



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

The AESO published a recommendation paper October 9, 2009 summarizing industry consultation and the draft recommendations on milestones for the Southern Area Transmission Reinforcement (SATR). The milestones outlined in the paper are designed to monitor and verify system need for the staged development of the SATR and are premised on the AESO's legislated obligations to forecast need and be proactive in developing transmission.

1. AESO's interpretation of policy		
Stakeholder	Stakeholder Comment	AESO Response
Office of the Utilities Consumer Advocate (UCA)	Generally, all Need Applications will be based on forecasted information (s.8 TReg). Since forecasts have a degree of risk and uncertainty, it is prudent for transmission projects of substantial costs (>\$100 M) to outline in the Need assessments and Applications the minimum conditions (milestones) which trigger the necessary transmission developments. Outlining the minimum conditions does not conflict with the AESO various statutory requirements but rather it requires the AESO to stipulate which requirements are not, or will not be, met.	The AESO may consider the use of milestones in a NID when it is viewed that project development and transmission need is uncertain and warrants monitoring and assessment. The AESO believes the applicability of Milestones is more a function of "known uncertainty" than of project costs. The applicability of milestones to a particular NID should, in the AESO's view, be assessed on a case by case basis.



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

<p>“Load Coalition” [Industrial Power Consumers Association of Alberta (IPCAA) / Alberta Direct Connect Consumers Association (ADC)]</p>	<p>Why does the AESO believe this paper should not be construed as establishing any precedent related to when milestones will be used in future need applications? If milestones prove effective in this instance, they should be utilized in future need applications as well.</p>	<p>Please see the response above. Additionally, if future NIDs have similar characteristics with respect to the load and generation forecast uncertainty, then the AESO agrees milestones may be used.</p>
<p>NaturEner Energy Canada Inc.</p>	<p>NaturEner supports that the AESO has correctly interpreted the Electric Utilities Act and related regulations.</p>	<p>The AESO acknowledges Naturener’s comment.</p>
<p>2. AESO’s use of milestones</p>		
<p>Stakeholder</p>	<p>Stakeholder Comment</p>	<p>AESO Response</p>
<p>Office of the Utilities Consumer Advocate (UCA)</p>	<p>Generally, for transmission projects of substantial cost (>\$100 M) it is reasonable for the AESO, pursuant to 11.4(a) of the TReg, to undertake the identification of "milestones" when determining the need for new transmission and when making an application for Need. We interpret the term "milestone" to mean a condition that must exist in order to proceed with a particular stage of the transmission development sequence, which includes the need assessment/approval, the facilities</p>	<p>The Milestones established for the specific circumstances of the SATR are not based on costs but rather the possibility of future addition of wind generation. As noted above, it is the AESO’s view that milestones may be established in cases where the need must be adaptable to future outcomes of load and generation which are known to be variable at the time of the NID, not based on an arbitrary cost level.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>application/approval and, finally, the construction phase. If milestones were used in the determination of Need, then it is recommended that the AESO continue to use milestones, pursuant to 11(5) of the TReg, to assess the market conditions and when to direct the TFO to proceed with the subsequent stages of the transmission development sequence.</p> <p>While milestones provide a means for the AESO to make prudent decisions regarding the direction to TFOs to incur costs, such milestones need to be balanced against its duties to maintain a reliable system that provides system access. It is therefore important that the monitoring process and milestones reflect on the complexity and time required for each stage of the transmission development sequence and where uncertainty remains, the AESO and TFO take reasonable precautions to ensure that all costs will be used and useful.</p> <p>Section 5.1 of the AESO Recommendation Paper sets out three types of milestones, corresponding to the stages of the transmission development sequence: a Need Milestone, a Facility Application Milestone and a Construction Milestone. We agree with these as natural assessment intervals.</p>	<p>By way of background, the AESO has a legislative mandate to provide an unconstrained transmission system based on forecast needs. The AESO develops transmission plans based on load and generation forecasts and files needs identification documents with the AUC for review.</p> <p>The Transmission Regulation requires the AESO to develop a 10 Year Plan every two years. Hence, the AESO assesses the need for transmission enhancements on an ongoing basis. The requirement to assess need is fulfilled by the NID application and not by any milestone.</p> <p>The AESO agrees that the natural milestones proposed reflect the complexity of the situation and the time requirement for implementation.</p>
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**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

