

# **ALBERTA ENERGY AND UTILITIES BOARD**

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Calgary Alberta

## **TRANSALTA UTILITIES CORPORATION 138-kV MERCHANT POWER LINE TO SASKATCHEWAN**

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**Addendum to Decision 98-19  
Application No. 980310**

### **INTRODUCTION**

#### **1.1 Application**

TransAlta Utilities Corporation (TAU) applied to the Alberta Energy and Utilities Board (the Board), pursuant to sections 12, 14, and 17 of the Hydro and Electric Energy Act (the H&EE Act), for a permit and licence to construct and operate a 138-kV transmission line, designated as CP 790L-TE, from Provost substation CP 545S to the Alberta/Saskatchewan border. The line would then tie into a SaskPower transmission line with the intent of serving 40 MW of electrical load in the Cactus Lake/Macklin area of Saskatchewan.

Although TAU applied for approval of the project, the transmission line would be owned by TransAlta Energy Marketing Corporation (TEMCO), a non-regulated subsidiary of TransAlta Corporation. TAU is a regulated subsidiary of TransAlta Corporation and a sister company to TEMCO. TAU would construct, operate, and maintain CP 790L-TE. It would also connect the transmission line to its existing electrical transmission system.

#### **1.2 Interventions**

In response to a public notice issued by the Board, several interveners registered their objections and their desire to attend a hearing into TAU's application. Those interveners that appeared at the hearing are listed below. ESBI Alberta Limited and Interprovincial Pipeline Company attended the hearing but did not participate in the proceedings.

#### **1.3 Pre-Hearing Meeting**

A pre-hearing meeting was held on 19 August 1998, to clarify the issues that would be subsequently addressed at the hearing. This application was the first instance of a request to build an unregulated (merchant) export line in Alberta since the declaration of the Electric Utilities Act (the EU Act). As such, there were questions regarding the applicability of the EU Act to an application filed under the H&EE Act. As a result of the pre-hearing meeting, the Board decided to hear all arguments for and against the application and weigh the applicability of those arguments in reaching a decision respecting the disposition of the application.

## 1.4 Hearing

The application was considered at a public hearing held in Calgary on the 22<sup>nd</sup> and 23<sup>rd</sup> of September, 1998 before Board members J. P. Prince, Ph.D., G. J. Miller, and acting Board member J. R. Nichol, P.Eng. TAU addressed matters relating to the routing, the design, the construction, and the maintenance of the line. TEMC spoke to the energy sales transaction and its discussions with the Transmission Administrator (the TA) on tariff issues.

Having considered all of the evidence and argument provided at the hearing, the Board issued Decision 98-19 (attached) approving Application No. 980310. This addendum provides the reasons for Decision 98-19.

Those who appeared at the hearing and abbreviations used in this report are listed in the following table.

### **THOSE WHO APPEARED AT THE HEARING**

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#### **Principals and Representatives (Abbreviations Used in Report)**

#### **Witnesses**

TransAlta Utilities Corporation (TAU)  
C. J. Meagher

W. Hosie

TransAlta Energy Marketing Corporation (TEMC)  
C. J. Meagher

K. Willis

Alberta Power Limited (APL)  
L. G. Keough

ENMAX Corporation (ENMAX)  
K. L. Meyer

ESBI Alberta Limited (EAL)  
J. Moffat

FIRM Group (FIRM)  
J. A. Bryan, Q. C.

Industrial Power Consumers Association of Alberta  
(IPCCA)  
D. E. Crowther

Interprovincial Pipeline Company (IPL)  
M. Henderson

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**THOSE WHO APPEARED AT THE HEARING (Cont'd)**


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**Principals and Representatives  
(Abbreviations Used in Report)**
**Witnesses**


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Energy And Utilities Board staff  
(EUB)

T. Y. K. Chan  
D. Gray  
K. Gladwyn  
D. A. Larder

## 1 ISSUES

Although the application was filed pursuant to sections 12, 14, and 17 of the H&E Act, it also raised a number of concerns respecting how export merchant transmission lines would fit into the revised electric industry structure as contemplated by the EU Act.

