

# Environmental Noise Checklist

Site: Alternative 1

| Noise Sources   |                      |
|---|----------------------|
| How many transformers are proposed at this site?        | 2                    |
| What is their electrical rating?                        | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>1</sup> | 75 dBA               |

| Noise Receptors   |  |  |
|---|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                    |  |  |
| <input type="checkbox"/> Residential  | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional  | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):  |  |  |
| <input type="checkbox"/> Commercial   | <input type="checkbox"/> Industrial              |  |
| <input type="checkbox"/> Park   | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>2</sup>  |  |  |
| Permanent or seasonal residences  | <input type="checkbox"/>                         |  |
| Hotels/motels   | <input type="checkbox"/>                         |  |
| Nursing/retirement homes  | <input type="checkbox"/>                         |  |
| Rental residences   | <input type="checkbox"/>                         |  |
| Hospitals   | <input type="checkbox"/>                         |  |
| Campgrounds   | <input type="checkbox"/>                         |  |
| Schools   | <input type="checkbox"/>                         |  |
| Places of worship   | <input type="checkbox"/>                         |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                |  |  |
| <i>Name</i>   | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1  | Residence  | 530  |
| POR2  | Residence  | 1460   |
| POR3  | Residence  | 960  |
| POR4  | Residence  | 730  |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>3</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|   |  | <input checked="" type="checkbox"/> Class 3      |

| Noise Approval Requirements  |   |
|--|---|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |   |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                                     |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |   |
| <input type="checkbox"/> Definitely (<500 m separation)  | <input checked="" type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |   |
| <input type="checkbox"/> Likely  | <input checked="" type="checkbox"/> Unlikely                    |
| <input type="checkbox"/> To be determined by AAR   |   |

<sup>1</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>2</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>3</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 2

| Noise Sources   |                      |
|---|----------------------|
| How many transformers are proposed at this site?        | 2                    |
| What is their electrical rating?                        | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>4</sup> | 75 dBA               |

| Noise Receptors   |  |  |
|---|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                    |  |  |
| <input type="checkbox"/> Residential  | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional  | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):  | <input type="checkbox"/> Commercial              |  |
|   | <input type="checkbox"/> Industrial              |  |
|   | <input type="checkbox"/> Park                    |  |
|   | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>5</sup>  |  |  |
| Permanent or seasonal residences  | <input checked="" type="checkbox"/>              |  |
| Hotels/motels   | <input type="checkbox"/>                         |  |
| Nursing/retirement homes  | <input type="checkbox"/>                         |  |
| Rental residences   | <input type="checkbox"/>                         |  |
| Hospitals   | <input type="checkbox"/>                         |  |
| Campgrounds   | <input type="checkbox"/>                         |  |
| Schools   | <input type="checkbox"/>                         |  |
| Places of worship   | <input type="checkbox"/>                         |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                |  |  |
| <i>Name</i>   | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1  | Residence  | 825  |
| POR2  | Residence  | 1740   |
| POR3  | Residence  | 480  |
| POR4  | Residence  | 1020   |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>6</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|   |  | <input checked="" type="checkbox"/> Class 3      |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>4</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>5</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>6</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 3

| Noise Sources   |                      |
|---|----------------------|
| How many transformers are proposed at this site?        | 2                    |
| What is their electrical rating?                        | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>7</sup> | 75 dBA               |

| Noise Receptors   |  |   |
|---|--|---|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                    |  |   |
| <input type="checkbox"/> Residential  | <input checked="" type="checkbox"/> Agricultural |   |
| <input type="checkbox"/> Institutional  | <input type="checkbox"/> Utility                 |   |
| <input type="checkbox"/> Other(s):  | <input type="checkbox"/> Commercial              |   |
|   | <input type="checkbox"/> Industrial              |   |
|   | <input type="checkbox"/> Park                    |   |
|   | <input type="checkbox"/> Greenbelt/Conservation  |   |
| Receptors within approximately 500 metres of the proposed site? <sup>8</sup>  |  |   |
| Permanent or seasonal residences  | <input checked="" type="checkbox"/>              |   |
| Hotels/motels   | <input type="checkbox"/>                         |   |
| Nursing/retirement homes  | <input type="checkbox"/>                         |   |
| Rental residences   | <input type="checkbox"/>                         |   |
| Hospitals   | <input type="checkbox"/>                         |   |
| Campgrounds   | <input type="checkbox"/>                         |   |
| Schools   | <input type="checkbox"/>                         |   |
| Places of worship   | <input type="checkbox"/>                         |   |
| See the attached map identifying the four nearest points of reception (POR) described below.                                |  |   |
| <i>Name</i>   | <i>Description</i>                               | <i>Distance (metres)</i>                    |
| POR1  | Residence  | 560   |
| POR2  | Residence  | 240   |
| POR3  | Residence  | 685   |
| POR4  | Residence  | 655   |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>9</sup> |  | <input type="checkbox"/> Class 1 or 2       |
|   |  | <input checked="" type="checkbox"/> Class 3 |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>7</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>8</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>9</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 4