<p>Capital Power</p>	<p>Capital Power agrees that the AESO has the authority under Section 11(4)(a) of the Transmission Regulation to specify milestones when proposing to construct a transmission facility at a later date.</p>	<p>Agreed</p>
<p>Alberta Wind Energy Corporation</p>	<p>Concern is that transmission development and construction has a longer lead time than wind farm generation. In other words, the risk is that once a generation project need has been identified for interconnection, it may face being to be delayed in order for transmission line construction to 'catch up'.</p>	<p>Agreed</p>
<p>“Load Coalition” [Industrial Power Consumers Association of Alberta (IPCAA) / Alberta Direct Connect Consumers Association (ADC)]</p>	<p>If milestones prove effective in this instance, they should be utilized in future need applications as well.</p>	<p>The AESO will continue to assess the need for milestones on a case by case basis, as contemplated by the legislation. Please see the related response on p. 1.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

<p>NaturEner Energy Canada Inc.</p>	<p>NaturEner supports the use of milestones and believes it is important to have triggers for the SATR build outs. It is also agreed upon that the NID and Review milestones are not required because of the stage the project(s). The proposed Construction milestone is agreed that it is a good tool to have as a start/stop trigger.</p>	<p>The AESO acknowledges NaturEner's comments.</p>
<p>3. Recommended milestones – construction milestones only</p>		
<p>Stakeholder</p>	<p>Stakeholder Comment</p>	<p>AESO Response</p>
<p>Office of the Utilities Consumer Advocate (UCA)</p>	<p>Section 5.3 of the Paper sets out milestones in the form of thresholds of generation development that should be exceeded in order to proceed with the transmission development. This type of condition addresses the capacity requirements but do not address the question of timing. It may be sufficient, for example, to proceed with the Facility Application (5% of costs) but when directing a TFO to the substantial majority of costs (95%), it would be prudent to be satisfied that the timing of development is appropriate.</p> <p>Development Stages 1–SE, 2-SW (Goose Lake to sub C) , 2-SW (Sub C to D) and 2-SW (Sub C to MATL) are all based on "any wind forecast" in each respective region. This would suggest that</p>	<p>Agreed. The noted measurement assesses the need for construction. The AESO will use this information along with an assessment of timing to determine when to direct the submission of a facility application.</p> <p>"Any wind forecast" is recommended as a milestone in areas where there is no transmission system to connect the proposed wind generation. Based on</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>a generation proposal for less than 10 MW, for example, could trigger the construction of these segments. We recommend establishing a more realistic and finite threshold for each segment.</p>	<p>current information available to the AESO in this regard, the milestone measures the need to facilitate the interconnection of the first wind farm in the area. Of note is that these transmission lines will not only interconnect the wind project but also will serve to move power from one area to another.</p>
<p>Capital Power</p>	<p>Capital Power is supportive of the use of Construction milestones to provide off ramps in circumstances where there is known uncertainty related to generation additions. Capital Power agrees that the Need and Review milestones are not necessary for the reasons outlined in the paper. With respect to the Development Milestone, given that construction does not start until the Construction milestone is triggered and that the legislation clearly states that the AESO can direct the TFO to begin the facility application any time after the Need application is filed, this milestone appears to only have value for the TFO.</p>	<p>Agreed. The AESO can direct the TFO to begin preparing the facility application before the Need application is filed, therefore milestones are not required for this stage.</p>
<p>“Load Coalition” [Industrial Power Consumers Association of Alberta]</p>	<p>According to the AESO, “the milestones are proposed to be measured against accepted Interconnection Proposals (IPs) as an indicator of confirmed system need.” The AESO proposes</p>	<p>The “IP accepted” is the proposed milestone as it provides the appropriate balance between the certainty required to move forward with construction</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