The Board believes that the issues relating to this application are:

- Need for the transmission line
- Area transmission system performance and impact of the proposed line
- Appropriateness of tariff
- Supply and demand in a competitive marketplace
- Is the line in the public interest?

## 2 NEED FOR THE TRANSMISSION LINE

### 3.1 Views of TAU

TAU stated that its role in the project was to provide the physical facilities to support TEMC's energy supply contract with SaskPower. It further indicated that the arrangement it had with TEMC was for it to obtain the regulatory approvals and to construct, operate, and maintain the transmission line but the line would be owned by TEMC.

TAU indicated that the transmission line was needed because a 40 MW electrical load in the Cactus Lake/Macklin area of Saskatchewan that cannot be effectively and efficiently served by SaskPower. It argued that its transmission line could serve the load and that it was in the public interest to do so. It was TAU's opinion that public interest, as referred to in the H&EE Act and the EU Act, extends beyond the provincial boundary. It argued, therefore, that it has a public responsibility to serve the Saskatchewan load.

### **3.2 Views of the Interveners**

IPCAA stated that the sole purpose of the transmission line was to facilitate TEMC's energy sale to SaskPower. It further stated that SaskPower had other alternatives for serving the Cactus Lake/Macklin load. It contended that SaskPower could run the Landis generating unit more hours per day or build its own transmission line into the area. IPCAA concluded that the line was not needed.

### **3.3 Views of the Board**

The Board recognizes that there is a load in the Cactus Lake/Macklin area that needs to be served. It sees this transmission line as a viable way of serving the load. The proposed line would also provide an opportunity to serve other loads in the Provost area in the future.

The Board finds that this application meets the definition of public convenience and need as specified in the H&EE Act. The long-standing, cross-border arrangements that have served to benefit all provincial electric systems should, in certain cases, expand the definition of "public" to include neighbouring jurisdictions. Further, the EU Act specifically includes exporters within the framework of the new Alberta electric industry.

## **4. AREA TRANSMISSION SYSTEM PERFORMANCE AND IMPACT OF THE PROPOSED LINE**

### **4.1 Views of the Applicant**

TAU stated that currently the transmission system in the Battle River area does not meet the planning guidelines laid down by the Electric Transmission Council. Based on the planning guidelines, the firm transmission capacity for the Battle River area is 200 MW. However the 1998/1999 firm load for the area is projected to be 278 MW. TAU recognized that the 240-kV transmission line CP 948L from Battle River to Metiskow is the crucial transmission element for the Provost area. Should the line suffer an outage, firm load in the Provost area would be affected. TAU submitted that currently there is no plan to upgrade the local system. Nevertheless, it planned to improve the security of the transmission system by installing a new line protection scheme.

TAU had applied for Board approval to install an improved protection scheme, a "single pole trip and re-close", on that portion of CP 948L between Paintearth Creek substation CP 863S and Metiskow substation CP 648S. Line tripping due to lightning had been the major cause of line outages on CP 948L. The scheme would allow for switching out one of the three phases on the 240-kV circuit in the event of an outage and then re-closing it after a brief period of time. This mode of operation effectively allows the circuit to stay in service if lightning strikes only one of three phase conductors. Consequently, it is expected that the reliability of electrical supply to the Provost area would be significantly improved.

In its letter to TEMC, EAL stated that through a review of system studies and a review of the expected load on the system, EAL determined that it could provide TEMC system access service for delivery of energy to the Saskatchewan border via the proposed line. The service, as proposed, would not trigger the need for additional transmission facilities in Alberta over the 5 year-term of the system access service agreement, even under high load growth scenarios.

