SUBJECT:
Durham/York Energy from Waste Facility Construction Update Report

RECOMMENDATION:
THAT the Joint Works and Finance and Administration Committee receive this report for information and forward it to Regional Council.

REPORT:

1. BACKGROUND

- In November, 2010, the Regions of Durham and York received Environmental Assessment (EA) approval from the Ministry of Environment (MOE) and based on Regional Council direction executed a Project Agreement with Covanta Durham York Renewable Energy Ltd. Partnership (Covanta) for the design, construction, commissioning, start-up, testing, operation and maintenance of the Durham York Energy from Waste project.

- Under the terms of the executed Project Agreement, Notice to Proceed was officially granted to Covanta on August 16, 2011, subsequent to the direction of Regional Council to execute the Durham York Energy from Waste Co-owner's Agreement with York Region (executed on August 12, 2011).

- An approved Certificate of Approval for the project was received on June 28, 2011 (Report 2011-WR-11) and on January 24, 2012, a Site Plan Agreement was executed by the Corporation of the Municipality of Clarington and the Regional Municipality of Durham.

- This report provides a construction project cost update as requested by the Finance and Administration Committee at the November 23, 2011 meeting per Item 6.a as follows:

"Councillor Foster requested that semi-annual updates be provided to the Finance and Administration Committee on the capital expenditures related to the construction of the EFW Facility. R.J. Clapp agreed to provide update to the committee."
2. **PROJECT FINANCING**

- The table below provides a comparison of the project budget approved in 2009 (Report 2009-COW-03), expenditures to date and current cost projections, based upon construction progress to date. The project incurred costs for capital escalation ($2.65 million beyond 2009 projections) which were benchmarked within the Request for Proposals (RFP) and Project Agreement to the Engineering News Record (ENR) Building Cost and Materials indexes (Toronto) up to the August, 2011 Notice to Proceed date. At Notice to Proceed, capital costs were fixed, subject only to potential scope changes authorized by Regional Council and based upon the terms of the Project Agreement.

- Additional costs are anticipated for approved utility connection requirements (an additional $3.2 million) and land expropriation (a component of 'Host Community Agreement and other site servicing costs' as noted within the table on the next page). Land expropriation costs are currently $0.65 million higher than anticipated in 2009, and will be subject to final expropriation proceedings.

- A balanced Durham EFW project budget is currently estimated, since current estimates for utility connections and land expropriation are offset by higher funding commitments provided through the co-owners agreement which was executed with York Region in August 2011. Specifically, through the co-owner's agreement, York has agreed to fund certain oversized items and Host Community Agreement components at 50 per cent, as opposed to the 21.4 per cent shares conservatively assumed within Durham's project approvals report. York is also purchasing 50 per cent of the site lands as co-owner, under the terms of the approved and executed co-owner's agreement. Although certain costs are over budget, it does not change the Region's position due to these increased recoveries from York.

- To date, the Region's have paid approximately $51.1 million to Covanta for the first two of a total of 9 construction milestones (Durham's share is $38.6 million), and is withholding 10 per cent of the paid amounts based upon Ontario's construction lien process (amounts exclude applicable taxes).

- Also, the Durham York Energy Centre (DYEC) Project Agreement included within the Lump Sum Price the amount of nine million dollars ($9,000,000) for Architectural Enhancements. Works Department staff and HDR architectural specialists have verified the enhancement costs as representing $9,000,000 of value.

- The following table represents the Tangible Capital Cost of the EFW facility to date and, as additionally requested, the 2012 Operating budget status is provided.
### EFW Tangible Capital Asset (TCA) - Project Budget, Projection and Financing

($ Millions)

<table>
<thead>
<tr>
<th>PRECONSTRUCTION TCA COSTS</th>
<th>Project Budget</th>
<th>Actual To Date</th>
<th>Projected Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment</td>
<td>13.42</td>
<td>13.21</td>
<td>13.42</td>
</tr>
<tr>
<td>Early Works</td>
<td>0.86</td>
<td>0.86</td>
<td>0.86</td>
</tr>
<tr>
<td><strong>TOTAL PRE-CONSTRUCTION TCA COSTS</strong></td>
<td><strong>14.28</strong></td>
<td><strong>14.07</strong></td>
<td><strong>14.28</strong></td>
</tr>
</tbody>
</table>

| DURHAM'S SHARE OF COSTS                       | 7.56           | 7.46           | 7.56            |

**FINANCING (DURHAM SHARE)**

**SOLID WASTE MANAGEMENT BUDGET**

- **PROPERTY TAX**  
  | 7.56 | 7.46 | 7.56 |

In addition to the above preconstruction costs, which form part of the EFW Tangible Capital Asset (TCA), the following represents the Construction cost component:

### CONSTRUCTION PROJECT

**Contractor Costs**

- Covanta Energy Corporation  
  | 235.76 | 47.14 | 235.76 |
- Escalation cost (fixed at Notice to Proceed)  
  | 8.15 | 2.16 | 10.80 |
- Architectural Enhancements  
  | 9.00 | 1.80 | 9.00 |

