation to prevent waste has addressed the issue in two ways: by making the practice of wasteful production illegal, and by encouraging or requiring producers to enter into pooling and unitization agreements.¹⁵

II. Regulatory Regime in Nova Scotia and Newfoundland

The federal government passed the Canada-Newfoundland Atlantic Accord Implementation Act¹⁶ in 1987, followed by the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act in 1988.¹⁷ Nova Scotia and Newfoundland passed mirror legislation to reflect the federal legislation.¹⁸ The Nova Scotia Accord Act and the Newfoundland Accord Act contain the same legislative approach to the regulation of waste, pooling of resources and mandatory unitization of reservoirs.¹⁹

Under the *Accord Acts* there are established as governing agencies in the respective offshore areas the Canada-Nova Scotia Offshore Petroleum Board and the Canada-Newfoundland Offshore Petroleum Board (the Boards).²⁰ The jurisdiction of these Boards is wide-ranging, and includes

^{11.} Lowe, supra note 9 at 16.

^{12.} Ibid.

^{13.} Maxwell et al., supra note 12 at 841.

^{14.} Lowe, supra note 9 at 17.

^{15.} A.R. Lucas & C.D. Hunt, *Oil and Gas Law in Canada* (Scarborough: Carswell, 1990) at 7. While the focus of this article is on the use of pooling and unitization, there are also other techniques which are used to prevent wasteful production, including prohibitions on concurrent production of oil and gas caps, prescriptions for oil/gas ratios, and rateable take of gas orders.

^{16.} S.C. 1987, c. 3 [hereinafter Newfoundland Accord Act].

^{17.} S.C. 1988, c. 28 [hereinafter Nova Scotia Accord Act].

^{18.} Canada-Newfoundland Atlantic Accord Implementation (Newfoundland) Act, S.N. 1986, c. 37 and the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act, S.N.S. 1987, c. 3.

^{19.} We refer to the *Nova Scotia Accord Act* and the *Newfoundland Accord Act* together as the *Accord Acts*. All citations refer to the federal versions of the legislation.

^{20.} Nova Scotia Accord Act, supra note 17, s. 9(1); Newfoundland Accord Act, supra note 16, s. 9(1).

the jurisdiction to deal with issues related to resource management.²¹ For the purpose of carrying out its duties, each Board has established an Oil and Gas Committee (Committee) which is empowered to hold inquiries. hear appeals, make orders and give direction with regard to the production of oil and gas.²² Further, each Board has appointed a Chief Conservation Officer (Officer)²³ whose duties include overseeing the prevention of waste

1. Interests in Offshore Licences

The Accord Acts establish an interest regime involving categories of licences which provide the holders with different rights and obligations. Licence holders are entitled to exercise these rights exclusively for the offshore area to which their licence applies. Interests are acquired in the Crown reserve areas of the offshore, generally through a competitive call for bids system administered by the Board.²⁴ Under an exploration licence, the holder has:

- (1) the right to explore for and the exclusive right to drill for petroleum in the licence area,
- (2) the exclusive right to develop the licence area to produce petroleum, and
- (3) the exclusive right to apply for a production licence.²⁵ A significant discovery licence confers the same rights as an exploration licence. It is restricted to the area which the Board has declared to be a significant discovery, that is, in respect of which the Board has reasonable grounds to believe that the significant discovery may extend. The holder of a significant discovery licence may be subject to Board orders requiring the drilling of wells.26

Where the Board has made a declaration of commercial discovery, the licence holder is entitled to receive a production licence. In addition to the rights conferred upon the holders of exploration and significant discovery licences, the holders of production licences receive the exclusive

^{21.} M. Harrington et al., "Emerging Issues in East Coast Oil and Gas Development" (1997) 35 Alta, L. Rev. 269 at 274.

^{22.} Nova Scotia Accord Act, supra note 17, ss. 145-49; Newfoundland Accord Act, supra note 16, ss. 141-45.

^{23.} Nova Scotia Accord Act, ibid., s. 144; Newfoundland Accord Act, ibid., s. 140.

^{24.} Nova Scotia Accord Act, ibid., s. 61; Newfoundland Accord Act, ibid., s. 58.

^{25.} Nova Scotia Accord Act, ibid., s. 68; Newfoundland Accord Act, ibid., s. 65.

^{26.} Nova Scotia Accord Act, ibid., ss. 74, 75, 79; Newfoundland Accord Act, ibid., ss. 71, 72, 76.

right to produce petroleum for the licence area and title to the petroleum so produced.²⁷ A Board's intended declaration of commercial or significant discovery may be subject to a hearing before the Committee.²⁸

In addition to these licences, a person wishing to explore for, drill for, produce or transport petroleum in the offshore requires an operating licence and an authorization for the work or activity.²⁹ To obtain the work authorization, the licence holder must submit and obtain approval for its development plan. The development plan must contain detailed and technical information regarding the reservoir and its proposed reservoir management plan sufficient to allow for a comprehensive review and evaluation of the proposed development.³⁰

2. Conservation Measures

The Accord Acts contain measures aimed at the conservation of oil and gas. There are powerful provisions to prevent the continuance of waste as defined under the Accord Acts. The Accord Acts also contain provisions for the pooling and unitization of interest in the production of oil or gas. While the Accord Acts do not explicitly address the settling of rights affected by drainage, these conservation measures may be used to push these issues towards resolution.