In response to APL's belief that transmission shortages in the region should lead to shedding of the Saskatchewan load before Alberta load, TAU confirmed that the protection devices for the transmission system would be adjusted to shed the TEMC-Saskatchewan load prior to any Alberta loads.

#### **4.2 Views of The Interveners**

APL stated that TAU should ensure that in the event of transmission capacity shortage in the Provost area, the TEMC-Saskatchewan load should be shed prior to any Alberta loads.

#### **4.3 Views of The Board**

The Board is concerned with the impact of adding the TEMC-Saskatchewan load on the transmission system in the Provost area. However, the Board accepts that the TA, who has the responsibility for system planning and reliability, has reviewed the application and is satisfied that the potential effect on reliability of the transmission system is acceptable. The Board expects the TA will monitor service delivery in the area and take appropriate steps to ensure that there is no deterioration in the quality or reliability of service in the area.

### **5 APPROPRIATENESS OF TARIFF**

#### **5.1 Views of the Applicant**

The applicant submitted that the TA had committed to the principle of an opportunity tariff with a transfer charge of \$3.50 per MWh to allow TEMC to economically deliver energy to the Saskatchewan border,.

TEMC entered a letter from the TA into evidence which stated that TEMC would be eligible for system access service under Rates GIS/GSS & GOS for the delivery of energy to the Saskatchewan border. Also detailed in the letter were the terms and conditions for the system access service that would be provided.

The applicant advocated that the appropriate time to challenge a tariff would be when the TA brought the tariff before the Board for scrutiny. The Applicant acknowledged that the tariff for this line has not been approved by the Board and that it was prepared to take the risk of moving forward with the project in the absence of a defined tariff.

## **5.2 Views of The Interveners**

IPCAA challenged whether TEMC qualifies under the EU Act as an eligible party to receive system access service from the TA. IPCAA argued that although TEMC had a commitment from the TA, until its tariffs were amended, and approved by the Board, the proposed tariff would be a commitment that the TA simply could not make because TEMC would not be eligible to receive system access under the TA's current tariff.

As well, IPCAA submitted that the terms and conditions in the TA's GIS/GSS & GOS rates that establish the eligibility for domestic opportunity system access service did not contemplate this type of export transaction.

APL would not comment on the appropriateness of the proposed tariff and terms and conditions under which service had been offered to TAU and TEMC. APL stated that it would reserve its views on these matters for the appropriate rate proceeding.

FIRM stated the tariff issue was fundamental to these proceedings. It submitted that should the Board approve a facility based on a preferred transmission access rate, then it should have an understanding and knowledge of the economics of the situation and the final form of rate that would be applied. In addition, FIRM submitted that the proposed domestic delivery rates GIS, GSS & GOS would not be appropriate for this type of export transaction and, therefore, TEMC should not qualify under those rates.

## **5.3 Views of the Board**

The Board finds that the establishment of the appropriate tariff structure for this line is not a matter which would preclude the approval of this Application. The applicability of the tariff is a matter that should be considered under the context of the appropriate application before the Board, with such application being considered on its own merits. The Board acknowledges that the subject line cannot be operated in the absence of an approved tariff. Consequently, if this line cannot be accommodated within one of the existing tariffs already approved by the Board, the TA would have to submit the appropriate application to the Board for approval. The Board notes that the applicant is prepared to accept the risk of proceeding in the absence of an approved tariff.

# **6 SUPPLY AND DEMAND IN A COMPETITIVE MARKETPLACE**

## **6.1 Views of the Applicant**

The applicant stated that in a competitive marketplace, an increase in demand would result in an increase in supply. The marketplace for electricity would respond to increased demand for electricity by bringing on new generation. It pointed out that there would be times when demand would be greater than the supply and other times when the supply would be greater than the demand.

TEMC submitted that public interest for Albertans had been determined by the Legislature of the Province to be a functioning marketplace, therefore any steps to interfere with the marketplace would be contrary to that interest. TEMC further submitted that the goal of achieving a functioning marketplace would not be served by artificially suppressing demand.