| Noise Sources  |                      |
|--|----------------------|
| How many transformers are proposed at this site?         | 2                    |
| What is their electrical rating?                         | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>10</sup> | 75 dBA               |

| Noise Receptors  |  |   |
|--|--|---|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                     |  |   |
| <input type="checkbox"/> Residential   | <input checked="" type="checkbox"/> Agricultural |   |
| <input type="checkbox"/> Institutional   | <input type="checkbox"/> Utility                 |   |
| <input type="checkbox"/> Other(s):   | <input type="checkbox"/> Commercial              |   |
|  | <input type="checkbox"/> Industrial              |   |
|  | <input type="checkbox"/> Park                    |   |
|  | <input type="checkbox"/> Greenbelt/Conservation  |   |
| Receptors within approximately 500 metres of the proposed site? <sup>11</sup>  |  |   |
| Permanent or seasonal residences   | <input checked="" type="checkbox"/>              |   |
| Hotels/motels  | <input type="checkbox"/>                         |   |
| Nursing/retirement homes   | <input type="checkbox"/>                         |   |
| Rental residences  | <input type="checkbox"/>                         |   |
| Hospitals  | <input type="checkbox"/>                         |   |
| Campgrounds  | <input type="checkbox"/>                         |   |
| Schools  | <input type="checkbox"/>                         |   |
| Places of worship  | <input type="checkbox"/>                         |   |
| See the attached map identifying the four nearest points of reception (POR) described below.                                 |  |   |
| <i>Name</i>  | <i>Description</i>                               | <i>Distance (metres)</i>                    |
| POR1   | Residence  | 695   |
| POR2   | Residence  | 545   |
| POR3   | Residence  | 450   |
| POR4   | Residence  | 360   |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>12</sup> |  | <input type="checkbox"/> Class 1 or 2       |
|  |  | <input checked="" type="checkbox"/> Class 3 |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>10</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>11</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>12</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 5

| Noise Sources  |                      |
|--|----------------------|
| How many transformers are proposed at this site?         | 2                    |
| What is their electrical rating?                         | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>13</sup> | 75 dBA               |

| Noise Receptors  |  |  |
|--|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                     |  |  |
| <input type="checkbox"/> Residential   | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional   | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):   | <input type="checkbox"/> Commercial              |  |
|  | <input type="checkbox"/> Industrial              |  |
|  | <input type="checkbox"/> Park                    |  |
|  | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>14</sup>  |  |  |
| Permanent or seasonal residences   | <input checked="" type="checkbox"/>              |  |
| Hotels/motels  | <input type="checkbox"/>                         |  |
| Nursing/retirement homes   | <input type="checkbox"/>                         |  |
| Rental residences  | <input type="checkbox"/>                         |  |
| Hospitals  | <input type="checkbox"/>                         |  |
| Campgrounds  | <input type="checkbox"/>                         |  |
| Schools  | <input type="checkbox"/>                         |  |
| Places of worship  | <input type="checkbox"/>                         |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                 |  |  |
| <i>Name</i>  | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1   | Residence  | 410  |
| POR2   | Residence  | 1180   |
| POR3   | Residence  | 785  |
| POR4   | Residence  | 350  |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>15</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|  |  | <input type="checkbox"/> Class 3                 |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>13</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>14</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>15</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 6

| Noise Sources  |                      |
|--|----------------------|
| How many transformers are proposed at this site?         | 2                    |
| What is their electrical rating?                         | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>16</sup> | 75 dBA               |