One method of preventing waste where more than one person has an interest in a reservoir is to provide for pooling and unitization agreements. The terms "pooling" and "unitization," though often used interchangeably, have specific meanings. "Pooling" is generally considered in the industry to be "the bringing together of small tracts sufficient for the granting of a well permit." The principle of pooling is confined to rights within a designated area, known as a spacing unit. In order to meet the drilling spacing requirements under legislation, owners of oil and gas leases covering areas smaller than the prescribed "spacing units" enter into

^{27.} Nova Scotia Accord Act, ibid., ss. 81-83; Newfoundland Accord Act, ibid., s. 80.

^{28.} Nova Scotia Accord Act, ibid., s. 127; Newfoundland Accord Act, ibid., s. 124 See Petro-Canada v. Canada (Canada-Newfoundland Offshore Petroleum Board) (1995), 127 D.L.R. (4th) 483, 133 Nfld. & P.E.I.R. 91, 413 A.P.R. 91 (Nfld. S.C.T.D.) and Mobil Oil Canada v. Canada-Newfoundland Offshore Petroleum Board (1990), 87 Nfld. & P.E.I.R. 58 (Nfld S.C.T.D.), aff'd (1992), 95 Nfld. & P.E.I.R. 95 (Nfld. C.A.); cross-appeal by Board allowed, appeal by company dismissed, [1994] 1 S.C.R. 202, 163 N.R. 27, 115 Nfld. & P.E.I.R. 334, 360 A.P.R. 334, 111 D.L.R. (4th) 1 (S.C.C.) for judicial consideration of the administrative law principles which apply to the Boards when holding hearings into whether or not licences will be granted.

^{29.} Nova Scotia Accord Act, supra note 17, s. 140; Newfoundland Accord Act, supra note 16, s. 136.

^{30.} Nova Scotia Accord Act, ibid., s. 143; Newfoundland Accord Act, ibid., s. 139.

^{31.} C.T Mulldane & A.P.G Walker, "The Pooling Clause and the Effects of Unitization on the Oil and Gas Lease" (1966) 4 Alta. L. Rev. 250.

pooling agreements to recover the oil or gas.³² Pooling gives the mineral owner whose correlative rights are threatened by drainage a legal right to share in the recovery of the resource which is being drained.³³

"Unitization" is considered to be "the bringing together of units covering large field-wide or pool-wide unit areas or portions thereof."34 The principle of unitization combines the interests throughout a pool which covers more than one spacing unit. Unitization involves an arrangement by owners of oil and gas rights in tracts overlying a common pool so that the pool or field can be operated as a unit.³⁵ When unitization occurs, one of the unit owners undertakes to operate the unit on behalf of all the owners, allocating the costs and profits accordingly.³⁶

3. Pooling

Producers under the Accord Acts cannot produce oil or gas if there are two or more leases or separately owned working interests within a "spacing unit" unless there is a pooling agreement in place.³⁷ The Accord Acts contain provisions for voluntary and mandatory pooling.

The impact of these provisions is uncertain as a result of the unclear definition of "spacing unit" contained in the Accord Acts. "Spacing unit" is defined as "the area allocated to a well for the purpose of drilling for or producing petroleum."38 This definition neither describes precisely the area of a spacing unit nor indicates how such area is to be ascertained. Who allocates the area to a well for the purposes of drilling for or producing petroleum? Under what statutory or regulatory authority is this allocation made? It would appear that the powers to regulate the production of offshore oil and gas which has been given to the Governor in Council,³⁹ together with the wide definition of spacing unit would permit regulations to be made which govern these areas of concern.⁴⁰

^{32.} Lucas & Hunt, supra note 15 at 202.

^{33.} Lowe, supra note 9 at 27.

^{34.} Mulldane & Walker, supra note 31 at 250.

^{35.} Lucas & Hunt, supra note 15 at 215.

^{36.} Lucas & Hunt, ibid. at 215.

^{37.} Nova Scotia Accord Act, supra note 17, s. 176(1); Newfoundland Accord Act, supra note 16, s. 171(1).

^{38.} Nova Scotia Accord Act, ibid., s. 171; Newfoundland Accord Act, ibid., s. 166.

^{39.} Nova Scotia Accord Act, ibid., s. 153 and s. 208; Newfoundland Accord Act, ibid., s. 149

^{40.} For a discussion of this point as it pertained to the Oil and Gas Production and Conservation Act, R.S.C. 1970, c. O-4, s. 20 see O.L. Anderson, Oil and Gas Conservation on Canada Lands (Calgary: Canadian Institute of Resources Law, 1985). Interestingly, the author noted the failure to protect correlative rights as a troublesome aspect of this legislation which was a precursor to the Accord Acts.

Without a clear definition of "spacing unit" it is difficult to know when two or more leases or two or more separately owned working interests exist within a spacing unit. This deficiency in the legislation appears to stem from a failure adequately to adapt pooling concepts contained in other legislation when borrowing them for inclusion in the different scheme for acquiring rights under the *Accord Acts*. The drafters of the legislation can be forgiven for this oversight, committed at a time when two or more drillers squabbling over entitlement to a producing pool would have appeared to be a "high class" problem for these speculative frontiers.

Voluntary pooling is contemplated under the *Accord Acts*. All the working interest owners within a spacing unit, together with any royalty owners, may by agreement pool their working and royalty interests in the spacing unit for the purpose of drilling for or producing (or both drilling for and producing) petroleum.⁴² The pooling agreement must be filed with the Officer.⁴³ The legislation also contemplates mandatory pooling orders. A working interest owner in a spacing unit may apply for a pooling order directing the working interest owners and the royalty owners to pool their interests in the spacing unit for the purpose of drilling for and producing, petroleum from the spacing unit.⁴⁴ The Committee holds a hearing at which interested persons have an opportunity to be heard before it makes such an order.

