FACILITATING THE DEVELOPMENT AND USE OF RENEWABLE ENERGY AND ENABLING 2010 AND 2025 RENEWABLE TARGETS

1.0 RENEWABLE PROJECTS

Q. Which transmission projects in the IPSP are aimed at enabling the 2010 renewable energy target?

A. No transmission projects included in this IPSP are aimed at enabling the 2010 renewable energy target. There are some renewable resources which are being developed and are anticipated to come on line by 2010, however, the existing transmission system is capable of incorporating these resources. No new transmission enhancements need to be implemented by 2010 to accommodate these resources.

Q. Which transmission projects in the IPSP are primarily aimed at facilitating the development and use of renewable energy resources in those parts of the province where the most significant development opportunities exist and enabling the 2025 renewable energy target?

A. The following transmission projects included in the IPSP are aimed at facilitating renewable energy development and enabling the 2025 renewable energy target:

- North-South Transmission Reinforcement;
- Sudbury West Transmission Reinforcement;
- Sudbury North Transmission Reinforcement;
- Incorporating Little Jackfish and East Nipigon Renewable Resource Development;
- Enabling Goderich Area Renewable Resource Development;
- Enabling Bruce Peninsula Renewable Resource Development;
- Enabling Manitoulin Island Renewable Resource Development; and
- East Lake Superior Transmission Reinforcement.

In addition to the foregoing transmission projects, the IPSP is premised on certain other transmission upgrades and reinforcements that are currently being undertaken or

pursued by Hydro One Networks outside of the IPSP. Certain of those upgrades will add some near-term transfer capacity to the North-South Tie, which will allow some northern renewables to be developed and delivered to southern Ontario. As well, Hydro One Networks has sought or is seeking approval to construct new transmission facilities including a new Bruce to Milton line, which in addition to delivering additional nuclear energy from the Bruce Nuclear Complex, will permit the development and delivery of wind energy in the Bruce area.

Q. How will these transmission projects facilitate the development of renewable energy and enable the 2025 renewable energy target?

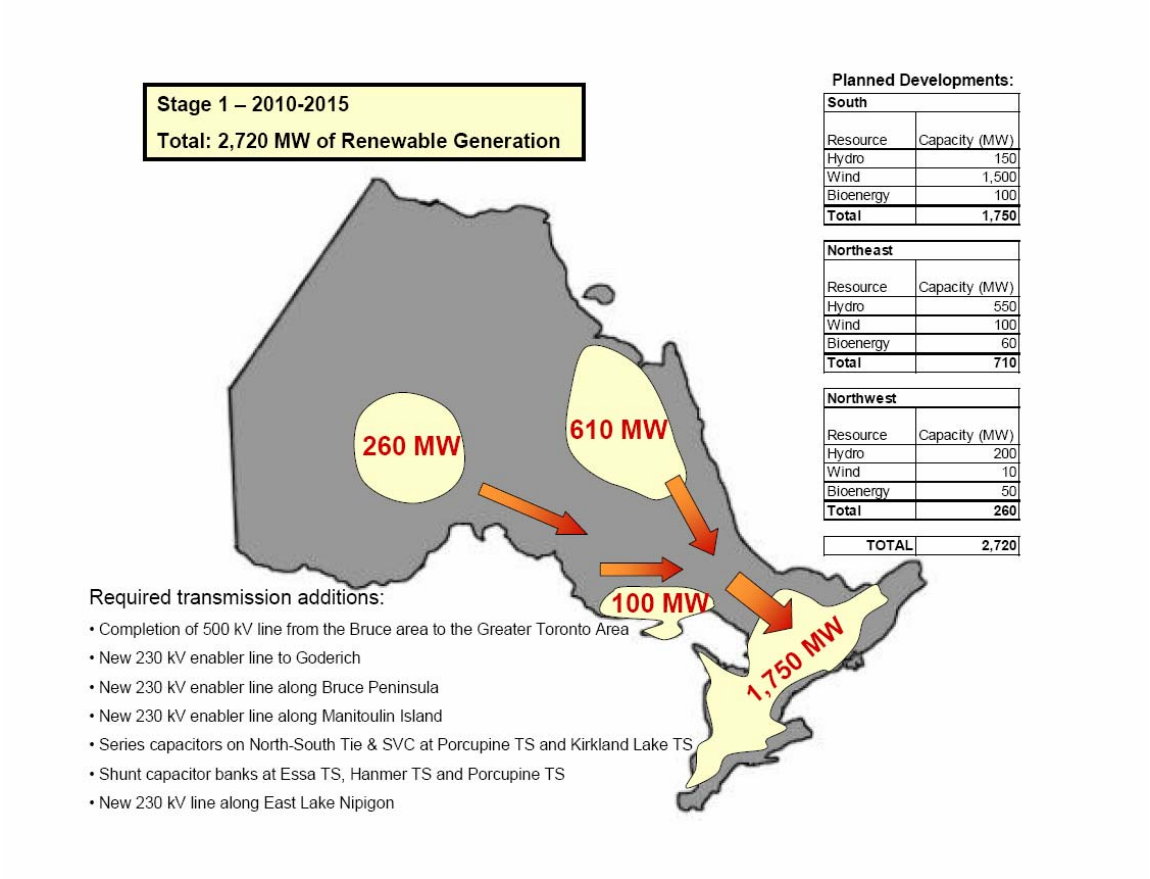
A. The OPA has developed a three-stage transmission development plan and these projects are part of that plan. The manner in which the OPA developed this staged transmission development plan is discussed in greater detail below, but in summary, the three stages are as follows:

- *Stage One (2010-2015)* – Initially, the OPA recommends that the Province harvest those renewable resources that are the most accessible from a transmission perspective, that is, resources which will not require substantial transmission reinforcements. These resources and the associated transmission projects include:
    - Renewable resources in southern Ontario, principally wind in the Bruce area. Much of this wind energy would not presently be capable of being integrated into the grid, but will be following the construction of the new Bruce to Milton 500 KV line, which Hydro One has sought leave to construct. Accessing these resources will also require construction of enabler transmission lines to the pockets of wind resources in the Bruce area. The foregoing transmission projects – Enabling Goderich Area Renewable Resource Development and Enabling Bruce Peninsula Renewable Resource Development - are transmission projects that are aimed at facilitating and enabling the development of these resources.
    - Renewable resources located in the north and which can be delivered by making modest transmission upgrades to the North-South Tie (i.e., installation of static var compensators at Porcupine TS and Kirkland Lake TS, installation of shunt capacitors at Essa TS, Hanmer TS and Porcupine TS, and installation of series compensation on the North-South Tie). In addition, enabler transmission would have to be constructed to access these resources. The foregoing projects, Incorporating Little Jackfish and East Nipigon Renewable Resource Development and Manitoulin Island Resource

Renewable Development, are aimed at facilitating and enabling these resources.

The transmission upgrades and reinforcements that are planned for Stage 1 are intended to facilitate and enable the development of approximately 2,720 MW of renewable energy. A majority, 1,750 MW of the total, is planned for development in southern Ontario, most of which is wind (1,500 MW).

Figure 1: Stage 1



Planned Developments:

South	
Resource	Capacity (MW)
Hydro	150
Wind	1,500
Bioenergy	100
Total	**1,750**

Northeast	
Resource	Capacity (MW)
Hydro	550
Wind	100
Bioenergy	60
Total	**710**

Northwest	
Resource	Capacity (MW)
Hydro	200
Wind	10
Bioenergy	50
Total	**260**

TOTAL	**2,720**

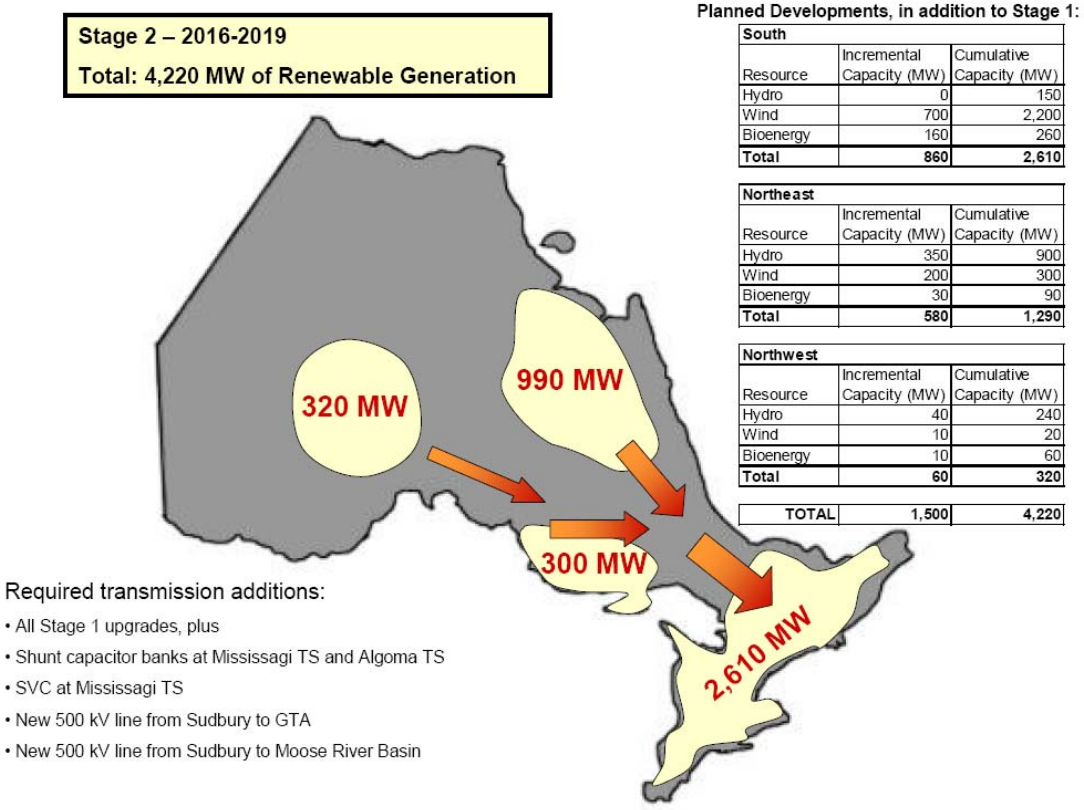
Source: OPA

- *Stage 2 (2016-2019)* – In the middle years of the IPSP, the OPA recommends transmission upgrades including the installation of static var compensators at Mississagi and shunt capacitors at Mississagi and Algoma to capture those remaining northern renewable resources that can still be accessed without substantial reinforcements to the North-South Tie. In this stage, the OPA has also planned the necessary reinforcements to the North-South Tie to facilitate further development of renewable generation in the north. As well, a new line from Sudbury to Moose River Basin which will be the first step towards accessing and delivering

northern hydroelectric resources.

The transmission upgrades and reinforcements that are planned for Stage 2 are intended to facilitate and enable the development of an additional 1,500 MW of renewable energy, of which 910 MW of it is wind. Furthermore, over half of the total 1,500 MW (860 MW) is planned for development in southern Ontario.

Figure 2: Stage 2



Planned Developments, in addition to Stage 1:

South		
Resource	Incremental Capacity (MW)	Cumulative Capacity (MW)
Hydro	0	150
Wind	700	2,200
Bioenergy	160	260
Total	**860**	**2,610**

Northeast		
Resource	Incremental Capacity (MW)	Cumulative Capacity (MW)
Hydro	350	900
Wind	200	300
Bioenergy	30	90
Total	**580**	**1,290**

Northwest		
Resource	Incremental Capacity (MW)	Cumulative Capacity (MW)
Hydro	40	240
Wind	10	20
Bioenergy	10	60
Total	**60**	**320**

