

**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-001**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**  
**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.1, "typical cross- sections and photo simulations". For many of the photos of the cross sections, associated simulations of new facilities are not included, as identified by "this page intentionally left blank". Please provide the photo simulations, if applicable, for each of the blank pages associated with the cross section drawings.

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of July 20, 2009. WMECO will file these photo simulations as soon as possible thereafter.



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-002**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**  
**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.2. and the following mapsheets. Please provide photo simulations of the proposed facilities from the identified views based on the following two configurations: (1) the northern route as proposed with 115 kV overhead; and (2) the northern route as proposed with 115 kV underground. Please identify the locations of each simulation, and include those locations where trees would be removed, and where the worst case views would occur.

- a. Mapsheet 01 of 03 – view from homes along Oakridge Drive and Pine Street;
- b. Mapsheet 02 of 22 – view from homes along Silverlake Drive, Lakeview Circle, Wrenwood Lane and Lancaster Drive;
- c. Mapsheet 03 of 22 – view from homes along High Street;
- d. Mapsheet 04 of 22 – view from homes along Guy Place and Silver Street;
- e. Mapsheet 05 of 22 – view from homes along Greenleaf Avenue and Larchwood Street;
- f. Mapsheet 06 of 22 – view from homes along Piper Road;
- g. Mapsheets 07/08 of 22 – view from homes along Labelle Street;
- h. Mapsheet 09 of 22 – view from homes along Schoolhouse Road;
- i. Mapsheet 10 of 22 – view from homes along Granby Street and apartment house to the west of East Springfield Junction;
- j. Mapsheet 12 of 22 – view from homes along Shawinigan Drive;
- k. Mapsheet 13 of 22 – representative views from Blue Bird Acres
- l. Mapsheet 15 of 22 – view from homes along Libby Street/Stanley Street
- m. Mapsheet 18 of 22 – view from homes along Booth Street and Lyon Drive
- n. Mapsheet 19 of 22 – view from homes along Woodcrest Court, from both sides of the ROW

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of July 24, 2009. WMECO will file these photo simulations as soon as possible thereafter.

**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-003**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**  
**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.2. and the following mapsheets. Please provide photo simulations of the proposed facilities along the southern route. Please identify the locations of each simulation, and include those locations where trees would be removed, and where the worst case view would occur.

- a. Mapsheet 05 of 20 – view from homes along Brookfield Lane/Andover Lane (please include views from 2nd floor condos)
- b. Mapsheet 10 of 20 – view from homes along Country Club Drive
- c. Mapsheet 11 of 20 – view from the Elms Condos
- d. Mapsheet 12 of 20 – view from homes along Old Orchard Road and Samble Lane
- e. Mapsheet 14 of 20 – view from homes along Greenleaf Dive (Tall Pines development)
- f. Mapsheet 14 of 20 – view from homes along Bonair and Deepwood Drive
- g. Mapsheet 17 of 20 – view from homes along Manchonis Road
- h. Mapsheet 18 of 20 – view from homes along May Road and Hill Terrace
- i. Mapsheet 19 of 20 – view from homes along Meadowlark Circle

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of July 31, 2009. WMECO will file these photo simulations as soon as possible thereafter.



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-004**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**

**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.2. and mapsheet 08 of 22. Please provide photo simulations of the proposed facilities from homes along Granger Street, Amherst Street, Delany Avenue and Bill Street. For each location, base the identified views on the following three configurations: (1) the northern route as proposed with 115 kV overhead; (2) the northern route as proposed with 115 kV underground; and (3) the southern route as proposed with 115 kV overhead. Please identify the locations of each simulation, and include those locations where trees would be removed, and where the worst case view would occur.

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of July 31, 2009. WMECO will file these photo simulations as soon as possible thereafter.





**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-005**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**  
**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Tables 5-12 and 5-13. For each project segment where it is indicated that "wooded buffer between ROW and residential areas would be decreased," please indicate the specific amount of wooded buffer, in linear feet, that would be removed for each segment.