Orders for the pooling of interests must provide for the drilling and operation of a well, the appointment of a working interest owner as an operator to be responsible for said drilling, the allocation of shares in the production of the petroleum, the payment of costs both in the event that production occurs and that no production occurs, and for the sale by the operator of the petroleum.⁴⁵ The utility of these pooling provisions is questionable because of the uncertain definition of "spacing unit" in the *Accord Acts*.

^{41.} In other jurisdictions, a spacing unit is defined with exact geographic detail or with sufficient detail from which the boundaries of a spacing unit may be determined. For instance, the Alberta legislation defines a drilling spacing unit for an oil well as one quarter section (160 acres) and for a gas well as one section (640 acres). Lucas & Hunt, *supra* note 15 at 200. It is interesting to note that as of February 6, 2001 the average size of the area for which an exploration licence was granted in the offshore of Nova Scotia was 122,433.4 hectares, online: Canada-Nova Scotia Offshore Petroleum Board webpage http://www.cnsopb.ns.ca/Rights-Management/EL_Info.html>.

^{42.} Nova Scotia Accord Act, supra note 17, s. 172(1); Newfoundland Accord Act, supra note 16, s. 167(1).

^{43.} Ibid.

^{44.} Nova Scotia Accord Act, ibid., s. 173(1); Newfoundland Accord Act, ibid., s. 168(1).

^{45.} Nova Scotia Accord Act, ibid., s. 173(5); Newfoundland Accord Act, ibid., s. 168(4).

4. Unitization

The Accord Acts allow for unitization where there are multiple working interest owners of a pool which exceeds the area of a spacing unit. As "working interest" is defined as the right to produce or dispose of petroleum from a pool or part of a pool, 46 only persons holding a production licence qualify as working interest owners. The definition of "spacing unit" causes difficulty in interpreting the unitization provisions, as it did in interpreting the pooling provisions of the Accord Acts. The unit area subject to unitization must be a pool or part of a pool that exceeds the area of a spacing unit. While there is some uncertainty regarding what constitutes a spacing unit, there are certain circumstances in which it would appear safe to assume that a pool covers an area exceeding a spacing unit. For instance, a pool straddling two or more production licence areas where each licence holder has entitlement to drill a well would appear to cover an area exceeding a spacing unit, however that term may be interpreted.

Unitization may occur in three ways: voluntarily, as a result of the Board's order on the application of the Officer, or as a result of the Board's order on the application of the owners of 65 percent or more of the working interests in a unit area. One or more working interest owners in a pool, or part of a pool, exceeding a spacing unit in area may, together with the royalty owners, enter into a unit agreement and operate their interests pursuant to that agreement.⁴⁷ The only requirement is that a copy of the agreement be filed with the Officer.⁴⁸ Where such an agreement designates one operator to be the agent of the parties to the agreement, the performance or non-performance by that agent is deemed to be performance or non-performance by all parties to the agreement.⁴⁹

If the Officer is of the opinion that the unit operation of a pool or any part thereof would prevent waste, the Officer may apply to the Committee for an order requiring the working interest owners to enter into a unit agreement and a unit operating agreement.⁵⁰ When the Officer makes this application, the Committee will hold a hearing to determine whether such a unitization order should be made.⁵¹ If, following such a hearing, the Committee determines that a unitization agreement is required, it may issue an order that the working interest owners in that pool or part thereof

^{46.} Nova Scotia Accord Act, ibid., s. 171; Newfoundland Accord Act, ibid., s. 166.

^{47.} Nova Scotia Accord Act, ibid., s. 177(1); Newfoundland Accord Act, ibid., s. 172(1).

^{48.} Ibid.

^{49.} Nova Scotia Accord Act, ibid., s. 177(3); Newfoundland Accord Act, ibid., s. 172(3).

^{50.} Nova Scotia Accord Act, ibid., s. 178(1); Newfoundland Accord Act, ibid., s. 173(1).

^{51.} Nova Scotia Accord Act, ibid., s. 178(2;) Newfoundland Accord Act, ibid., s. 173(2).

enter into a unit agreement and unit operation agreements.⁵² If the parties fail to do so within the specified time, the production of oil or gas from that pool must cease until such agreements are reached and filed with the Officer⁵³ or unless otherwise authorized to continue said production.⁵⁴

The Board can also grant unitization orders upon application by working interest owners. Only those working interest owners who, individually or collectively, are parties to a unit agreement and a unit operating agreement and own in the aggregate 65 percent or more of the working interest in a unit area may apply for an unitization order with respect to the agreements.⁵⁵ If these working interest owners are successful, then the Committee may, following a hearing, order that the agreement is a valid contract among all of the working or royalty interest holders in that unit area.⁵⁶ To be successful, the working interest and royalty owners must, in addition to proving that they do own 65 percent of the interest in the unit area, prove that such an order would accomplish more efficient or economical production of petroleum in the unit area.⁵⁷

5. Prohibition of Waste

Under the Accord Acts waste is prohibited, and any person who commits it may be found guilty of an offence. Waste is defined not only to include its ordinary meaning and the meaning understood in the petroleum industry, but also to include the following:

- (a) the inefficient or excessive use or dissipation of reservoir energy;
- (b) the locating, spacing or drilling of a well within a field or pool or within part of a field or pool or the operating of any well that, having regard to sound engineering and economic principles, results or tends to result in a reduction in the quantity of petroleum ultimately recoverable from a pool;
- (c) the drilling, equipping, completing, operating or producing of any well in a manner that causes or is likely to cause the unnecessary or excessive loss or destruction of petroleum after removal from the reservoir;
- (d) the inefficient storage of petroleum above ground or underground;
- (e) the production of petroleum in excess of available storage, transportation or marketing facilities;
- (f) the escape or flaring of gas that could be economically recovered and processed or economically injected into an underground reservoir; or

^{52.} Nova Scotia Accord Act, ibid., s. 173(3); Newfoundland Accord Act, ibid., s. 173(3).

