



25 July 2008

Dear Stakeholder:

**Re: Results of the AESO's second round of Open Houses in southern Alberta**

The Alberta Interconnected Electric System (AIES), our province's transmission system or grid, is planned and operated by the Alberta Electric System Operator (AESO). This network of higher-voltage transmission lines, towers and equipment carries ('transmits') electricity from generators to large industrial customers as well as lower-voltage systems that distribute it to cities, towns and rural areas. Our job is to maintain safe, reliable and economic operations on the provincial transmission grid.

Last November, the AESO consulted residents throughout the region to share information on the need to add capacity to the transmission system. Significant commercial interest in developing wind generated electricity is the primary driver of the need for additional space on the grid. The AESO advised Open House visitors that we would return in the spring with alternatives to address the need to add more transmission capacity.

In late April and early May of this year, we hosted 12 Open Houses throughout southern Alberta to discuss alternatives that had been developed for meeting the need for more capacity. Over 300 visitors attended these events. We received many insightful comments about how to plan for additional space on the grid while remaining sensitive to the needs of community members. This update provides an overview of what we heard.

Our transmission planning efforts will ensure that electricity generated from wind and other generation developments in southern Alberta will reach the areas that need it. Along with technical studies designed to examine engineering aspects and costs, we rely on all stakeholders (including southern Alberta residents) to help guide our planning decisions.

We are committed to a consultation process based on fairness and transparency; we look forward to your continuing participation in our process.

Yours truly,

Ata Rehman, P. Eng.  
Manager, South System Planning

**Southern Alberta System Reinforcement  
Planning Update to Stakeholders  
25 July 2008**



**Matt Gray  
Advisor, Transmission  
Caitlin Olson  
Communications Assistant**

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## ***Background***

Interest in generating electricity from wind resources in southern Alberta is growing. At the time of writing, (June 2008), more than 11,000 megawatts (MWs) in the province has been proposed by wind project developers seeking connection to the transmission system. When planning for the reinforcement of the grid began in September, 2007, interest in developing wind amounted to about 4,000 MW.

As the planner of Alberta's Interconnected Electric System (AIES), we face two main transmission challenges in southern Alberta:

- Connecting each new wind development to the transmission system; and
- Adding capacity to the main section(s) of the transmission system to move additional electricity generated from wind to places where this electricity will be consumed.

We base our transmission planning decisions on three general criteria:

- Social
- Technical
- Cost

The AESO will file a Needs Identification Document (NID) with the Alberta Utilities Commission (AUC). The NID will identify a preferred option(s) to reinforce the transmission system in southern Alberta based on the criteria above.

## ***AESO Second Round of Open Houses***

The AESO hosted Open Houses in 12 southern Alberta communities between April 28 and May 15, 2008. At each of the events, visitors were provided with surveys to evaluate the AESO's efforts to communicate information about the project and to provide an additional opportunity for visitors to share their views on transmission development in this region. The following section offers an overview of these survey results from our Open Houses.

## Attendance

Over 300 visitors attended the second round of Open Houses on the Southern Alberta System Reinforcement.

<b>Date</b>	<b>Town</b>	<b>Number of Visitors Registered</b>
<b>Week 1</b>		
Monday, April 28	Foremost	24
Tuesday, April 29	Bow Island	24
Wednesday, April 30	Medicine Hat	82
Thursday, May 1	Brooks	16
<b>Week 2</b>		
Monday, May 5	Taber	18
Tuesday, May 6	Lethbridge	51
Wednesday, May 7	Cardston	17
Thursday, May 8	Pincher Creek	42
<b>Week 3</b>		
Monday, May 12	Fort Macleod	21
Tuesday, May 13	Claresholm	9
Wednesday, May 14	Nanton	14
Thursday, May 15	Strathmore	9
<b>TOTAL</b>	<b>12 communities</b>	<b>327</b>

## Open House Visitor Surveys – Results

Open House visitors were asked to complete surveys at each event. Please see the appendices for a copy of the survey used. A summary of the responses to each question follows.