To deal with concerns related to security of supply, TEMC filed a letter from SaskPower addressing this issue. In the letter, SaskPower stated that, in the event of a firm load curtailment situation in Alberta, it would commit to supply to Alberta, in real time, the amount of energy being consumed by SaskPower as supplied from Provost. This arrangement would remain in place until 31 December 2000. In addition, SaskPower agreed that in the event of a firm load curtailment situation in Alberta, if SaskPower were unable to deliver power to Alberta through the McNeil converter station, Saskatchewan would not expect service to SaskPower through Provost.

In regard to the assumption that Alberta would be short of supply this winter, the applicants stated that the project would not affect the Alberta winter peak supply. It stated that this project would come on line after the winter peak so that the affect of the project on the available supply would be minimal. It further stated that increased generation would be available after the project comes on line to compensate for the increased demand.

## **6.2 Views of the Interveners**

IPCAA queried whether a fair, free, and efficient market presently existed in Alberta. Therefore, it submitted that the potential impact on pool price, due to additional demand to delivery energy to SaskPower, should be considered in these proceedings. It also stated that it did not know what to expect in terms of impacts on pool price. It was IPCAA's suggestion that TransAlta had completed pool price forecasts, even though it chose not to divulge those forecasts at the hearing. IPCAA also pointed out that TransAlta admitted that pool prices might well be impacted by its proposal in this application, but said the impact would be small. IPCAA therefore submitted that TransAlta failed to make its case and its application should be denied.

ENMAX said the evidence suggested that electric energy supplies would be tight in the Province. It submitted that the Board must look at the impact on the supply/demand situation for Alberta during the initial five-year period for which the applied-for facilities would be used to export energy to SaskPower. It further submitted that in assessing the applied-for facilities, the Board should ensure that Alberta consumers would not be in any worse situation as a result of construction of the facilities than if the facilities were not built. In light of the evidence presented at these proceedings, ENMAX submitted that such might not be the case.

ENMAX noted that TEMC agreed that Alberta would not be indifferent to the export to SaskPower from Provost if the McNeil tie line were fully loaded. Therefore, it stated that the commitment from SaskPower as stated in its letter to TEMC did not go far enough in ensuring that Albertans would not be in a worse situation than they would be without the additional export load.

The FIRM Group submitted that the applicants had not filed any evidence to support their claim that, by not allowing the proposed power transaction to proceed through the pool, demand would be artificially suppressed. It believed that the power pool would operate with or without the proposal transaction and the market dynamics would not be affected by the outcome of these proceedings.

### **6.3 Views of the Board**

The Board recognizes that the generation sector is in transition from regulation to competition. However, it does not believe that it would be in the broad public interest for the Board to deny an application to supply new load simply because there is a tight supply/demand situation in the Province. Furthermore, the Board notes this project will not impact the supply/demand balance in Alberta during the 1998/99 winter season. The Board believes that the approval of this application is consistent with the development of a competitive electricity market and is therefore in the public interest.

The Board acknowledges that the provision of a physical hedge by SaskPower until 31 December 2000 is of some benefit, although that power would probably be supplied anyway because of the high prices that are likely to emerge when firm load is curtailed. The Board expects the appropriate arrangements would be made to fulfill this obligation.

## **7 IS THE LINE IN THE PUBLIC INTEREST?**

### **7.1 Views of TAU and TEMC**

TAU and TEMC contended that public interest could be looked at from two views. First, considering strictly the physical facilities and, secondly, looking at the broader view of the current Alberta electrical marketplace.

Regarding the physical facilities, it was TAU's opinion that the lack of interventions by "directly affected landowners" indicated that the line is not contrary to the public interest. It further contended that since none of the costs of the line would be borne by the Alberta public and the TA would receive incremental revenue from the line, the line would be in the public interest.