^{53.} Nova Scotia Accord Act, ibid., s. 173(4); Newfoundland Accord Act, ibid., s. 173(4).

^{54.} Nova Scotia Accord Act, ibid., s. 173(5); Newfoundland Accord Act, ibid., s. 173(5).

^{55.} Nova Scotia Accord Act, ibid., s. 179(1); Newfoundland Accord Act, ibid., s. 174(1).

^{56.} Nova Scotia Accord Act, ibid., s. 181(2); Newfoundland Accord Act, ibid., s. 176(2).

^{57.} Nova Scotia Accord Act, ibid., s. 181(2); Newfoundland Accord Act, ibid., s. 176(2).

(g) failure to use suitable artificial, secondary or supplementary recovery methods in a pool when it appears that such methods would result in increasing the quantity of petroleum ultimately recoverable under sound engineering and economic principles.

If the Officer, on reasonable grounds, is of the opinion that waste is being committed, he or she may order that all operations giving rise to such waste cease until the Officer is satisfied that the waste has stopped.⁵⁸ In the event that the Officer believes it is necessary in order to prevent damage to persons or property or to protect the environment, he or she may make an order requiring all operations to be shut down prior to the investigation, but the investigation must still occur following the shutdown.⁵⁹ This power of the Officer cannot be exercised in relation to waste resulting from a failure to utilize gas or a failure to use the appropriate recovery methods.⁶⁰ If this type of waste is suspected, the Officer can apply to the Committee for an order, and only the Committee can order the stoppage of this type of waste.61

The Officer has power to issue production orders requiring commencement, continuation or increase in the production of petroleum to stop waste. 62 To prevent waste he or she can authorize such persons as are necessary to enter the premises and take over management and control of the operations which are giving rise to the waste.⁶³ Any costs associated with such management are borne by the person who holds the permit with a lease to produce the resource.

If waste resulting from a failure to utilize gas or a failure to use the appropriate recovery methods is found by the Committee, then the Committee may order the introduction of a scheme for the collection, processing, disposition or re-injection of any gas produced from such a pool, or it may direct maintenance for the pool or direct the injection of gas, water or any other substance into the pool.64

In addition to the remedies discussed above, charges may be brought for committing waste.65 The prosecution of any person accused of committing waste may only be instituted with the consent of the Board. It is important to note that no person can be deemed to have committed

^{58.} Nova Scotia Accord Act, ibid., s. 160(1); Newfoundland Accord Act, ibid., s. 155(1).

^{59.} Nova Scotia Accord Act, ibid., s. 160(3); Newfoundland Accord Act, ibid., s. 155(3).

^{60.} Nova Scotia Accord Act, ibid., s. 159(2)(f) or (g); Newfoundland Accord Act, ibid., s. 154(2)(f) or (g).

^{61.} Nova Scotia Accord Act, ibid., s. 163(1); Newfoundland Accord Act, ibid., s. 163(1).

^{62.} Nova Scotia Accord Act, ibid., s. 158; Newfoundland Accord Act, ibid., s. 153.

^{63.} Nova Scotia Accord Act, ibid., s. 161(1); Newfoundland Accord Act, ibid., s. 156(1).

^{64.} Nova Scotia Accord Act, ibid., s. 164(1); Newfoundland Accord Act, ibid., s. 159(1).

^{65.} Nova Scotia Accord Act, ibid., s. 199(5); Newfoundland Accord Act, ibid., s. 194(1).

the offence of waste for a failure to utilize gas or to use appropriate recovery methods unless that person has been ordered by the Committee to take measures to prevent the waste and has failed to comply.

6. Protection of Correlative Rights

The Accord Acts contain no provisions explicitly designed to address the protection of correlative rights. Drainage is dealt with as a conservation concern for which there are a variety of regulatory mechanisms available. Without judicial or administrative precedents regarding the balancing of correlative rights in the offshore, it is useful to examine the Alberta experience concerning these issues.

III. Alberta Regime

Protection of correlative rights under Alberta statutory and regulatory regimes is a fundamentally different exercise than in offshore areas. It is a simpler process, because the underlying land tenure process is more straightforward. It is, at the same time, more complex, because of the variety of regulatory processes that come into play in a maturing area of energy production, such as the Western Canadian Sedimentary Basin. Despite the differences in basin (and regulatory) maturity and land tenure, there are, nonetheless, some lessons to be learned from the Alberta experience for offshore energy producers. 66

1. Land Tenure

In Alberta, the procedures used for the acquisition of the right to produce oil or gas from an area depends on whether the rights are held privately or by the Crown. In the case of freehold lands, mineral rights flowed, initially, to the fee simple landowner, and have subsequently been subject to disposition on the open market. After 1930, mineral rights were reserved to the provincial Crown, as and when new land parcels were created. Those rights have been subject to the provincial land sales process, wherein petroleum and natural gas (P&NG) rights are posted for "sale", and bid upon by energy companies or their agents. This takes the form of an initial exploration licence, followed by the issuance of standard form P&NG leases following the drilling of a qualifying well.⁶⁷

On a conceptual basis, the issuance of land tenure for public lands under Alberta legislation is therefore similar (albeit, less complex) than under federal and offshore regimes. An initial right to explore is obtained

^{66.} For an interesting review of industry and regulatory development in Alberta and the myriad issues impacting thereon, the reader is referred to D.H. Breen, Alberta's Petroleum Industry and the Conservation Board, (Edmonton: University of Alberta Press, 1993).