<b>Did the Open House Provide you with enough information?</b>	<b>Yes</b>	<b>No</b>	<b>Somewhat</b>	<b>No Answer</b>
Was the Open House helpful?	120	0	12	0
Was the amount of information sufficient?	111	7	14	0
Were your questions fully answered?	104	5	23	6
Did you comment on the areas of greatest interest to you?	118	4	10	0
Did AESO team members listen and record your comments?	103	7	16	6
Was the need for additional transmission development explained to your satisfaction?	121	1	10	0
Was the AESO's role in transmission development explained to your satisfaction?	117	2	13	0
Was it demonstrated that your interests are being considered in the AESO's development?	100	4	22	6

<b>How did you hear about the Open House?</b>	
AESO invitation	67
AESO website	1
Newspaper Advertisement	46
Newspaper or TV story	8
Radio Advertisement	11
Other	21

<b>How would you like to learn about the AESO Needs Identification Documents preparation and review process?</b>	
Newspaper advertisements	44
Radio	18
AESO website	27
Email Notification	38
Correspondence by mail	53
Other	1 (information sessions)

## **Visitor Comments and Questions: What did we hear?**

At our Open Houses we collected a range of comments, questions and suggestions related to the need to reinforce the transmission system in southern Alberta.

Visitors' responses were generally positive: most visitors indicated that they understood the need for transmission development, and they appreciated our efforts to keep them informed of our work and to provide them with opportunities to share their comments.

Visitors' comments generally show that they appreciate the link between maintaining the reliability of power through transmission development. Some visitors also endorsed industry efforts to develop alternative energy such as wind power. Many private land owners who attended our events, particularly in southeast Alberta, expressed interest in making their land available to site wind turbines.

Visitors generally expressed an understanding for the need for transmission development in southern Alberta; however, we received a clear message that it's important to site transmission facilities such as lines, towers and substations strategically; that is, the AESO should try to balance social, technical and cost factors when determining which alternative to recommend. Visitors advised us that existing rights-of-way should be used where possible and that we should avoid planning transmission development that could interfere with high value irrigation areas and river crossings. Visitors also advised that transmission infrastructure should be sited south of Highway 3.

We also heard about the importance of appropriate compensation for landowners if their land is used for transmission development.

Some visitors, particularly those who attended the Medicine Hat Open House, expressed concerns regarding the impact that transmission development may have on the environment, including disturbances to land and wildlife.

Overall, visitors indicated that they support our efforts to address the need for transmission development in southern Alberta. They maintain, however, that it is important to keep residents updated on what is happening and to avoid future shortages of transmission capacity in later years by studying forecast demand and "building big" to accommodate generation and load needs well into the future.

These visitor responses will be added to other insights recorded in meetings and comments gathered from other channels such as email and telephone. Taken together, this collection of stakeholder perspectives on transmission development in southern Alberta will help us assess the social impacts of our plans and inform our recommendation for addressing the transmission challenges in this region.



**Comments and Questions Received from Open House Visitors (source: exit surveys and one-on-one conversations between AESO staff and visitors)**

	Foremost	Bow Island	Medicine Hat	Brooks	Taber	Lethbridge	Cardston	Pincher Creek	Fort Macleod	Claresholm	Nanton	Strathmore
<b>SOCIAL</b>												
Consultation			2	1	2	3		3			4	2
Siting	1	3	18			2		14	1	1	4	1
Need				1		2	2	1			1	
Policy		1	1			2		2	1	6	1	
Safety			1					1				
Regulatory			2			2		1			1	
<b>TECHNICAL</b>												
Need			1	2	1	2	2	9	3	1	5	1
Generation			2					1				
<b>ECONOMIC</b>												
Cost of transmission				1				4	1	2	3	
Economic development impacts											1	

**Figure 1: Table showing number of comments/questions received and categories**

**Comments and questions related to Social matters include** health, safety, environment and public preference, especially with respect to aesthetic considerations and property values. We also consider land use within the study area and the impact potential transmission development may have on multiple-use areas, wildlife and livestock; some comments here advise planners to avoid certain areas. Matters related to siting and the regulatory process also included here, along with references to the location of generation. Comments and questions related to visitors’ positions on generation type such as alternatives (e.g., renewables, microgeneration) and fossil fuels are also included. Added to this, social also includes references to AESO consultation, including advise on who to consult, and consultation activities executed by other industry players such as the AUC and TFOs like AltaLink. Finally, this category also includes regulatory matters such as other applications in the region and also rate of growth in Alberta. Comments included under “Policy” include those related to export, deregulation and support for renewable energy technologies.