| Noise Receptors  |  |  |
|--|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                     |  |  |
| <input type="checkbox"/> Residential   | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional   | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):   | <input type="checkbox"/> Commercial              |  |
|  | <input type="checkbox"/> Industrial              |  |
|  | <input type="checkbox"/> Park                    |  |
|  | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>17</sup>  |  |  |
| Permanent or seasonal residences   | <input checked="" type="checkbox"/> Hospitals    |  |
| Hotels/motels  | Campgrounds                                      |  |
| Nursing/retirement homes   | Schools  |  |
| Rental residences  | Places of worship                                |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                 |  |  |
| <i>Name</i>  | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1   | Residence  | 550  |
| POR2   | Residence  | 1075   |
| POR3   | Residence  | 805  |
| POR4   | Residence  | 340  |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>18</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|  |  | <input type="checkbox"/> Class 3                 |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>16</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>17</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>18</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 7

| Noise Sources  |                      |
|--|----------------------|
| How many transformers are proposed at this site?         | 2                    |
| What is their electrical rating?                         | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>19</sup> | 75 dBA               |

| Noise Receptors  |  |  |
|--|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                     |  |  |
| <input type="checkbox"/> Residential   | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional   | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):   | <input type="checkbox"/> Commercial              |  |
|  | <input type="checkbox"/> Industrial              |  |
|  | <input type="checkbox"/> Park                    |  |
|  | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>20</sup>  |  |  |
| Permanent or seasonal residences   | <input checked="" type="checkbox"/>              |  |
| Hotels/motels  | <input type="checkbox"/>                         |  |
| Nursing/retirement homes   | <input type="checkbox"/>                         |  |
| Rental residences  | <input type="checkbox"/>                         |  |
| Hospitals  | <input type="checkbox"/>                         |  |
| Campgrounds  | <input type="checkbox"/>                         |  |
| Schools  | <input type="checkbox"/>                         |  |
| Places of worship  | <input type="checkbox"/>                         |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                 |  |  |
| <i>Name</i>  | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1   | Residence  | 125  |
| POR2   | Residence  | 115  |
| POR3   | Residence  | 200  |
| POR4   | Residence  | 320  |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>21</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|  |  | <input type="checkbox"/> Class 3                 |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>19</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>20</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>21</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 8

| Noise Sources  |                      |
|--|----------------------|
| How many transformers are proposed at this site?         | 2                    |
| What is their electrical rating?                         | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>22</sup> | 75 dBA               |

| Noise Receptors  |  |  |
|--|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                     |  |  |
| <input type="checkbox"/> Residential   | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional   | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):   | <input type="checkbox"/> Commercial              |  |
|  | <input type="checkbox"/> Industrial              |  |
|  | <input type="checkbox"/> Park                    |  |
|  | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>23</sup>  |  |  |
| Permanent or seasonal residences   | <input checked="" type="checkbox"/>              |  |
| Hotels/motels  | <input type="checkbox"/>                         |  |
| Nursing/retirement homes   | <input type="checkbox"/>                         |  |
| Rental residences  | <input type="checkbox"/>                         |  |
| Hospitals  | <input type="checkbox"/>                         |  |
| Campgrounds  | <input type="checkbox"/>                         |  |
| Schools  | <input type="checkbox"/>                         |  |
| Places of worship  | <input type="checkbox"/>                         |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                 |  |  |
| <i>Name</i>  | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1   | Residence  | 1315   |
| POR2   | Residence  | 1440   |
| POR3   | Residence  | 270  |
| POR4   | Residence  | 440  |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>24</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|  |  | <input checked="" type="checkbox"/> Class 3      |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>22</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>23</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>24</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 9

| Noise Sources  |                      |
|--|----------------------|
| How many transformers are proposed at this site?         | 2                    |
| What is their electrical rating?                         | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>25</sup> | 75 dBA               |

| Noise Receptors  |  |  |
|--|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                     |  |  |
| <input type="checkbox"/> Residential   | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional   | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):   | <input type="checkbox"/> Commercial              |  |
|  | <input type="checkbox"/> Industrial              |  |
|  | <input type="checkbox"/> Park                    |  |
|  | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>26</sup>  |  |  |
| Permanent or seasonal residences   | <input checked="" type="checkbox"/>              |  |
| Hotels/motels  | <input type="checkbox"/>                         |  |
| Nursing/retirement homes   | <input type="checkbox"/>                         |  |
| Rental residences  | <input type="checkbox"/>                         |  |
| Hospitals  | <input type="checkbox"/>                         |  |
| Campgrounds  | <input type="checkbox"/>                         |  |
| Schools  | <input type="checkbox"/>                         |  |
| Places of worship  | <input type="checkbox"/>                         |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                 |  |  |
| <i>Name</i>  | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1   | Residence  | 1115   |
| POR2   | Residence  | 955  |
| POR3   | Residence  | 220  |
| POR4   | Residence  | 255  |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>27</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|  |  | <input type="checkbox"/> Class 3                 |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>25</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>26</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>27</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