**Response:**

As a result of varying existing conditions, and past management practices and vegetation clearing schedules, the width of the existing wooded buffers varies widely. In order to present an estimate of the largest "wooded buffer decrease" near each residential area in all of the identified segments, the maximum width of the wooded buffer that would be removed is provided in Tables 5-12a and 5-13a (See EFSB-V-005 Attachment 1). The width of wooded buffer that would be removed was determined by using the available land-use data (specifically the Upland Forest (UF) and Palustrine Wetland Forest (PFO) classifications) and the anticipated limits of clearing. In each area the distance, in linear feet, was measured from the existing edge of the wooded buffer out to the limit of clearing.



**Table 5-12a: Summary of ROW and Structure Visual Changes: Overhead Portion of Preferred Northern Route<sup>1</sup>**

| Project Segment  | Miles | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas |
|--|-------|-------------------------------------|-------------------------------------|--|---|
| CT/MA Border to Existing Deadend Structure 2249                  | 0.2   | 65 feet to 75 feet                  | H-frame 85 feet to 100 feet         | <p>The existing line on lattice-steel structures would remain and a new 345-kV line would be added on a single line of H-frame structures. The taller H-frames would be more visible at some locations. Existing ROW would require some vegetation removal on the eastern side to accommodate the new line.</p> <p>See: XS-3. Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights, ranging from a 10' – 35' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and agricultural area would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from MA/CT border to Structure 2249: 0</li> </ul> | None  |
| Existing Deadend Structure 2249 to Existing Angle Structure 2252 | 0.3   | 65 feet to 75 feet                  | Monopole 125 feet to 130 feet       | <p>The existing line on lattice-steel structures would be removed and replaced with a 345/115-kV line using steel monopoles. The taller steel monopoles would be more visible at some locations. Existing ROW would require some vegetation removal on the south side to accommodate the new line.</p> <p>See: XS-4. Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 50' – 65' increase. The tallest structures</li> </ul>   | None  |

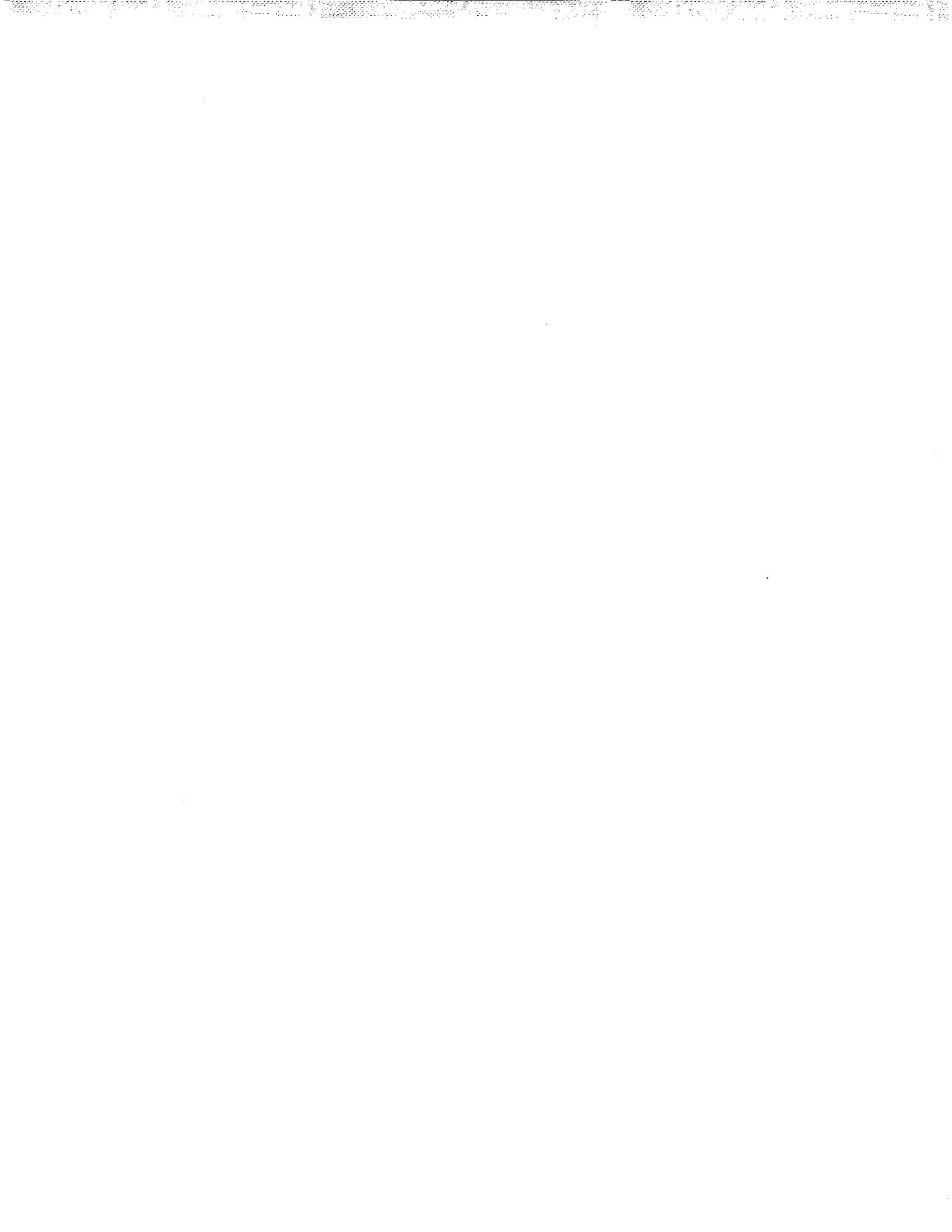
<sup>1</sup> Note: ROW vegetation removal widths identified are conservative and are indicated as if all vegetation is forestland. Little or no removal would be required in areas where the ROW traverses land uses (e.g., cropland, orchard, lawns, pasture, landfill and other non-woodland land areas) that are compatible with transmission line construction and operation or where terrain permits spans of certain vegetation. This table addresses potential long-term visual changes along the overhead portion of the Project.