TEMC argued that public convenience should not stop at the provincial boundary. It contended that public convenience would be served by the operation of the Power Pool. TEMC contended that both itself and SaskPower are participants in the Power Pool of Alberta. It was TEMC's view that by not allowing the project to proceed, the Board would be discriminating against TEMC and SaskPower as Power Pool participants.

## **7.2 Views of the Interveners**

The interveners submitted that the words “in Alberta” have to be read into the H&EE Act where it refers to public convenience. They took the view that public convenience as referred to in the H&EE Act extends to all Albertans, not just those who own lands along the transmission line route. They further took the view that public convenience and need stops at the Alberta border and that the need of other provinces cannot be construed as being in the public convenience of Albertans.

It was the interveners’ opinion that the transmission line would not be required for either present or future need by the AIS and, therefore, it would not be in the public interest to approve the application. It was stated that in order for these facilities to be in the public convenience, Alberta consumers must be in no worse situation with the facilities in place as they would be without them. It was the interveners’ contention that the Alberta consumers would be in a worse situation once the line was built.

## **7.3 Views of the Board**

The interveners argued that the present application does not meet the public interest, convenience, and need requirements of Alberta legislation because there is no current Alberta load requiring new transmission facilities in the Provost area. It was also their contention that the exporting of electrical energy from Alberta to Saskatchewan, in the current tight supply market, could increase the pool price and contribute to a greater likelihood of interruption to electrical service to Albertans.

The Board believes that the question of whether or not the approval of the subject transmission line would be in the public interest must be viewed in the context of both the H&EE Act and the EU Act. The Board also notes that the EU Act expressly recognizes that participation in the power pool is not restricted to entities based in Alberta. Parties outside the Province can play a direct role in the Pool. Therefore, the Board believes that it cannot wholly exclude these external interests when considering an application under s. 12(2.1) of the H&EE Act. The Board holds that the interests of Saskatchewan in obtaining power from Alberta, on which the transmission line's existence depends, are a legitimate component of the public convenience and need, as expressed in the H&EE Act. Such interests must be weighed against the valid interests of the Alberta public that may differ from those of extra-provincial parties.

The Board recognizes that exports may contribute to shortages of power in Alberta but notes offsetting arguments as discussed in section 6. The Board acknowledges that provincial tribunals are entitled to place priority on their own citizens needs and it is appropriate, given the existence of an immature electricity marketplace, to take concerns regarding such shortages into account as part of the determination of public convenience and need. The Board believes that section 12(2.1) of the H&EE Act provides a sufficiently broad test against which this concern may be examined. In this case, those concerns do not persuade the Board that the application should be denied.

The Board believes that the fact that the pool price may rise because of the Saskatchewan demand for power is not a relevant consideration, given the EU Act's purpose of establishing a competitive market for electricity. This is a merchant line where the proponent accepts all of the costs and risks associated with the construction, operation and abandonment of the facilities in question. There are no direct costs that will have to be borne by the AIS. In fact, the impact on the AIS is positive in that system revenue will be generated through the application of the system access tariff.

## **8 OTHER MATTERS**

### **8.1 ROLE OF THE TRANSMISSION ADMINISTRATOR**

The Board recognizes that the TA has the primary responsibility for planning and assessing the ongoing operation of the AIS. This includes evaluating the implications of adding new facilities for the reliability, safety, and quality of the existing service.

The Board, however, must approve new transmission facilities pursuant to the H&EE Act ensuring they are in the public interest. Safety and reliability of the AIS is always a relevant issue in this context and should be addressed by the TA.

The Board's deliberations were made more difficult because the TA did not present evidence respecting its evaluation of the system impacts and technical aspects of the applied-for facilities. In the absence of direct evidence and the ability for all parties to test the information that might have been provided, the Board accepted the Applicants' evidence that the TA had reviewed these matters and had approved the connection of the facilities to the AIS.