^{67.} For a more complete description, see Lucas & Hunt, supra note 15 at 9-11.

through bidding, followed by conversion of that interest to a "lease" following the discovery of commercial reserves.

2. Drainage Remedies

The basic remedy available to an Alberta company whose reserves are being drained by an off-setting well is self-help. That is, to drill a competing well with the objective of not only preventing migration of reserves to the offsetting producer, but also reversing the situation in one's favour. In one notoriously competitive portion of Alberta, that development scenario is known as "Straw Wars."

Alberta law and regulatory practice acknowledges and, in some respects, even encourages such aggressive behaviour. For example, the Alberta Energy and Utilities Board (EUB or Board) has long held that drainage of off-setting lands is not undesirable per se, as it is a natural consequence of a competitive industry and the rule of capture. 68 Moreover, exploration success is rewarded following the drilling of a successful exploration well, through measures such as conferring confidential status on all well data for one year following completion, and waiving off-target penalties for the first well in a pool.

Regulatory relief is available, however, where the drainage is "inequitable," or where the production practice resulting in the drainage results in conservation losses. Because the public interest in maximizing the amount of energy recovered from a pool is sometimes congruent with the off-setting owner's desire to impede the rate of drainage from a pool, conservation measures can, therefore, occasionally be pursued as a surrogate for drainage relief. In the ensuing portion of this article, we will describe the regulatory remedies available in Alberta for both types of situations.

3. Relief from "Inequitable" Drainage

One of the primary differences between Alberta and offshore legislation is Alberta's explicit recognition of correlative rights, as one of the enumerated purposes of the Oil and Gas Conservation Act. 69 Section 4 of the OGCA provides:

The purposes of this Act are

(a) to effect the conservation of, and to prevent the waste of, the oil and gas resources of Alberta;

^{68.} Eagle Exploration, Application for Common Purchaser Declaration, Bruce Viking A Pool (1977), D 77-25 (EUB).

^{69.} R.S.A. 1980, c. O-5 [hereinafter OGCA].

- (b) to secure the observance of safe and efficient practices in the locating, spacing, drilling, equipping, constructing, completing, reworking, testing, operating, maintenance, repair, suspension and abandonment of wells and facilities and in operations for the production of oil and gas;
- (c) to provide for the economic, orderly and efficient development in the public interest of the oil and gas resources of Alberta;
- (d) to afford each owner the opportunity of obtaining his share of the production of oil or gas from any pool;⁷⁰
- (e) to provide for the recording and the timely and useful dissemination of information regarding the oil and gas resources of Alberta;
- (f) to control pollution above, at or below the surface in the drilling of wells and in operations for the production of oil and gas and in other operations over which the Board has jurisdiction.

The OGCA contains a number of provisions that afford a party that is being deprived by circumstances beyond its control the opportunity to produce its share of production from a pool.⁷¹ These situations have sometimes been referred to as instances of "inequitable" drainage. Among these remedies are: common carrier declarations, common processor declarations, common purchaser declarations, and rateable take orders.

A 1969 article by C.H. Hebb⁷² discussing common carrier, common purchaser and common processor orders has been partly summarized as follows:

These orders are intended to ensure that every holder of oil and gas rights has an opportunity to secure a fair share of the benefits from the resource. The objective is the mitigation of inequities produced by the rule of capture in the context of particular contractual arrangements and physical circumstances, including reservoir characteristics and production facilities. Common purchaser, carrier and processor orders extend the principle of entitlement to a fair share of resources beyond mere access to the hydrocarbons to include the opportunity to have the oil and gas transported, purchased or processed. Without the benefit of these orders, a rights holder without access to markets would be vulnerable to drainage by other producers in the same pool who have marketing arrangements.⁷³

^{70.} Contrast this explicit objective with the more oblique stated purpose of the Accord Acts "to promote . . . joint production arrangements." Nova Scotia Accord Act, supra note 17, s. 138.1; Newfoundland Accord Act, supra note 16, s. 135.1 [emphasis added].

^{71.} OGCA, supra note 69, s. 1(1)(q) defines "pool" as "a natural underground reservoir containing or appearing to contain an accumulation of oil or gas or both separated or appearing to be separated from any other such accumulation."

^{72.} C.H. Hebb, "Common Carrier, Common Purchaser and Common Processor Orders" (1969) 7 Alta. L. Rev. 436.

^{73.} Supra note 1 at 30-3196.

Clearly, these orders represent a significant protection for rights holders who, under the pure rule of capture and related concepts, may be treated inequitably by other rights holders. Indeed, by these orders, "the opportunity for every person to secure a fair share of the oil or gas beneath his land is effectively correlated with all other producers in the Province of Alberta."74

Traditionally, the criteria for obtaining such relief from the Board have included demonstrating that (1) drainage of reserves is taking place (or at least that there is a high probability of drainage); (2) drainage is taking place because of constraints in processing capacity (in the case of common processor applications), pipeline capacity (for common carrier applications), or gas markets (for common purchaser applications); (3) the applicant has made reasonable efforts to reach a negotiated, commercial solution; and, (4) no other economic alternative exists (e.g., use of another gas processing plant).⁷⁵

Recently, the common processor remedy was expanded to include a situation where the processing fee demanded by the plant operator was in excess of normal industry practice.76 For the most part, however, drainage has been considered to be a necessary prerequisite to the granting of these remedies.