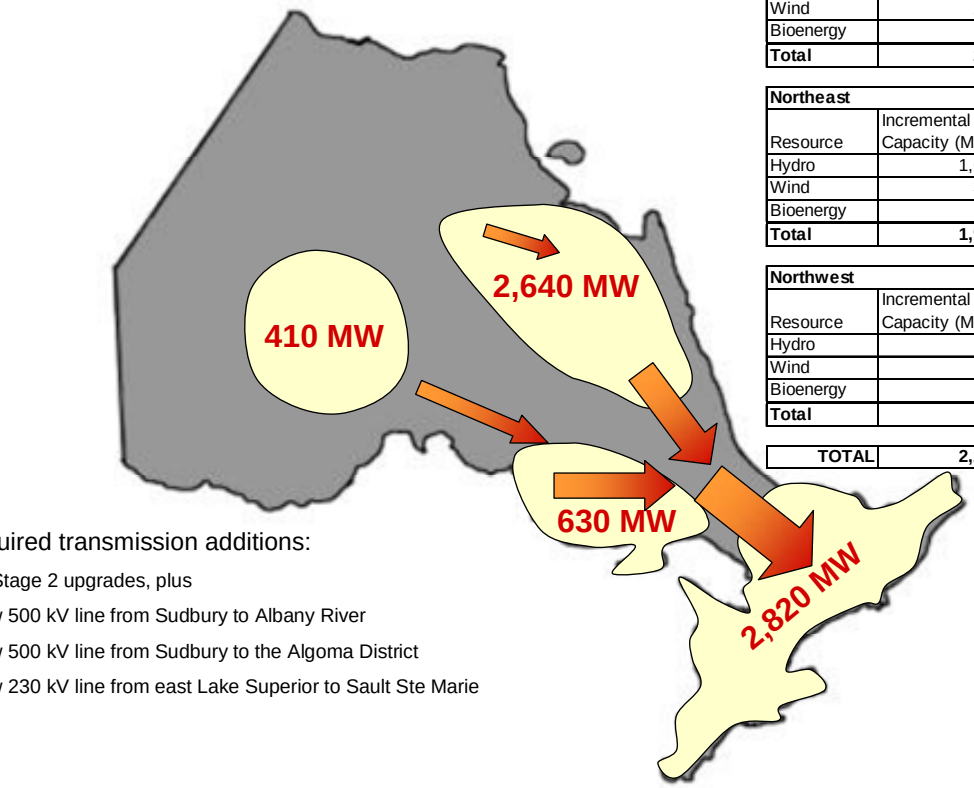
TOTAL	**1,500**	**4,220**

Source: OPA

- *Stage 3 (2020 and beyond)* – In the mid to later years of the plan, the foregoing projects – Sudbury North Development, Sudbury West Transmission Reinforcement and East Lake Superior Transmission Reinforcement – are aimed at enabling further development of renewable resources in the north. Additional transmission reinforcements could possibly include a purchase from Manitoba if such a purchase could be reasonably negotiated.

The transmission upgrades and reinforcements that are planned for Stage 3 are intended to facilitate and enable the development of an additional 2,280 MW of renewable energy. The majority of that (2,070 MW), is planned for development in northern Ontario. Of this 2,070 MW, a majority (1,660 MW) is hydroelectric.

Figure 3: Stage 3



Planned Developments, in addition to Stage 2:

South		
Resource	Incremental Capacity (MW)	Cumulative Capacity (MW)
Hydro	0	150
Wind	210	2,410
Bioenergy	0	260
Total	**210**	**2,820**

Northeast		
Resource	Incremental Capacity (MW)	Cumulative Capacity (MW)
Hydro	1,600	2,500
Wind	330	630
Bioenergy	50	140
Total	**1,980**	**3,270**

Northwest		
Resource	Incremental Capacity (MW)	Cumulative Capacity (MW)
Hydro	60	300
Wind	30	50
Bioenergy	0	60
Total	**90**	**410**

TOTAL	**2,280**	**6,500**

Source: OPA

2.0 DEVELOPMENT OF OPA'S TRANSMISSION PLAN TO FACILITATE AND ENABLE RENEWABLE DEVELOPMENT

Q. How will these transmission projects assist in meeting the Directive's renewable goals in an economically prudent and cost effective manner?

A. The OPA conducted various studies and analysis to develop a transmission plan that would satisfy the Directive's renewable goals in an economically prudent and cost effective manner. The following is a summary of the step-by-step process the OPA took in developing the foregoing three-stage transmission development plan.

2.1 Assessment of Existing and Potential Renewable Resources

The Directive requires the OPA to: (i) facilitate the development and use of renewable energy in those parts of the Province where the most significant development opportunities exist; and (ii) increase the total capacity of renewable energy resources used in Ontario to 15,700 MW by 2025.

As an initial step in deciding how to fulfill these renewable goals, the OPA conducted an assessment of all existing and committed renewable resources and an assessment of all undeveloped renewable resources in Ontario that could potentially be developed. Part of this process — the OPA's assessment of existing and potential resources — is addressed in more detail in Exhibit D-5-1. It is summarized here for background information to explain how the OPA developed its transmission plan.

Existing/Committed Renewables — The OPA first accounted for the total capacity of all existing and committed renewable resources. This included those renewables that have been and will be developed under the OPA's Renewable Electricity Supply ("RES") contracts and standard offer programs ("SOP"s). Based on this assessment, the OPA identified 9,673 MW of existing and committed renewable resources, leaving a deficit of 6,027 MW that will need to be developed to meet the 2025 target.

Potential Renewable Development — The OPA next assessed what undeveloped renewable resources could potentially be developed to bridge the 6,027 MW deficit

necessary to meet the 2025 target and meet the Directive's objective of realizing the most significant renewable development opportunities. This assessment entailed a preliminary screening-out of resources which did not satisfy certain minimum feasibility requirements:

- *Hydroelectric* — For hydroelectric, the OPA identified all potential sites that were not subject to policy constraints, i.e., hydroelectric resources not located within national and provincial parks or provincial conservation reserves, and not subject to Northern Rivers and Moose Rivers Basin commitments (with the exception of approximately 1,756 MW of hydroelectric potential that fell within these policy constraints and which the OPA included on the grounds that there is a reasonable basis to believe these constraints may be overcome). The OPA estimates these potential hydroelectric resources that are feasible at 2,921 MW.
- *Wind* — For wind, the OPA also identified sites that met certain minimum feasibility criteria. These criteria included that the sites be on-shore, below the 50th parallel, between 30 MW and 200 MW in the case of large sites, have a wind speed of greater than 6.5m/s, not lie within provincial parks, conservation areas or sensitive bird habitats, etc. The sites identified by the OPA included 60 large sites, between 30 MW and 200 MW and 13 projects that were in the process of being developed ("Large Wind sites"). The Large Wind sites totaled 9,267 MW. As well, the OPA identified over 300 small sites ("Small Wind sites"), not exceeding 10 MW (totaling 2,787 MW), for which applications had been submitted to Hydro One pursuant to the OPA's SOP. In total, the OPA identified 12,054 MW of potential wind capacity.
- *Bioenergy* — With respect to bioenergy, there is significant uncertainty at this stage as to how much bioenergy can be developed over the term of the plan and where it may be sited. For planning purposes, the OPA assumed that 450 MW of bioenergy will be developed over the term of the Plan and the OPA has not identified any specific sites as most will be distributed as small developments, with the exception of the possible conversion of Atikokan.
- *Solar* – No additional allowance was made for solar resources beyond the 88 MW currently committed, on the basis that all of this capacity may not materialize and that other future resources are likely to be small, less than 500 kW, and counted as Conservation resources.

The potential feasible hydroelectric, wind and bioenergy potential identified by the OPA and their respective locations and capacities are listed in Table 12, Exhbit-D-5-1.

After identifying all undeveloped renewable resources that could feasibly be developed the OPA performed an analysis of the relative costs of developing these resources.

2.2 Development of OPA's Staged Transmission Plan – Planning Considerations

After taking stock of existing committed renewable resources and potential renewable resources, the OPA's next step was developing a plan to capture renewable resources to meet the Directive's renewable goals in an economically prudent and cost effective way. This process entailed considering and applying the OPA's six planning criteria — reliability, feasibility, flexibility, cost, environmental performance and societal acceptance. Based on an application of these planning criteria, the OPA determined that the most economically prudent and cost effective way to meet the Directive's renewable goals would be to recommend a staged transmission development plan under which the Province would initially enable the most accessible renewables in the Province and would then proceed over the mid to later years of the plan to make the necessary transmission reinforcements to the North-South Tie (and build further enabler lines) to access and deliver more remote northern hydroelectric and wind resources. The following sections address how the OPA decided upon this staged transmission development plan based on consideration of its six planning criteria.

Cost

Cost was a primary driver in planning what renewables to enable. The OPA ranked all potential renewable resources based on their all-inclusive LUECs and generally selected for inclusion in the Plan those resources with the lowest all-inclusive costs. The manner in which the OPA assessed the LUECs of resources and ranked them for inclusion in the Plan is briefly as follows:

The OPA subjected all potential renewable resources to an all-inclusive LUEC cost analysis. The LUEC methodology is described at Exhibit D-3-1, Attachment 1 and the manner in which the all-inclusive LUEC of renewable resources was calculated is described in Attachment 1 to this exhibit. In short, the LUEC is the present cost of developing and operating the resource over its economic life. For the purpose of assessing the all-inclusive LUEC costs of potential renewable sites, the OPA, incorporated transmission-related costs. Specifically, the OPA factored in the

associated connection, enabler line, bulk transmission and station costs; as well, the OPA included the costs of transmission losses.

For some potential wind resources, the LUECs were allocated to “clusters” of wind as opposed to the individual wind resources within the cluster. This was done because it was decided that the sites would only be economic and cost effective to develop if most or all of the sites within the cluster were developed to fully utilize the enabling transmission facilities and the transmission-related costs were shared pro-rata, as appropriate.

Based on its LUEC analysis, the OPA concluded that potentially feasible hydroelectric resources were generally lower-cost than potentially feasible wind resources. Potential hydroelectric resources ranged generally from 2.5 to 8.5 ¢ per kwh as compared to wind, which ranged generally from 7.5 to 11.5 ¢ per kwh. The OPA therefore included all 2,921 MW of feasible hydroelectric resources in the plan. The OPA included all feasible hydroelectric in the Plan because even the most expensive hydroelectric was of lower cost than the least expensive wind resources not included in the Plan. Moreover, the gap between hydroelectric and wind costs widened when account was taken of the fact that hydroelectric resources have a greater demand-meeting capability than wind resources. This is addressed in more detail at Exhibit D-5-1.