<p>(IPCAA) / Alberta Direct Connect Consumers Association (ADC)]</p>	<p>that the total megawatts of accepted IPs indicate a strong reflection of generation interest.</p> <p>The Load Coalition believes that accepted IPs do not represent sufficient reassurance that these generation projects will become operational. More stringent triggers should be used for the construction milestones. Other possibilities for the construction milestone triggers include:</p> <ul style="list-style-type: none"> • Wind Generator Applications filed with AUC and deemed complete; and/or • An executed CCA with posted security; and/or • Evidence of a financial commitment by the wind developer (e.g. transaction with turbine vendor, etc.) <p>The Wind Generator has paid a non-refundable system contribution payment.</p>	<p>expenditures and the timing required to ensure the transmission facilities are in place in time to provide the market assurance of system access.</p> <p>There is nothing precluding the AESO from monitoring and adjusting for other factors outside of the milestones identified. Accordingly, the AESO will continue to monitor other indicators, such as those mentioned by the Load Coalition, to ensure the wind development forecast used in developing the SATR remains appropriate. If there are significant changes, it is the AESO's practice to submit an amended NID.</p>
<p>AltaLink</p>	<p>First of all, we support the adoption of a construction milestone with “total megawatts of accepted Customer IPs” as the trigger mechanism. Customer acceptance of the IP is a strong indicator of intent to proceed with a project.</p> <p>We also support your proposal that the AESO should have discretion regarding when to start</p>	<p>Agreed</p> <p>Agreed</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>work on the Facility Application (the Facility Application Milestone”). Starting the facility application work early will help ensure the transmission is in place when it is needed. The cost of the facility application work is a relatively small portion on the total project cost.</p>	
<p>TransAlta</p>	<p>The phrase "additional* generation" (Row 1 of the Table on p.8) requires clarification. Is the additional generation that which is forecast to built in addition to existing generation? Or is the reference to other than existing generation? This phrasing is not used with in the Milestones and Related Process Steps document - the last four pages of the document. The reference to a date and other information to identify the increment referred to is important for clarity.</p> <p>What is the distinction between the Milestone area referenced as being the "Pincher Creek/Peigan region" for the 911L Rebuild and the "Pincher Creek area" for the Goose Lake/Crowsnest Line in the table on page 8? Are these areas defined based on collection nodes and if so what are they? It would be helpful if these nodes were identified, e.g. Goose Lake/Pincher Creek and Peigan substations.</p>	<p>“Additional generation” refers to the forecast generation in addition to the generation that was in service on Dec 30, 2008, as this was the basis for the SATR NID.</p> <p>The power flowing on the 911L will be influenced by the existing and proposed generation around the Pincher Creek/Goose Lake and Peigan substations. The catchment area diagrams will provide more clarity on the definition of these areas.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>It seems that it should matter which of these two projects went first, i.e. 911L Rebuild and then Goose Lake/Crowsnest Line, or Goose Lake/Crowsnest Line then 911L Rebuild. Both projects increase the transmission capacity available from the area and back to Calgary. In the event of an outage of one of the 240 kV Goose Lake to Peigan lines generation above approximately 600 MW requires an additional line from Pincher Creek. An outage of the existing 9.11L would be accommodated by the Goose Lake/Crowsnest Line. The Goose Lake/Crowsnest Line is markedly shorter in length than the 911L Rebuild. Based on the Status reported the Milestones are currently met for both projects. The AESO now has to make a decision as to which project advances first.</p> <p>TransAlta observes that the existing generation in an area plus a certain amount of additional generation will result in the need to reinforce the transmission system. The existing notional 500 MW of wind power plants is not in one area. It is thus important for clarity to identify what existing generation plus what increment is the threshold for milestone proposes. The existing generation more than just wind and includes various hydro and thermal plants located across the south.</p> <p>The transmission connected generation in the</p>	<p>Any component of the SATR will proceed when the milestone for that component is met. Components from Stage 2 may well proceed concurrently with components from Stage 1 if deemed necessary based on the milestones and study work.</p> <p>The existing generation considered around</p>
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**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>Pincher Creek area is approximately 243 MW assuming Kettles Hill to be in the Pincher Creek area although it would be part of the Peigan area as well. The rating of the new 240 kV lines under contingency would be 600 MVA or approximately 540 MW. This would suggest that the increment for the milestone would be approximately 300 MW of new generation in the Pincher Creek area. This would lead us to conclude that the milestone for the Goose Lake to Crowsnest Line would be closer to 300 MW new rather than 600 MW in the circumstance of zero import/export to BC on 786L and without consideration of local load. TransAlta request that the AESO review this milestone to take into account existing generation in the area.</p>	<p>the Pincher Creek area for determining the milestones is approximately 244 MW, as noted. Power flow studies have shown that an additional 600 MW of generation will cause an overloading on one of the Goose Lake – Peigan circuits when the other circuit is switched off. The studies assumed a phase shifting transformer at Coleman as well as the upgrading of the Drywood 69 kV system. It is to be noted that beyond the two 240 kV circuits between Goose Lake and Peigan, there are two 138 kV lines connecting the Pincher Creek/Goose Lake substation to other parts of the system.</p>
<p>NaturEner Energy Canada Inc.</p>	<p>NaturEner is in support for the recommended construction milestones.</p>	<p>The AESO acknowledges NaturEner’s comments.</p>
<p>4. Recommendation for milestones based on studies</p>		
<p>Stakeholder</p>	<p>Stakeholder Comment</p>	<p>AESO Response</p>
<p>Office of the Utilities Consumer Advocate (UCA)</p>	<p>The question is perplexing. We assume that the AESO has established the threshold generation inherent in each milestone based on the level of generation in the study cases where the Reliability Criteria performance requirements are</p>	<p>Agreed.If subsequent studies indicate a need for change, the milestone will be adjusted.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>violated, i.e. new system upgrades are required to maintain the Criteria. If subsequent system studies reveal a different level of generation causes criteria violations, then we expect the AESO will adjust the milestones accordingly.</p> <p>System studies should also be used to determine if there are other conditions that might lead to a loss in reliability. For example, the AESO should identify whether future load or interchange conditions require any of the 8 segments of the SATR project in order to maintain reliability. Such milestones should also be included in the SATR monitoring and commitment process.</p>	<p>Agreed.</p>
<p>TransCanada</p>	<p>At page 8, the Paper reads “The milestones are proposed to be measured against accepted Interconnection Proposals (IPs) on a <i>(sic)</i> as an indicator of confirmed system need.”</p> <p>TransCanada assumes the AESO meant “The milestones are proposed to be measured against accepted Interconnection Proposals (IPs) as an indicator of confirmed system need.” and would request the AESO correct or clarify this statement.</p>	<p>Agreed. The measurement of accepted IPs is an indicator confirming system need.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