4. Rateable Take of Gas Orders

While originally framed as a gas conservation mechanism, rateable take orders have, over the years, evolved as a mechanism for allocating production of natural gas from a common pool on a "fair share" basis. Section 23 of the *OGCA* provides:

The Board may, by order, restrict

- (a) the amount of gas, or
- (b) where gas is produced in association with oil, the amount of gas and oil, that may be produced during a period defined in the order from a pool in Alberta, and the restriction may be imposed by either or both of the following means:
- (c) by limiting, if the limitation appears to be necessary, the total amount of gas that may be produced from the pool or part of the pool, having regard to the demand for gas from the pool or to the efficient use of gas for the production of oil, or to both of those considerations;

^{74.} Supra note 72 at 442.

^{75.} Oil and Gas Conservation Regulations, Alta. Reg. 151/71, as am., ss. 15.005, 15.010, 15.020, 15.021 and 15.022.

^{76.} Rider Resources Inc., Common Processor Pembina Field (1997), D 97-02 (EUB).

(d) by distributing the amount of gas that may be produced from the pool or part of the pool in an equitable manner among the wells or groups of wells in the pool for the purpose of giving each well owner the opportunity of receiving his share of gas in the pool. (emphasis added)

The predecessor of s. 23 contained significantly different wording. It stated that:

- 23. The Board, after a public hearing, may, by order, restrict the amount of gas and oil produced in association with gas that may be produced during a period defined in the order from a pool within Alberta
- (a) by limiting, if the limitation appears necessary, the total amount of gas that may be produced from the pool, having regard to the efficient use of gas for the production of oil and to the demand for gas from the pool, and
- (b) by distributing the amount of gas that may be produced from the pool in an equitable manner among the wells in the pool for the purpose of giving each well owner the opportunity of producing or receiving his share of the gas in the pool.

Under the old wording, it was argued that in order for a rateable take order to issue, whereby gas production was allocated between wells in a pool, there must first be a conservation reason to restrict pool production to a particular level. The Board disagreed, holding that it could restrict production in a pool in order to allocate it fairly among producing wells.⁷⁷ The *OGCA* was later amended to codify the practice of the Board, and to remove uncertainty regarding the Board's jurisdiction to order allocation of production with or without a preceding limitation on total pool production.

That a rateable take order can be sought as a drainage remedy (as opposed to being a gas conservation measure), is clear from the statute, and even clearer from the *Oil and Gas Conservation Regulations*. Section 15.005 sets out the information required of an applicant in such case, and includes the following:

15.005 An application under section 23 of the Act for an order limiting the total amount of gas that may be produced from a pool or distributing the amount of gas that may be produced from a pool in an equitable manner among the wells in a pool shall include

- (f) where drainage is alleged, a discussion of drainage including
 - (i) evidence showing that the applicant's well is being drained subsequent to the completion of the well in the pool,
 - (ii) estimates of the present rate of drainage and the expected future rate of drainage, and

^{77.} Suncor Inc., Rateable Take Application Rosevear Beaverhill Lake A Pool (1985), D 85-11 (ERCB).

- (iii) an estimate of the total amount of drainage that has occurred since the well was completed in the pool, including where appropriate
- (A) the details of the gas purchase contracts, or
- (B) the situation which, in the applicant's opinion, has led or will lead to an inequitable situation, and
 - (iv) documents showing the applicant's attempts to negotiate a resolution of the problem

Despite the broad wording of s. 23 of the OGCA, and s. 15.005 of the Oil and Gas Conservation Regulations, the EUB has not been called upon to consider a plethora of rateable take applications. There are a number of reasons for this. First, the primary response to drainage by a competitor is to drill or recomplete one's own well, so as to compete for production from the pool. Second, there is no guarantee that the EUB would view drainage by a competitor, in the absence of circumstances addressed via the common processor/carrier/purchaser remedies (or other unusual situations), to be inequitable. Thus, even if one could show that a competitor's well might recover gas originating on lands held by others, success in a rateable take application might still be elusive. Third, rateable take orders (unlike common processor/carrier/purchaser orders) are not retroactive to the date of application. Thus, the time required to marshal evidence of drainage, establish a track record of negotiations to rectify the situation, apply to the EUB, participate in a contested hearing, and await issuance of a decision, may make the availability of regulatory relief an ineffective remedy in some instances.

5. Drainage and Conservation

In a competitive situation, whenever production of a well is either delayed or restricted, other owners of other wells in the pool stand to benefit. Like taxes, drainage deferred is drainage avoided. In that context, any statutory provision that modifies the right to produce is a potential drainage remedy for an off-setting owner. For example, an approval as simple as a licence to drill can be used as an opportunity to present or pursue drainage concerns. This is particularly the case where a well licence applicant proposes an off-target bottom hole location. The drainage issue can also underlie, or be squarely addressed, in respect of applications for approvals of gas processing facilities, 78 oil or gas pipelines, 79 gas cycling

^{78.} Dome Petroleum Ltd., Rateable Take Application, Pouce Coupe Kiskatinaw D Pool (1980), D 88-8 (ERCB).

^{79.} Dome Petroleum Ltd., Petro-Canada Inc., Amoco Canada Petroleum Ltd., Gas Cycling Applications Brazeau River Nisku P Pool (1987), D-87-7 (ERCB).

(conservation) schemes,80 applications for special spacing units (either reduced or enlarged).81

By engaging the public hearing process, a company whose reserves are under the threat of drainage may be able to forestall drainage losses, or enhance its commercial leverage to achieve a negotiated solution. The challenge for east coast developers will be to find similar opportunities within the context of the *Accord Acts*, and to do so by advancing positions that can be credibly supported under a fair reading of the legislation.