The LUEC rankings of potential hydroelectric and wind resources, from lowest-cost to highest-cost, are shown in Tables 15 and 16 at Exhibit D-5-1. Tables 17 of Exhibit D-5-1 also show the LUEC ranges for hydroelectric, wind and biomass resources, including a breakdown of the LUEC ranges for hydroelectric and wind by region.

The OPA took costs into account in how to plan the development sequence of renewables resources. With the exception of certain potential northern hydroelectric resources — which for feasibility reasons, relating to transmission availability, cannot be developed early on — the OPA has generally recommended the development of lower cost (based on all-inclusive LUEC) renewables first. This is prudent from a cost and

flexibility perspective because by deferring higher-cost renewables to the later years of the plan, it allows for substitution in the event lower cost or otherwise preferable renewable resource alternatives emerge in the interim. The OPA also treated large wind as a balancing resource to meet the 2025 renewable target (after accounting for all hydroelectric solar, biomass and SOP wind), but did not recommend developing more wind to exceed the 2025 target due to the cost disadvantages of wind as compared to other conventional resources.

Feasibility

Feasibility was also a primary consideration in developing the OPA's transmission plan. This is reflected in the amount of wind resources the OPA included in the plan and which the OPA proposes be facilitated and enabled through transmission development. For Small Wind sites, the OPA included 90% of the capacity of the current 10 MW or less generation applications for connection to Hydro One Networks (after adjustment to ensure distribution station limits are not exceeded). The 90% factor corrects for applications for other than wind resources. These applications, which total 338 projects with a total installed capacity of 2,787 MW. Of the 2,787 MW total, 1,148 MW are deemed feasible to assume for inclusion in the Plan as shown in Table 19 of Exhibit D-5-1. The OPA recognizes that not all of these projects will proceed; on the other hand, additional 10 MW or lower applications are anticipated over the course of the Plan.

After accounting for hydroelectric, bioenergy and Small Wind resources, the OPA used Large Wind as the balancing resource to satisfy the remaining gap to meet the Directive's 2025 renewable target. Although the OPA only needed approximately 1,500 MW to meet this gap, the OPA determined that for feasibility reasons, it would be prudent to approximately double the MWs of Large Wind included in the Plan. That is because for regulatory, environmental, social, commercial and/or technical reasons, it is assumed that substantially less than the amount of planned Large Wind sites will be

developed. The OPA's experience to date with the development of RES 1, RES 2 and SOP wind projects indicates that this is a reasonable assumption.

Feasibility was also central in considering how to stage transmission development. All things being equal, transmission should be constructed to enable the lowest-cost renewables first. While the OPA's staged plan generally accomplishes this, the timelines are in some cases dictated by transmission lead-times and feasible in-service dates. As such, some lower cost northern hydroelectric developments — i.e., Moose River Basin, Albany — will have to be developed later in the life of the IPSP due to the substantial work that will need to be done to reinforce the North-South Tie, build the dedicated transmission lines to connect these resources to the grid and address costs issues.

Reliability

Reliability was also a significant concern with respect to incorporating wind resources. Ontario has limited experience with incorporating a significant amount of wind energy. Therefore, at this time the OPA deemed it prudent for system operability reasons to plan for not more than 5,000 MW of wind over the term of the plan. As knowledge and experience with wind operations evolve, this threshold could be revisited in subsequent IPSPs. For operational reasons, the OPA also believes it is prudent to add wind resources incrementally and to geographically disperse them.

Flexibility

It is important that the OPA's transmission plan be flexible enough to withstand and/or adapt to changing circumstances. Although the OPA is proposing the foregoing three-stage transmission plan, the OPA is not seeking to pre-determine what specific resources and facilities will be developed or when precisely they will be developed. This will largely depend on how market and commercial developments unfold. The OPA recognizes that certain resources and their associated transmission facilities will not proceed and that others will proceed more quickly or more slowly than anticipated,

and not necessarily in economic merit order. A main purpose of the transmission component of the IPSP is to trigger necessary transmission work so that reasonable options are preserved and remain open and available as means of meeting the Directive's renewable goals.