At future electrical facility hearings, the Board expects the TA to take an active and direct role respecting the addition of new transmission facilities to the AIS.

## 9 DECISION

Having carefully considered all of the evidence, the Board believes that the project is in the broad public convenience and interest.

Therefore, the Board approves the application subject to all of the commitments made during these proceedings by all parties concerned.

Dated at Calgary, Alberta, on 22 January 1999.

### **ALBERTA ENERGY AND UTILITIES BOARD**

*<original signed by>*

J. P. Prince, Ph.D.  
Presiding Member

G. J. Miller \*  
Board Member

J. R. Nichol, P.Eng.  
Acting Board Member

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\* G. J. Miller was not available for signing but concurs with the contents and issuance of this report.

**ALBERTA ENERGY AND UTILITIES BOARD**  
**Calgary Alberta**

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**TRANSALTA UTILITIES CORPORATION**  
**138-kV MERCHANT POWER LINE**  
**TO SASKATCHEWAN**

**Decision 98-19**  
**Application No. 980310**

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**1 APPLICATION AND HEARING**

TransAlta Utilities Corporation (TAU) applied to the Alberta Energy and Utilities Board (EUB), pursuant to sections 12, 14, and 17 of the Hydro and Electric Energy Act, for a permit and licence to construct and operate a 138-kV transmission line, designated as CP 790L-TE, from Provost substation CP 545S to the Alberta/Saskatchewan border. The line would then tie into a SaskPower transmission line with the intent of serving 40 MW of electrical load in the Cactus Lake/Macklin area of Saskatchewan. The transmission line will be owned by TransAlta Energy Marketing Corporation (TEMC), a non-regulated subsidiary of TransAlta Corporation. TAU is a regulated subsidiary of TransAlta Corporation and a sister company to TEMC. TAU will construct, operate and maintain CP 790L-TE. It will also connect the transmission line to its existing electrical transmission system.

**2 HEARING**

The application was considered at a public hearing in Calgary on 22 and 23 September 1998, with J. P. Prince, Ph.D., G. J. Miller, and J. R. Nichol, P.Eng. sitting. Those who appeared at the hearing and abbreviations used in this report are listed in the following table.

**THOSE WHO APPEARED AT THE HEARING**

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**Principals and Representatives  
(Abbreviations Used in Report)**

**Witnesses**

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D. E. Crowther

Interprovincial Pipeline Company (IPL)\*  
M. Henderson

Alberta Energy and Utilities Board staff  
T. Y. K. Chan  
D. Gray  
K. Gladwyn  
D. A. Larder

\* ESBI and IPL appeared at the hearing but did not participate.

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### 3 DECISION

The Board notes TAU's submission regarding the negative impact on the project should it not be in a position to provide the required electrical energy to SaskPower in the first quarter of 1999. It recognizes that a large part of the required energy is to serve IPL's new facilities in the Cactus Lake area which will come on-line early in 1999. To meet this schedule, TAU requested an approval by the Board in sufficient time to enable it to proceed with procurement of materials and route preparation in order to have the line in place on schedule. Under the circumstances, the Board is prepared to issue a decision with reasons to follow.

Having carefully considered all of the evidence, the Board has decided to approve Application No. 980310 subject to all of the commitments made by the applicants at the hearing as well as the specific conditions shown on the attached draft permit and licence. The required permits and licences will be issued forthwith and the connection order upon receipt of the Order in Council required for the connection of an export line to facilities outside of Alberta. A detailed final report giving the reasons for the Board's decision will be issued in due course.

Dated at Calgary, Alberta, on 3 November 1998

#### **ALBERTA ENERGY AND UTILITIES BOARD**

*<Original signed by>*

J. P. Prince, Ph.D.  
Presiding Member

*<Original signed by>*

G. J. Miller  
Board Member

*<Original signed by>*

J. R. Nichol, P.Eng.  
Acting Board Member