Capital Power	Milestones should be based on system studies that consider those factors described in Section 11 of the Transmission Regulation.	Agreed
NaturEner Energy Canada Inc.	NaturEner is in support of the reoccurring studies to ensure that the line build out is being done where necessary. It is however not understood what will happen to a stage 2 portion of the build out if the situation arises where a stage 1 build out is halted due to a delay in a construction milestone. Does the delay of a stage 1 build out halt work on any stage 2 build out that would require the stage 1 piece?	While the stages are related, they are not absolutely sequential. For example, if a delay in the construction milestone halts an element identified in stage 1, it is likely that the stage 2 elements in that area are not needed; however, if a stage 2 element is demonstrably required ahead of or concurrently with a stage 1 element, the AESO is prepared to move on the stage 2 element.
5. Monitoring and reporting		
Stakeholder	Stakeholder Comment	AESO Response
TransCanada	At page 10, the Paper reads: “Studies will be conducted on a regular basis and at least annually to assess how incremental wind additions and system changes are impacting <i>planned congestion (emphasis added)</i> .” TransCanada is concerned by the use of the term “planned congestion” as this does not appear to align with the AESO’s planning duties set out in the relevant sections of the	Agreed. The word “planned” should be removed so that the sentence reads “Studies will be conducted on a regular basis and at least annually to assess how incremental wind additions and system changes are impacting congestion.” The intent of the SATR is of course to remove congestion.