**Comments and questions related to Technical matters include** engineering design with respect to the need, including technical requirements, such as capacity, efficiency, reliability and system impact. This perspective also includes evaluations that address operating standards. Added here also are comments related to the efficiency of generation, such as wind.

**Comments and questions related to Economic matters include** capital costs of each alternative but also includes other economic factors such as ‘line losses,’ (i.e., the cost of electricity lost through heat as it moves through transmission lines) and the cost of these development

## ***Appendices***

## **Frequently Asked Questions: Transmission reinforcement in southern Alberta**

### **1) Why is transmission development needed in southern Alberta?**

Transmission development is needed in southern Alberta because interest in developing wind energy resources has grown considerably. The AESO has a mandate to connect all forms of electricity generation that meet regulatory standards. The transmission system in the southern Alberta has no extra capacity to take on additional generation and move that electricity to where it will be used. The AESO must also create a plan to add capacity to the system in order to move additional electricity to areas that demand this power.

### **2) Why is there so much interest in developing wind energy in southern Alberta?**

Alberta has an excellent wind resource and some of the best sites are in Southern Alberta; wind development is a success story for Alberta. We have over 500 megawatts (MW) of wind connected to the grid today which currently leads the nation. Developing wind power is an entrepreneurial activity undertaken by private developers; the AESO fully supports a diversified electric system that includes renewable energy sources like wind by planning transmission where it is needed. We plan for the interconnection of all qualified electricity generators.

### **3) How much interest is there in developing wind energy?**

The AESO has received over 60 proposals for wind energy developments province wide totaling almost 11,000 MW of wind energy. As noted above, developing wind power is an entrepreneurial activity undertaken by private developers and a number of these projects are in early stages; it may take several years for the full wind potential to be realized in Alberta.

### **2) Will the AESO look at underground transmission development?**

The current transmission development alternatives are based on overhead lines only; however, underground transmission may be considered for specific locations if there is a need to do so.

### **3) How much interest is there in developing wind energy?**

The AESO has received over 60 proposals for wind energy developments province wide totaling almost 11,000 MW of wind energy.

### **4) When will the transmission be built?**

The current Needs Identification Document being developed is scheduled to be filed around Q3/Q4 2008; the in-service date for the first stages of the proposed transmission development could be 2011/2012.

### **5) Where will the transmission be built?**

The current planning study, which includes public consultation, will help the AESO determine the right areas of the transmission system to strengthen.

### **6) Can we provide land for wind farms?**

The AESO advises that land owners speak directly with wind developers about developing wind resources on their lands. Interested land owners may also consult the Canadian Wind Energy Association (CanWEA). To find out more please visit [www.canwea.ca](http://www.canwea.ca).

**7) Will compensation be given to private land owners?**

Yes. Please note, however, that negotiations over compensation for siting transmission towers occur between the Transmission Facility Owner (AltaLink in southern Alberta) and individual land owners. These negotiations occur at the facility application stage.

**8) Is wind power reliable?**

Wind power is variable and comes and goes with the wind. The AESO has undertaken a wind power forecasting pilot project that is just concluding to help us and industry understand how we can forecast wind power in Alberta. We have also developed a Market and Operational Framework for Wind Power Integration to ensure that we have a means to accommodate the variability of large scale wind power. The AESO has also developed technical requirements that wind power facilities must meet when they connect to the grid to ensure they contribute to reliable operation of the grid during disturbances.