Environmental Performance and Societal Acceptance

As noted above, considerations of environmental performance and societal acceptance largely overlapped with considerations of feasibility. The OPA's staged transmission plan – and, in particular, its recommendations to start development work early, to provide ample project lead times and to include multiple enabling options – was in large part premised on the potential impacts recommended projects would have on communities and the environment, and the necessary consultation and further regulatory processes that would be required to address these impacts. Societal acceptance was also reflected in the stakeholdering and stakeholder feedback the OPA received on its plan to facilitate and enable renewable development. As further discussed herein, most stakeholders the OPA heard from supported the OPA's plan to build transmission to facilitate and enable northern renewable development, but some cautioned the OPA on the time and regulatory challenges that would be faced in implementing the plan. These comments influenced the OPA by causing it to recommend earlier development work and include more options to enable renewable development than had been included in the OPA's earlier discussion papers.

Q. Are there alternatives, in particular, lower-cost alternatives for strengthening the transmission system to meet these renewable objectives?

A. There are no lower-cost alternatives to facilitate the development of renewable energy in renewable-rich parts of the province and to meet the 2025 renewable target. Initially, the most cost-effective way to meet these renewable goals is to exploit the most accessible renewable resources. After that, in order to meet the renewable goals, it will be necessary to construct dedicated lines to tap more remote hydroelectric and wind resources, most of which are located in the north, and to build the additional

transmission capacity to transmit the energy from the north to the south. The staged development of these resources, discussed above, is, in the OPA's view, the most cost-effective way to achieve the supply mix goals. If some lower-cost renewable alternatives were to emerge in the interim, the transmission plan is sufficiently flexible that some northern transmission enhancements could be scaled back in favour of new, more cost-effective alternatives. As an example, if lower-cost off-shore wind resources were to emerge and be permitted, the plan could accommodate this.

2.3 Enabler Lines

Q. The OPA's transmission plan provides for the construction of "enabler" lines to access remote northern renewable resources. What specifically are "enabler" lines and how will these lines and the corresponding renewable resources get developed?

A. A number of renewable resources included in the plan are located in remote areas far from the transmission grid. In order to develop these resources, dedicated radial transmission lines will need to be constructed to connect these resources to the grid.

In some cases, these remote resources are hydroelectric resources and the water rights are owned by OPG, e.g., Albany, Moose River Basin and Little Jackfish. In these cases, the cost of constructing the necessary transmission lines will presumably be factored into the feasibility and cost of development.

In other cases, the plan includes clusters of potential wind resources and it is anticipated that the development of these resources will be through some form of competitive procurement process. The projects in the plan which necessitate the construction of dedicated lines to "enable" the development of these resources are the following:

- Enabling Goderich Area Renewable Resource Development;
- Enabling Bruce Peninsula Renewable Resource Development; and
- Enabling Manitoulin Island Renewable Resource Development.

It is the OPA's view that the construction of enabler lines is necessary in order to meet the Directive's renewable objectives and that these enabler lines should be treated as network assets and the costs — at least the initial costs — should be socialized. This is necessary in order to facilitate the development of these wind resources and, in particular, to attract and promote competition among developers.

"Enablers" are a concept that is not known to Ontario and under the present Transmission System Code ("TSC") regulatory framework, they would not be treated as network assets. This poses a potential impediment to the development of enabler lines and corresponding renewable resources.

It is the OPA's view that the existing regulatory framework should be adapted to accord with the *Electricity Act's* and the Directive's renewable objectives. This view was expressed by a representative of the First Nations Energy Alliance North who specially said that the OEB may need to consider changes to existing transmission policy to facilitate enabler lines to First Nations' renewable projects.

The OPA generally agrees with this view and believes there are, viable ways to develop appropriate policy and regulation. Other jurisdictions in North America, California and Texas, have faced similar challenges and some have taken steps to develop policies to meet these challenges.

As an example, California has a renewable portfolio standard ("RPS") which requires 20% of the state's electricity to be generated by renewable resources by 2010 and 33% by 2020. One of the obstacles California identified to meeting its RPS targets was the relatively small size of potential renewable projects, their remote location and the significant costs of building transmission connections. Like Ontario, California's regulatory framework distinguishes between "network" and "connection" assets and would have required generation proponents to pay for the cost of constructing transmission lines to access remote renewables. In order to address this obstacle, California ISO ("CAISO") applied to the Federal Energy Regulatory Commission

("FERC") to have this renewable-related transmission treated as a "third category" of transmission facilities. CAISO applied to have the initial costs of this transmission investment socialized with the costs being recovered through pro-rata contributions by generators as the line became subscribed. FERC issued a declaratory order dated April 19, 2007 approving CAISO's application and, in doing so, stated that:

> Location-constrained resources present unique challenges that are not faced by other resources and that are not adequately addressed in the Commission's current interconnection policies. These resources tend to have an immobile fuel source, are small in size relative to the necessary interconnection facilities, tend to come on line incrementally over time, and are often remotely located from loads. Location constrained resources therefore have a limited ability to minimize their interconnection costs and, moreover, these factors can, in certain circumstances, impede the development of such resources altogether.