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p><i>Transmission Regulation.</i> TransCanada would request that the AESO correct or clarify this statement.</p>	
<p>Office of the Utilities Consumer Advocate (UCA)</p>	<p>The AESO should continue to forecast the key indicators and milestone conditions on an on-going basis, and at least quarterly.</p> <p>The AESO should also include in its monitoring and studies the number of projects and collective capacity (MW), by zone, which have filed generation development Applications with the AUC, as well as the information on approvals.</p> <p>We recommend that some portion of the threshold generation forecast used in the milestone for each segment of transmission development be comprised of projects that have made a Generation Development Application with the AUC. For example, the 500 MW of generation forecast for Pincher Creek should include, say, at least 25% or 125MW, of capacity from projects that have received approval from the AUC for the development of their generation projects.</p>	<p>Agreed</p> <p>The AESO will consider this suggestion.</p> <p>The AESO is concerned about any link to filed or approved applications as this may limit the time for construction of the line in advance of new wind generation. The concern is that transmission development and construction has a longer lead time than wind farm generation. The risk is that once a generation development application is approved, the project may face delay in order for transmission line construction to 'catch up'.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

Capital Power	The process should be as transparent as possible.	Agreed
“Load Coalition” [Industrial Power Consumers Association of Alberta (IPCAA) / Alberta Direct Connect Consumers Association (ADC)]	The Load Coalition supports the intent of the AESO’s monitoring and reporting plan. The following key forecasting indicators should also be included in for monitoring and reporting: <ul style="list-style-type: none"> • Wind Generator Applications filed with AUC and deemed complete • Executed CCA with posted security 	The AESO is willing to report on all reasonable data.
TransAlta	TransAlta presumes that the annotation on the graph on page 11 refers to the "911L Rebuild". This annotation should be changed to match the table on page 8.	Agreed
NaturEner Energy Canada Inc.	It is important to have allocation of AESO responsibilities of the process. Included in responsible parties there should be an understanding of schedules and timelines for the build outs. Timing is important for the generators to understand their risk in order to evaluate project economics etc. Accountability to the rate payers and the generators is missing and is essential to be included in the process.	The AESO is committed to meeting its obligations to build to forecast need for transmission and will monitor relevant variables to ensure that transmission is available in a timely fashion.



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<ul style="list-style-type: none"> Support if accountability, responsibilities and timing is clearly defined 	
6. Draft Milestones and Related Process Steps for Southern Alberta Transmission System Reinforcement		
Stakeholder	Stakeholder Comment	AESO Response
Office of the Utilities Consumer Advocate (UCA)	<p>The SATR Milestones and Related Process Steps appendix requires further clarification.</p> <ol style="list-style-type: none"> The AESO identifies only two process steps: Facility Application and Construction. The AESO assumes that all construction activity will occur after the facility application approval (P&L approved), however this ignores that the AESO may direct the TFO to procure long-lead equipment (LLE) prior to the issuance of a P&L. LLE procurement should be also evaluated against milestones. The AESO is not proposing formal milestones for Facility Applications. Since the Facility Application represents only 5% of costs, it seems prudent to proceed with such approvals on a timely basis. That said, the AESO should clarify the manner and timing of Facilities Applications and how this can be accomplished in the most optimal manner. For example, should the Facility Applications be advanced sequentially (1, then 2, then 3) or in parallel? If they are to be advanced in sequence, then each Facility Application 	<p>The AESO will take steps to ensure that facility application and equipment pre-order work is done in a timely fashion.</p> <p>The AESO will report on new metrics quarterly and as new directives occur to ensure that stakeholders are fully informed of the status of wind development and transmission development in the South Area.</p> <p>AESO directions concerning Facility Applications are based on an assessment related to the time required to complete facility application work in advance of required construction and the verification of need. The AESO will monitor the same information outlined in the construction milestone below and report on same, along with providing notice of any issued directives as they occur.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>should be triggered by its necessary antecedent – these become natural milestones that should be monitored.</p> <p>3. The monitoring Report on page 4 of the appendix includes a brief discussion of the facilities Application directives. Per comment 2 above, this section should be expanded to explain the optimal progression of the three main stages (Stage 1 2 and 3). In addition, the Monitoring Report should include a summary as to the progress the TFO is making with the various steps of the Facilities Application including siting, public consultation, construction design, application preparation and application filing.</p> <p>4. The monitoring report should include milestones for LLE commitments.</p> <p>5. The information and message of the graphic on page 2 of the appendix is difficult to read and understand. We recommend that the "construction items" information be merged into the Table on page 4 and that such enhanced table be used for monitoring and milestone reports.</p> <p>The AESO should update the monitoring reports at least quarterly and make them readily available on its web-site.</p>	<p>The ability to trigger various components of the plan needs to be flexible. If a stage 2 element is demonstrably required ahead of or currently with a stage 1 element, the AESO needs to be able to move on the stage 2 element.</p> <p>As for monitoring and reporting on TFO progress, the AESO will take this under consideration.</p> <p>The AESO will take this under consideration.</p> <p>The AESO will consider this suggestion and update the table as appropriate.</p> <p>The AESO will take this under consideration.</p>
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**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