**9) How does the AESO engage community members and stakeholders?**

The AESO is committed to a fair and transparent consultation process. The concerns of stakeholders must influence transmission development and we design our consultation process to achieve this end. The AESO uses a variety of activities and tools to share information about our planning activities and to gather questions and comments from stakeholders. Activities such as Open Houses and meetings, and tools such as our web page ([www.aeso.ca](http://www.aeso.ca)), newspaper publications, and communication via regular mail, email and telephone foster meaningful relationships between the AESO and our stakeholders. Stakeholders are encouraged to sign up for project updates on the southern Alberta System Reinforcement. Email requests to [stakeholder.relations@aseo.ca](mailto:stakeholder.relations@aseo.ca).

**10) How will the AESO address the concerns of stakeholders?**

The AESO will document all comments and questions we receive from stakeholders. We will also respond to questions in a timely fashion. Correspondence between the AESO and our stakeholders forms a critical source of insight that AESO planners draw upon when developing solutions to transmission challenges.

# Open House Visitor Survey (Sample)

Thank-you for taking the time to join us at our Open House. Please take a moment and provide us with your insights.

**Did the Open House provide you with enough information about the need to reinforce the transmission system in southern Alberta?**

	<i>Yes</i>	<i>No</i>	<i>Somewhat</i>
• Was the Open House helpful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Was the amount of information sufficient?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Were your questions fully answered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Did you comment on the areas of greatest interest to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Did AESO team members listen and record your comments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Was the need for additional transmission development explained to your satisfaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Was the AESO's role in transmission development explained to your satisfaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Was it demonstrated that your interests are being considered in the AESO's development plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**How did you hear about the Open House? (Please check any that apply)**

- AESO invitation   
 Newspaper advertisement   
 Friend/family member  
 AESO web site   
 Media report   
 Other \_\_\_\_\_

**The following are my questions and/or comments about planning the transmission system in southern Alberta to integrate proposed wind power developments and other generation:**

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**How would you like to learn about the AESO's transmission planning activities in southern Alberta?**

- Newspaper advertisements  
 Radio  
 AESO web site  
 Email notification  
 Correspondence by mail  
 Other (please indicate):

(over)



**How would you like to participate in the AESO need application process?**

- Opportunities for direct, individual contact with AESO project team members
- Open Houses/Information Sessions
- Other (please indicate):

**Would you like to receive a summary of community members' questions and comments from this round of Open Houses on the Southern Alberta System Reinforcement?**

- Yes
- No

**If "yes," please provide the following information:**

Name: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Mailing address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

***Consent to collection, use and disclosure of personal information***

I confirm that I have voluntarily provided the above information to the AESO for the purposes of documenting consultation for its Needs Identification Document to the Alberta Utilities Commission and to enable it to provide me with information about the Southern Alberta System Reinforcement.

I also understand that the AESO may pass on the above information to the Transmission Facility Owner (s) that it directs to submit an application to the Alberta Utilities Commission to construct facilities related to the Southern Alberta System Reinforcement and that Transmission Facility Owner (s) will only use my personal information for consultation on the facilities that will address the need described in the Southern Alberta System Reinforcement Need Identification Document.

I understand that the above information contains my "personal information" as defined in the *Personal Information Protection Act*. I consent to the foregoing collection, use and disclosure of my personal information in accordance with the terms described in the AESO's privacy statement below (bottom of page).

Name: \_\_\_\_\_  
(Please Print)

Signature: \_\_\_\_\_

**Thank you for your insights.**

*The AESO is committed to protecting your personal privacy in accordance with Alberta's Personal Information Protection Act. Any personal information collected by the AESO with regard to this project may be used to provide you with further information about the project, may be disclosed to the Alberta Utilities Commission (and as a result, may become public), and may also be disclosed to the eligible Transmission Facility Owner(s). If you have any questions about how the AESO will use and disclose your personal information collected with regard to this project, please contact us at 888.866.2959 or at [stakeholder.relations@aeso.ca](mailto:stakeholder.relations@aeso.ca)*