| Project Segment   | Miles      | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas  |
|---|------------|-------------------------------------|-------------------------------------|--|--|
|   |            |                                     |                                     | <p>would be required only at road crossings, hilly topography, and to span waterbodies.</p> <ul style="list-style-type: none"> <li>• Wooded buffer between ROW and agricultural area would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from Structure 2249 to South Agawam: 2</li> </ul>  |  |
| <p>Existing Angle Structure 2252 to Existing Angle Structure 2267</p> | <p>1.7</p> | <p>65' - 75'</p>                    | <p>Monopole 125 - 130'</p>          | <p>The existing line on lattice-steel structures would be removed and replaced with a 345/115-kV line using steel monopoles. The taller steel monopoles would be more visible at some locations. Existing ROW would be expanded by 10 feet on the southeast side with associated vegetation removal.</p> <p>See: XS-5. Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 50 feet to 65 feet increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• View of ROW from golf course would be increased.</li> <li>• Residences within 100 feet of the edge of the ROW from Structure 2252 to Structure 2267: 11</li> </ul> | <p>Near structure 2252 (south side of the ROW) - up to 35 feet.</p> <p>Near structure 2254 (south side of the ROW) - up to 30 feet</p> |
| <p>Existing Angle Structure 2267 to South Agawam S/S</p>              | <p>0.6</p> | <p>65' - 75'</p>                    | <p>Monopole 120 - 145'</p>          | <p>The existing line on lattice-steel structures would be removed and replaced with a 345/115-kV line using steel monopoles. The taller steel monopole would be more visible at some locations. Existing ROW would be expanded by 10 feet on the west side with associated vegetation removal.</p> <p>See: XS-6, Exhibit 5.1</p>   | <p>There is one residence near structure 2269, but there is currently no wooded buffer in this area.</p>                               |