NaturEner Energy Canada Inc.	See 5.	The AESO is committed to meeting its obligations to build to forecast need for transmission and will monitor relevant variables to ensure that transmission is available in a timely fashion.
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7. Relationship of interconnection queue management process to the SATR Milestones

Stakeholder	Stakeholder Comment	AESO Response
Capital Power	The AESO is mandated to plan and assess the current and future needs of the market participants and to plan the capability of the transmission system such that it meets those needs. In order to carry out this responsibility the AESO must have a reasonable degree of certainty that generation projects will be constructed in the timeframes indicated. Therefore, Capital Power is of the view that the interconnection queue is an important factor in the AESO's determination of Need. As a result, how this queue is managed will directly impact the AESO's ability to rely on the queue as an input for assessing this Need. In instances where the AESO files a Needs Identification Document (NID) that includes facilities to be constructed at a later date, the AESO may specify milestones that serve to ensure the certainty of that Need. These milestones must also consider projects in the	The AESO is reviewing the management of the queue as part of the connection model re-design and to the extent that new information can be used as input for need evaluation, it will be included.



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	interconnection queue in order to confirm if at a later date the Need for a transmission facility still exists. Capital Power recommends that management of the interconnection queue be carefully considered in this context within the AESO's consultation on the interconnection model that is currently underway.	
“Load Coalition” [Industrial Power Consumers Association of Alberta (IPCAA) / Alberta Direct Connect Consumers Association (ADC)]	The wind interconnection queue could be used as one element for monitoring the wind interest by area; however, it should not be directly linked with either Facilities Application or Construction milestones.	The AESO will reassess its forecast need for transmission against any new information available, and not simply rely solely on the interconnection queue to determine if a milestone is met.
NaturEner Energy Canada Inc.	NaturEner agrees with relating the SATR milestones to Gate 1 in the proposed interconnection queue management process.	The AESO acknowledges NaturEner's comment.
8. Other comments on the recommendation paper		
Stakeholder	Stakeholder Comment	AESO Response
Office of the Utilities Consumer Advocate (UCA)	A chief concern of consumers is to know that all transmission expenditures will be made prudently. The SATR project consists of 7 segments in Stage	The AESO is responsible for ensuring that transmission is in place in a timely (in advance of need) and prudent



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>1 and 2 and an eighth segment in Stage 3. While some upgrades are required immediately (Coleman, Milo), others may require adequate generation assumptions as well as the comfort that other conditions precedent will be in place. For example, the AESO should identify what elements of Stage 1 must be in place prior to construction and connect of the Stage 2 segments. Progress with respect to these conditions should also be included in the monitoring report. If a condition precedent does not forecast to be ready on time, the AESO should also be prepared to adjust the construction and development schedule accordingly. For example, if land-owner disputes prevent the timely development of Stage 1 segments, the AESO should revisit the schedule for Stage 2 construction.</p> <p>The AESO's Paper focuses on the question of milestones. Additionally, the AESO can increase the opportunity for these transmission upgrades to be used and useful by ensuring that they are sited in the areas of high wind potential. The AESO should therefore direct the TFO to prepare its Facilities Application and the siting options to take into account the wind patterns within the NID corridors and to propose a specific route that has the highest potential to interconnect wind projects.</p>	<p>fashion.</p> <p>The ability to trigger various components of the plan needs to be flexible. If a stage 2 element is demonstrably required ahead of or currently with a stage 1 element, the AESO needs to be prepared to move on the stage 2 element. The AESO will continue to monitor and evaluate the need for the various components of SATR and adjust accordingly.</p> <p>Many factors go into siting a transmission facility. The AESO may suggest that the TFO take wind patterns into account.</p>
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**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