A more detailed description of how California and Texas have addressed this issue is described in Attachment 2 of this exhibit.

The OPA recommends that the OEB, with assistance and input from the OPA, the IESO, transmitters, generators and other stakeholders, consult and work towards implementing the necessary policy changes to address this issue.

3.0 CONSULTING WITH STAKEHOLDERS AND ASSESSING ENVIRONMENTAL IMPACT OF TRANSMISSION PROJECTS

Q. How did the OPA consult with stakeholders on this part of the plan? What feedback did the OPA receive? How were stakeholders' priorities and views considered?

A. The OPA consulted with stakeholders on this aspect of the plan in the same manner it consulted with stakeholders generally. The OPA's stakeholdering processes are more particularly described in Exhibit C-2-1.

In Exhibit C-4-1, one of the key messages the OPA heard from stakeholders on this part of the plan was that they generally supported the proposal to reinforce the North-South Tie and to develop enabler transmission in the north to exploit remote northern renewables, but, they had concerns about timely consultation with First Nations and

about potential environmental, technical and regulatory approval requirements. In particular, they expressed concerns that certain transmission initiatives might be frustrated altogether and others might be delayed. In response to these concerns, the OPA has tried to build more optionality and flexibility into the Plan to mitigate against these risks. For instance, the OPA has included more northern renewables and transmission than it had in its Discussion Papers. As well, the OPA has identified Manitoba, Québec and Labrador purchases as potential alternatives and has recommended exploring these options further and proceeding with some preliminary development work.

Some stakeholders also expressed concern about whether the OPA and transmission proponents would have sufficient resources to carry out the necessary transmission development work in a timely manner. The OPA intends to consult and coordinate with transmitters, the OEB and other persons in order to address this challenge. The IPSP itself will also signal to transmission proponents and others the resources that may be required over the term of the Plan.

Another example of how stakeholder feedback influenced the OPA is with respect to the OPA's inclusion of additional northern hydroelectric resources. In the OPA's earlier Discussion Papers, the OPA did not include certain potential hydroelectric sites that were subject to Northern Rivers and Moose River Basin commitments; however, based on stakeholder feedback, the OPA concluded that certain northern hydroelectric resources were capable of being developed if existing policy constraints were appropriately addressed. As such, the Albany and Moose River Basin hydroelectric development have been added to the IPSP.

Q. Did the OPA receive any negative feedback on this part of the transmission plan? If so, how did this feedback influence the OPA?

A. Yes, some negative views were expressed. Some persons argued that northern renewable development, including transmission development, would disproportionately benefit southern Ontario, particularly the GTA, and could adversely impact northern

Ontario. The OPA is mandated to develop a plan which will meet the Directive's renewable goals for the Province and in the OPA's view, it is necessary to develop northern renewable resources to meet this province-wide need. At the same time, the OPA recognizes that successful development and implementation of the IPSP will require consultation with affected communities in order to mitigate concerns and highlight opportunities; this is one reason the OPA has recommended long project lead times.

Q. Which, if any, of the transmission projects (or reasonable alternatives) recommended in this part of the plan meet the criteria set out in paragraph 8 of section 2(1) of Regulation 424/04, that is, in the opinion of the OPA, they will require an individual environmental assessment within five years of Plan approval?

A. The transmission projects in the Plan (and reasonable alternatives) which meet the criteria set out in paragraph 8 of section 2(1) of O.Reg 424/04 are as follows:

- Incorporating Little Jackfish Hydro and Lake Nipigon Renewable Resource Development;
- Lake Superior East Renewable Transmission Reinforcement;
- Sudbury West Transmission Reinforcement;
- Enabling Manitoulin Island Renewable Resource Development;
- Enabling Bruce Peninsula Renewable Resource Development;
- Sudbury North Development;
- North-South Transmission Reinforcement;
- Manitoba Purchase (as an alternative); and
- Québec or Labrador Purchase (as an alternative).

As explained in Exhibit E-2-1, the OPA retained Hardy Stevenson & Associates Ltd. ("Hardy Stevenson") to perform environmental impact analysis of the foregoing projects (in the case of a potential purchase from Manitoba, the OPA is relying upon previous environmental analysis performed by Stantec and Dillon and SNC Lavalin). The Hardy

Stevenson, Stantec and Dillon and SNC Lavalin Reports are attachments to the applicable project analysis.