**Sub-total Construction Costs**  

| 252.91 | 51.10 | 255.56 |

**Other Project Costs**

- Technical Expertise & Project Management Services\(^1\)  
  | 5.60 | 0.43 | 5.60 |
- HCA and Other Site Servicing Costs (including land)  
  | 13.08 | 6.59 | 13.73 |
- Natural Gas and Hydro One Connections\(^2\)  
  | 0.90 | 0.53 | 4.13 |
- Net HST\(^3\)  
  | - | 1.03 | 4.91 |

**Sub-total Other Project Costs**  

| 19.58 | 8.58 | 28.37 |

**PROJECT CONSTRUCTION COST INCLUDING APPLICABLE TAXES\(^5\)**  

| 272.49 | 59.68 | 283.93 |

**DURHAM SHARE OF CONSTRUCTION COSTS\(^2\)**  

| 214.73 | 46.38 | 214.73 |

**FINANCING (DURHAM SHARE OF CONSTRUCTION)**

- Federal Gas Tax Reserve Fund  
  | 100.00 | 46.38 | 100.00 |
- Debentures\(^4\)  
  | 113.10 | - | 113.10 |
- Other revenue (Surplus land sales)  
  | 1.63 | - | 1.63 |

**TOTAL CONSTRUCTION FINANCING\(^2\)**  

| 214.73 | 46.38 | 214.73 |

**Notes:**

1. HDR Inc. is technical advisor and owner's consultant.
2. Negotiations are ongoing with Hydro One with respect to the electrical connection, which may impact the allocation of costs vis-a-vis the Region of York.
3. Financing approvals (2009-COW-03) excluded applicable taxes.
4. Financing approvals include application of Federal Gas tax revenues estimated at $17.3 million per year to retire the debt related to Durham's share of the project cost.
• While the EA and Certificate of Approvals increased Covanta's emission and monitoring requirements with a $1.2 million impact to Covanta's capital cost, the Project Agreement did include a provision by Covanta for a $2 million capital cost credit which was utilized to accommodate the increased capital required to accommodate the more stringent emissions and monitoring requirements dictated by the MOE.

• In addition, operating costs for the EFW project currently include legal costs, including the challenge from DurhamCLEAR, which required special Council approval for financing of $100,000 from the 2011 surplus in the Waste Management Division budget. The 2012 operating budget included funding for the facilitation of the liaison committees related to the project, and approved third party audit costs for a total approved budget of $304,000 with a Durham share of $258,000.

**EFW Operating Costs – 2012 Budget and Projection**

($ Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Operating Budget</th>
<th>Cost To Date</th>
<th>Projected Actual</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>DurhamClear Litigation</td>
<td>100</td>
<td>80</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Operating expenses (Waste Management Advisory Committee, third party audits, etc)</td>
<td>304</td>
<td>46</td>
<td>304</td>
<td>-</td>
</tr>
<tr>
<td><strong>OPERATING COSTS 2012 BUDGET</strong></td>
<td><strong>404</strong></td>
<td><strong>126</strong></td>
<td><strong>404</strong></td>
<td><strong>-</strong></td>
</tr>
</tbody>
</table>

3. **PROJECT UPDATE**

• In accordance with the Project Agreement, full commercial operation is to be achieved by December 14, 2014 (a total construction period of 1,215 days).

• Major design milestones are set at 25 per cent, 75 per cent and 100 per cent 'completion and review of construction specifications and drawings.' Regional staff and technical consultant HDR Inc. have verified that Covanta's detailed design has surpassed the 25 per cent design and review of construction specification and drawings threshold, and meets the requirements of the Project Agreement as well as the Ministry of Environment Certificate of Approvals.

• The 25 per cent design milestone depicts the major detailed design parameters of the project consistent with the project agreement, and sets forth the minimum equipment procurement requirements for the project. Covanta has secured contracts and placed orders for major facility components and equipment considered critical to the project construction schedule, including procurement of boiler, turbine generator, air pollution control equipment, stoker grate, and refuse crane equipment.

• Site preparation has advanced, including completion of security fencing, clearing and grubbing activities top soil removal and storage and signage. Based upon the building permits issued to date, the construction of the refuse pit and tipping hall foundations is underway as are underground site works for utilities.
• The next 75 per cent design milestone, anticipated in 2012, will include detailed design and review of emission control, civil, mechanical and structural engineering, architectural treatments, safety systems, piping and electrical instrumentation.

• Subsequent construction milestones in 2013 will include the completion of foundations for buildings, structures and major equipment, and completion of the super structure, including exterior walls and roofing, prior to equipment installation. Start-up, acceptance testing and certification is anticipated in late 2014.

• On-site project oversight, including Regional staff, HDR technical consultants, third-party audit and health and safety inspectors, is diligent and ongoing and will continue to the end of the construction period and beyond.

4. CONCLUSION

• The EFW project remains within the approved budget at this time and construction is currently on schedule.

• As the project progresses, the Commissioners of Finance and Works will provide the information per the November 23, 2011 request of the Finance and Administration Committee.

C. R. Curtis, P.Eng., MBA
Commissioner of Works

R. J. Clapp, CA
Commissioner of Finance