# Environmental Noise Checklist

Site: Alternative 10

| Noise Sources  |                      |
|--|----------------------|
| How many transformers are proposed at this site?         | 2                    |
| What is their electrical rating?                         | 125 MVA; 230/27.6 kV |
| What is the specified maximum sound level? <sup>28</sup> | 75 dBA               |

| Noise Receptors  |  |  |
|--|--|--|
| What is the land use according to the local official plan for the area(s) adjacent to the proposed site?                     |  |  |
| <input type="checkbox"/> Residential   | <input checked="" type="checkbox"/> Agricultural |  |
| <input type="checkbox"/> Institutional   | <input type="checkbox"/> Utility                 |  |
| <input type="checkbox"/> Other(s):   |  |  |
| <input type="checkbox"/> Commercial  | <input type="checkbox"/> Industrial              |  |
| <input type="checkbox"/> Park  | <input type="checkbox"/> Greenbelt/Conservation  |  |
| Receptors within approximately 500 metres of the proposed site? <sup>29</sup>  |  |  |
| Permanent or seasonal residences   | <input checked="" type="checkbox"/>              |  |
| Hospitals  | <input type="checkbox"/>                         |  |
| Hotels/motels  | <input type="checkbox"/>                         |  |
| Campgrounds  | <input type="checkbox"/>                         |  |
| Nursing/retirement homes   | <input type="checkbox"/>                         |  |
| Schools  | <input type="checkbox"/>                         |  |
| Rental residences  | <input type="checkbox"/>                         |  |
| Places of worship  | <input type="checkbox"/>                         |  |
| See the attached map identifying the four nearest points of reception (POR) described below.                                 |  |  |
| <i>Name</i>  | <i>Description</i>                               | <i>Distance (metres)</i>                         |
| POR1   | Residence  | 875  |
| POR2   | Residence  | 1295   |
| POR3   | Residence  | 230  |
| POR4   | Residence  | 340  |
| What is the Acoustic Class of the noise environment at the receptors as per MOE guidelines NPC -205 & NPC-232? <sup>30</sup> |  | <input checked="" type="checkbox"/> Class 1 or 2 |
|  |  | <input type="checkbox"/> Class 3                 |

| Noise Approval Requirements  |  |
|--|--|
| Is a Certificate of Approval (C of A) under s.9 of the <i>Environmental Protection Act</i> required?   |  |
| <input checked="" type="checkbox"/> Yes  | <input type="checkbox"/> No                          |
| Is a detailed technical Acoustic Assessment Report (AAR) necessary for the C of A process?   |  |
| <input checked="" type="checkbox"/> Definitely (<500 m separation)   | <input type="checkbox"/> Unlikely (>500m separation) |
| Are noise control measures (i.e., acoustic barriers, specialized equipment) necessary to meet the applicable Ministry of the Environment noise guidelines? |  |
| <input type="checkbox"/> Likely  | <input type="checkbox"/> Unlikely                    |
| <input checked="" type="checkbox"/> To be determined by AAR  |  |

<sup>28</sup> Maximum sound level rating as specified in Hydro One procurement specifications, as a measure of sound pressure per standard IEEE C57.12.90-2006. Actual operating sound levels of the installed transformers are generally quieter than specified maximum.

<sup>29</sup> According to the MOE *Noise Screening Process* (PIBS 4871), electrical power transmission, control and distribution facilities do not require an acoustic assessment for approval when the nearest sensitive receptor is more than 500 metres away. This distance is based on conservative assumptions; noise levels at or below guidelines occur at shorter distances for most Hydro One facilities.

<sup>30</sup> The acoustic class determines the applicable noise guidelines for the site. Based on Hydro One's typical operating conditions, in Class 1 and 2 areas the sound level limit is the typical One Hour Level Equivalent Sound Level ( $L_{eq}$ ) measured at the receptor, starting from a minimum value of 45 dBA (MOE publication NPC-205). For Class 3 areas, the minimum limit is 40 dBA at the receptor, and may be higher based on background sound level measurements (NPC-232).