6. Compulsory Pooling and Unitization

Alberta legislation requires that only one well can be drilled and produced within a drilling spacing unit (DSU) at one time.⁸² The reason for this requirement, and the underlying statutory or regulatory provisions establishing DSUs and target areas within those DSUs, are numerous. They include environmental/surface considerations, economic efficiency, conservation of resources, and protection of correlative rights.⁸³

Having made the threshold decision to prescribe DSUs and limit the number of wells to be drilled within one, Alberta had two options open to it to address the issue of correlative rights among different owners within the DSU. The first would be to do nothing, and leave the determination of how the costs and proceeds of drilling are to be allocated to market forces and the common law. The second avenue was to provide a mechanism for the compulsory pooling of ownership interests (or "tracts") within the DSU. In 1959, Alberta took the latter route, providing an avenue to resolution among those landowners unable to reach a negotiated pooling solution.

Section 13 of the OGCA stipulates that, in order to apply for a well licence, an applicant must show that it is entitled to the right to produce oil or gas from the well. Because s. 12 of the statute prevents more than one well per DSU, the Board has interpreted s. 13 as meaning that in order to receive a well licence, there must be common ownership of all tracts within a DSU, either through pooling or otherwise.⁸⁴

Because DSUs are statutorily prescribed, and common ownership of a DSU is a prerequisite to a well licence, the compulsory pooling provisions of the *OGCA* do not fall within the category of a drainage

^{80.} Ibid.

^{81.} Alberta Department of Energy Application to Rescind Spacing Unit Orders (1990), D 90-11 (ERCB).

^{82.} OGCA, supra note 69, s. 12.

^{83.} For a comprehensive discussion, see, e.g., R. Harrison, "Regulation of Well Spacing in Oil and Gas Production" (1970) Alta. L. Rev. 357; N. Bankes, "Compulsory Pooling Under the Oil and Gas Conservation Act of Alberta" (1997), 35 Alta. L. Rev. 945.

^{84.} Blue Range Resources Ltd., Application to Amend Well Licence (1990), D 90-12 (ERCB).

remedy, except to the extent that they deal with different ownership positions within the DSU itself. They do, however, allow the owner of a partial interest to use compulsory pooling to "form a DSU" in order to compete with other wells operated by a company having disproportionate interests in adjoining lands.

An example of this situation occurred recently in the southwestern foothills of Alberta. Canadian 88 Energy Corporation (Canadian 88) owned the P&NG gas rights to three-quarters of a section of land. P&NG rights to the northwest quarter were held by Shell Canada Ltd. (Shell) and Imperial Oil Ltd. (IOL) who also owned offsetting lands to the north and west of the subject section, and which were the subject of well licence applications. To protect its reserves from drainage by wells being proposed by the other two companies, Canadian 88 applied for a competing well. Its application was preceded by negotiations in respect of a voluntary pooling and, when those failed, was accompanied by a compulsory pooling application.

Within the context of the pooling negotiations and regulatory dispute, Shell and IOL argued that pooling of the section on an acreage or areal basis would result in inequitable drainage within the DSU because their quarter section contained a disproportionate volume of gas-in-place. At a prehearing conference, IOL also argued that the Canadian 88 well licence application was patently deficient since, at the time of applying, Canadian 88 had not completed the pooling of the DSU and, consequently, was not entitled to apply for a well licence. The EUB responded to the IOL jurisdictional argument by setting the compulsory pooling application down for hearing on an expedited basis, and in advance of the hearing of the various well licence applications.85 As it turned out, the compulsory pooling hearing was unnecessary, because a voluntary pooling agreement was reached. The well licence applications proceeded to hearing, and were granted.86

The Canadian 88/Shell/IOL dispute is an example of a case where drainage is not front and centre as an issue per se, but, nonetheless, motivates the various commercial and regulatory strategies pursued by the companies involved. One can reasonably expect that, as offshore development matures, similar types of situations will arise. Indeed, as long as the Accord Acts do not afford any direct forms of relief from inequitable drainage, companies seeking to prevent such drainage from

^{85.} Shell Canada Ltd., Canadian 88 Energy Corporation, Prehearing Meeting (1999), Memorandum of Decision 1999-11-10 (EUB).

^{86.} Canadian 88 Energy Corp., Application to Drill a Critical Sour Gas Well and Construct a Pipeline and Related Facilities Castle River Area (2000), D 2000-18 (EUB).

taking place will need to be even more vigilant in scrutinizing the regulatory activities of others.

7. Forced Unitization

Unitization involves the creation of a common entity for the purpose of ownership and operation of oil and gas production in an area extending well beyond a typical DSU. The Alberta *OGCA* contains a series of provisions empowering the EUB to compulsorily unitize lands. However, these provisions have not been proclaimed. What is left, then, is simply a duty to "encourage" unitization, rather than the authority to impose it.

While the EUB has on many occasions expressed support for the concept of unitization, its lack of jurisdiction to directly compel unitization has left aggrieved producers to pursue more oblique regulatory strategies where pools extend beyond the boundaries of traditional DSUs. For gas pools, one such remedy has been the rateable take remedy discussed earlier. In the case of small gas pools involving only a few sections of land, a bolder and more direct approach would be to apply for a special, enlarged drilling spacing unit encompassing all sections within the pool. The statutory basis for such an application would be s. 4.040 of the *Oil and Gas Conservation Regulations*. 88 It sets out the criteria for such application as follows:

- (1) Notwithstanding sections 4.020 and 4.030, the Board may prescribe special drilling spacing units which may differ from normal drilling spacing units in size, shape or target area.
- (2) An application for an order pursuant to subsection (1) shall conform to the provisions of section 15.160 concerning such applications.
- (3) The Board shall not grant an application for an order pursuant to subsection (1) that would reduce the size of drilling spacing units to less than the size of normal drilling spacing units unless the applicant shows that
 - (a) improved recovery will be obtained,
 - (b) additional wells are necessary to provide capacity to drain the pool at a reasonable rate that will not adversely affect the recovery from the pool,
 - (c) the drilling spacing units would be in a pool in a substantial part of which there are drilling spacing units of such reduced size, or
 - (d) in a gas field, increased deliverability is desirable.