<p>Capital Power</p>	<p>The AESO states that this recommendation paper should not be construed as establishing any precedent related to when milestones will be used in future Needs applications. Capital Power agrees that legislation is clear; the AESO may specify milestones when filing a NID for a facility to be constructed at a later date. However, once the Commission approves the AESO's use of milestones in this NID, a precedent for the application of milestones in future applications will be set. Could the AESO provide additional clarity regarding the circumstances in which the AESO is likely to file a NID under Section 11(4) of the Transmission Regulation?</p>	<p>Please see the related response to the UCA above on page 1.</p>
<p>Alberta Wind Energy Corporation</p>	<p>We support the use of milestones for the development of transmission, as long as AESO and the TFO can guarantee transmission will be available before the first generation project is ready for commissioning in any given area. Triggers must be early enough in the process to allow the 3-5 year lead time for transmission development, while not delaying the development and financing of generation projects. Projects cannot be financed and built without guaranteed transmission. AESO should also consider in its planning future export opportunities to the United States. Development of transmission should be</p>	<p>Agreed. The AESO has an obligation to ensure that transmission is built in a timely fashion. Industry should be assured by the process that through monitoring, reporting and directives for implementation, that this will be the case.</p> <p>Consideration of increasing inertie capacity (for import and export transactions) is part of the AESO's transmission plan, and is supported by government policy as well.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>used as an engine for economic growth, both for domestic industry as well as electricity export opportunities. Opening transmission development and construction to other companies (with AESO oversight) will drive competition and speed of interconnection to foster green energy export to the U.S. in a similar fashion to the export of oil and gas through privately owned pipeline systems.</p>	
<p>TransAlta</p>	<p>TransAlta notes that in some of the tables that only the region, e.g. SW, is indicated and not the specific project. For clarity, TransAlta requests that a column indicating the project be added.</p> <p>Given that at the highest level SATR seeks to provide increased capacity between Southern Alberta and the Calgary Area we would suggest that, for example, project "911L Rebuild" be referred to as such and not as between Calgary and Peigan. The terminus of both the northern and southern ends of this line when rebuilt remain to be decided. In the South, for example, the 911L Rebuild substation could be further East in the Fort Macleod area to better serve as a collection node for numerous wind farm developments in that area. This approach would be consistent with using the fuzzy and wide generalized lines, for example, as shown on the map on page 3 to indicate that flexibility is required in choices of</p>	<p>The specific projects were not included, as transmission is planned on a regional basis, not exclusively on a project basis. The AESO will ensure that project related information is also communicated to industry where relevant.</p> <p align="center">Agreed</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>both terminals and line routes. This is also consistent with the TFO filing facilities applications with the alternatives which will best satisfy, the Need.</p> <p>TransAlta believes the document could be better organized to make it easier to understand and follow, e.g. the Appendix which is what will actually be used and presumably replaces the Appendix in the SATR should be more distinct and labelled appropriate.</p>	<p>The AESO will endeavour to make the appendix clearer and easier to understand.</p>
<p>Heritage Wind Farm Development Inc.</p>	<p>1) Heritage firmly believes that the input into the process that resulted in this request was political in nature rather than technical and again, an attempted and unprovoked knock against the wind industry. Simply put the UCA consultants railed on about a process they failed to implement while employed by the AESO itself. The goal then of the UCA with the IPCA hat skillfully cloaked and thrown under its umbrella was to cause more confusion, more delays more hoops and bureaucracy, more red tape for the wind industry to stumble through when streamlining is the order of the day. The spoilers or proponent of this extra and unnecessary complication never did answer within the heading how they would like these very milestones applied to the "IPCA HAPPY WABAMUMN" six (6) 500kV coal lines being</p>	<p>The AESO is committed to meeting its obligations to forecast need for transmission and will monitor relevant variables to ensure that transmission is available in a timely fashion. The use of milestones in this case does not preclude the consideration of other variables in forecasting need.</p>



**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>proposed in the North of Calgary. The industry betting is that IPCA membership whom these six lines will benefit, if not a pure subsidy, will not want any of the same excessive milestones on those lines as is being proposed on the “South Area Transmission Requirements & Milestones” The real and big clue here in what is being proposed is nothing short of being purely discriminatory against wind energy is the title itself “South Area Transmission Requirements & Milestones” while nothing is said about the six IPCA HAPPY COAL LINES. The old saying that what is good for the goose must most defiantly apply to the gander on all future coal, gas, co-generation, hydro, nuclear, coal and any other form of generation transmission lines in the province wherever and whenever they are built on the suture. To not require the same on every other line in the province is nothing more than hypocrisy at best and pure discrimination against wind generation in the South which this appears to be. Heritage submits that the AUC technical staff be called upon to ensure absolutely that of there are to be any “Milestones” at all, the are reasonable and fairly implemented throughout the entire Alberta Electrical System if they are able to be applied in the South. Between the AUC and the MSA the real task will be to absolutely ensure there in no discrimination in the SOTH that is not applies equally in the six, 500kV coal lines in the</p>	
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**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>North. Perhaps has the former planners who planned transmission for 2,700MW when they knew there was 12,000 MW of wind projects; this futile exercise would remain unnecessary.</p> <p>2) The other major item that the proponents of more bureaucracy against wind energy (UCA/IPCA), more red tape, more dictation, more placing the gun next to the heads of generators is the world is still in recession. Natural gas is at or less than \$3.00, the power pool price has average somewhere between \$30 and \$47, capital is hard to raise in the market if at all, Ontario is offering 20 year PPA'S for \$121 to \$135 making Alberta the worst place in North America to build generation, billions of oil sands projects are or have been on hold plus pipelines. Yet despite all the world market signals some politically driven black power market proponents are now forcing AESO to try to force "Southern Area Transmission Requirements & Milestones" upon the South but not the North?</p> <p>To conclude the absolute bottom line here is that AESO supervised by both AUC technical staff and MSA technical staff must ensure that there is nothing in any way or form like "Milestones" or any other red tape blockages, being placed upon "Southern Area Transmission Requirements & Milestones" that is not equally and fairly places on every and all other lines North of Calgary under</p>	
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**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	<p>the principals of FEOC detailed by the Alberta government ADOE and the principals of “what is good for the goose is good for the gander” apply. Clearly if the public believes that Bill 50 is intended to ‘fast track Alberta transmission’ then the politically foisted UCA, IPCA milestones red tape ought not to fly in the face of the governments and AESO states goals to get transmission built. The nonsense of not over building (the UCA/IPCA argument(but rather under building and doing it over several times over rather than right the first time in the South is disgraceful. As brought forward at the session, what happened to the concept of ‘pre-build’ as in the pipeline industry? Frankly the pre-build of some twenty to forty years is what has allowed Alberta generation to increase as it has. If pre-builds for the future were excellence then they must also be acceptable now to ensure it is don’t right the very first time fur future expansion. Thus simply forget the milestones just build it!</p> <p>Respectfully, Heritage recognizes that the AESO if not very careful could be used as the pawn of UCA & IPCA to drive their agenda against wind and transmission in South as identifies in the hearing and this sympathies are extended to those saddles with this unnecessary task. Finally has anyone notes the ironies and inconsistencies here in that the ADOE and its Honorable Minister are trying to build more transmission while the</p>	
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**Transmission Need Identification: Milestones for Southern Area Transmission Reinforcement
Recommendation Paper
Stakeholder Comment & AESO Response Form**

	UCA and its Minister are throwing road blocks in Southern Alberta transmission project. Who is the Public supposed to believe?	
NaturEner Energy Canada Inc.	NaturEner appreciates the work that the AESO is doing. There is a lot of thought put into a paper of this nature and because of this there is a large amount of knowledge that has to be understood to comprehend the thought process that went into it. Due to the nature of this document the readability was difficult.	The AESO acknowledges NaturEner's comment.