^{87.} OGCA, supra note 69, s. 71(1).

^{88.} Alta. Reg. 151/71, as am.

- - (4) The Board may prescribe for an approved oil sands scheme or after publication of notice, for an experimental scheme
 - special drilling spacing units as to size, shape and target area, (a) or
 - an area not having any specific drilling spacing units as to size, (b) shape or target area within which wells may be drilled.

Special DSUs are commonplace in the heavy oil sector, where the normal 160 acre DSU often does not facilitate optimal recovery of resources. It is, nonetheless, clear, that the special DSU provisions also apply to enlarged DSUs to facilitate gas production. In fact, an extensive Decision Report⁸⁹ was issued by the Board in 1990 dealing with an application by the Alberta Department of Energy to rescind longstanding orders prescribing two section DSUs for the Pembina and West Rose areas. The Board discussed its mandate as follows:

1.2 Basis for Establishment of Special DSUs

The Board believes the fundamental reason for the establishment of Special DSUs is to provide flexibility in well spacing and target areas, thereby allowing for efficient and economic development of resources under variable topographical, geological, or reservoir conditions.

In the Board's view, the considerations relevant to establishing Special DSUs are generally as follows:

- Resource conservation, that is, whether the proposed special spacing would affect the recovery of the resource.
- Economics and efficiency, that is, whether altered facilities could effectively recover the resources, such that the economics of the special spacing were more favourable than the economics of standard spacing.
- Equity, that is, whether the special spacing would have any unacceptable effects on another party's opportunity to recover it share of the resource.
- Land use, that is, whether the proposed special spacing would have significant effects on land surface use.
- Land tenure policy, that is, whether the proposed special spacing would be contrary to the intent of the legislation governing land tenure.

A relatively common reason for requesting a larger-than-normal DSU is to obtain off-target penalty relief. In such situations, the above issues would be considered, and economic efficiency, resource conservation, and equity would be critical factors. Although frequently used to deal with off-target wells, special spacing is not intended as a tool to prevent normal competitive operations. Also, where there is insufficient data to establish the geological productive characteristics of a pool, the Board would normally maintain the standard size of spacing unit for the area.

To date, there have been no applications in which an enlarged DSU has been sought as a precursor to a multi-section pooling application. Clearly, the party resisting such a strategy would argue that it constitutes an attempt to have the Board do indirectly that which it cannot do directly (compulsory unitization). The applicant would likely respond by asserting that discretion is vested in the EUB to prescribe abnormally-sized spacing units under the OGCA and, consequently, such an application is both authorized and intended under the Act. How the Board would decide is a matter of conjecture. Existing EUB precedent and policies, such as those articulated above, could, nevertheless, be useful in the offshore or federal setting in the course of establishing criteria for establishing drilling spacing units or considering whether to grant a unitization application.

Conclusion

There are a number of differences between the Alberta and offshore areas that affect the commercial or regulatory remedies that may be available to a party whose reserves are being drained. These include the larger, more expensive scale of drilling operations in the offshore, different mechanisms for granting land tenure, and different statutory regimes. The Alberta experience is, nevertheless, relevant and instructive.

Cases decided by the EUB and its predecessor boards deal with a wide variety of disputes that had, at their root, the desire to prevent (or delay) drainage by a competitor. These include, but are not limited to, decisions involving the drainage remedies of common carrier, common processor and common purchaser. A careful review of Alberta precedent will assist offshore companies in devising regulatory strategies in response to drainage concerns, even though the same remedies may not now be available.

The Accord Acts do not explicitly address the settling of the correlative rights of persons interested in the same reservoir. The Board's jurisdiction to interfere with the exercise of a working interest owner's right to enjoy production pursuant to the rule of capture is based upon its conservation mandate of preventing waste, rather than an equitable mandate to do justice between the parties. The Alberta experience suggests that competitors will invoke this conservation mandate of the Board to protect their interests and seek relief not strictly based upon conservation considerations.

The Board may be called upon to deal with such applications as matters of urgency and importance. To obtain amendments to the *Accord Acts* or

to pass regulations under the Accord Acts so as to provide clearer direction to the Board and interest holders is likely a lengthy process as it involves the relationships of the federal government and two provinces. Legislative inertia may influence the Board to interpret its jurisdiction broadly.

The approach to these issues adopted by the Board may provide a number of opportunities for companies concerned with the prospect of drainage to protect their positions. For example, a broad interpretation of "waste" that included economic waste due to inefficiency could serve to invoke the various conservation-related powers under the Accord Acts. Similarly, it could be argued that the Board may require a development plan filed for approval under the Accord Acts to provide mechanisms for facilitating the efficient, economic and orderly production of reserves including resolution of drainage concerns other than the drilling of unnecessary wells or the construction of unnecessary gathering lines and processing facilities.

The commercial discovery declaration and hearing process may also be invoked in an attempt to provide protection against drainage. Applications for commercial discovery area declarations (and preceding significant discovery area declarations) should be followed carefully by adjacent interest holders. How the regulatory authorities might address concerns of adjacent interest holders is a matter of conjecture. The Alberta experience has shown, however, that if appropriately structured, regulatory action can provide some measure of drainage protection — if only to the extent of buying time to pursue self-help via competitive operations.