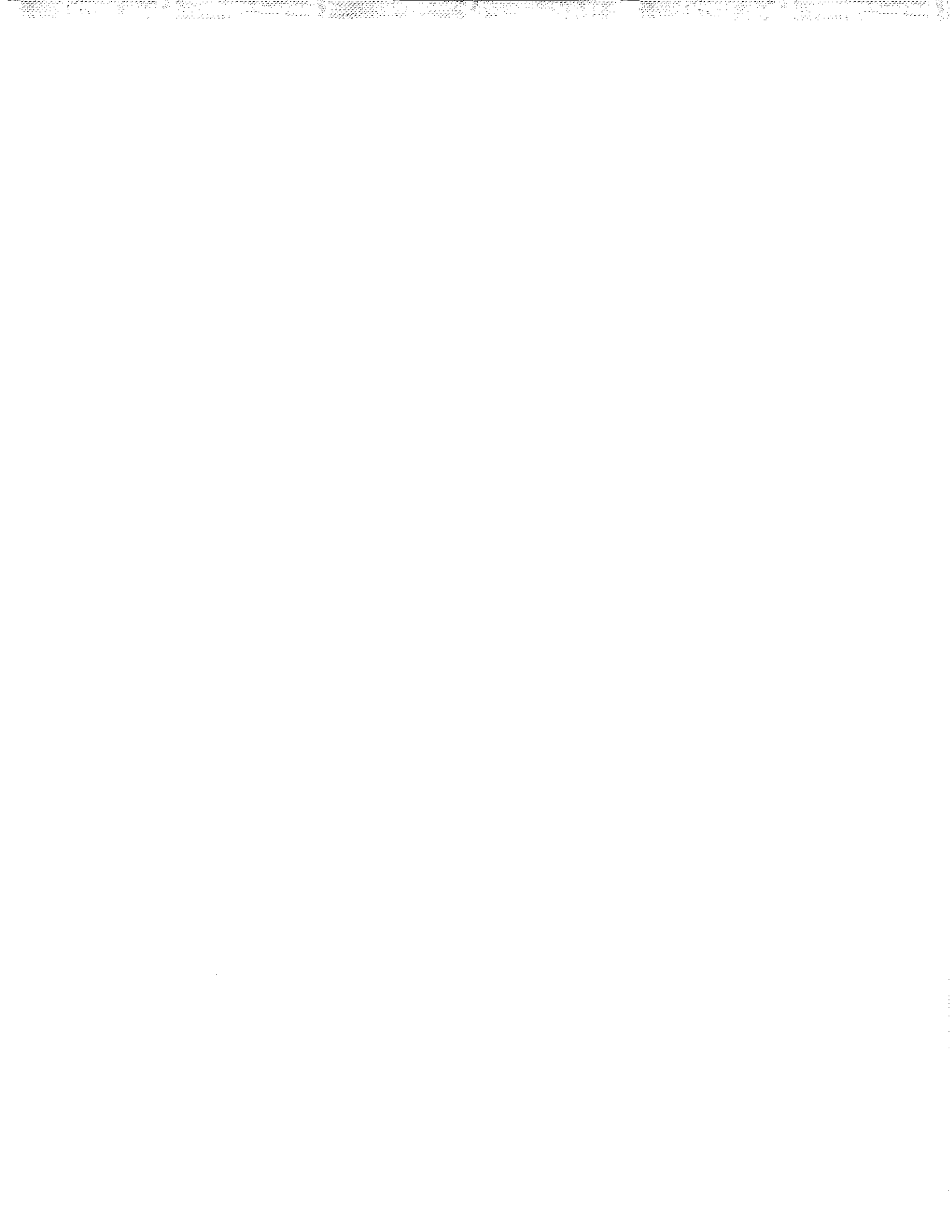


| Project Segment                       | Miles | Height Range of Existing Structures | Height Range of Proposed Structures       | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|---------------------------------------|-------|-------------------------------------|---|--|---|
|                                       |       |                                     |   | <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 45' – 80' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from Structure 2267 to South Agawam: 1</li> </ul>  |   |
| South Agawam S/S to Silver S/S        | 0.9   | 60' – 70'                           | Two monopoles 80' - 115' and 115' - 145'  | <p>The existing line on lattice-steel structures would be removed and replaced with a 115-kV single-circuit line and a 345/115-kV line, each using steel monopoles. The taller steel monopoles would be more visible at some locations. Existing ROW would require some vegetation removal to accommodate the new lines.</p> <p>See: XS-7, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 10' – 85' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from South Agawam S/S to Silver S/S: 1</li> </ul> | <p>Near structure 2280 (west side of the ROW) - up to 20 feet</p> <p>Near Silver Substation (west side of the ROW) - up to 55 feet</p>  |
| Silver S/S to Existing Structure 2286 | 0.5   | 65' – 80'                           | Two monopoles 100' – 110' and 125' – 145' | <p>The existing distribution line would be relocated within the ROW as required. The existing line on lattice steel structures would be removed and replaced by a 115-kV single-circuit line and a 345/115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW would</p>  | <p>There are residential areas along the east side of the ROW in this segment, but it is not anticipated at this time that any further clearing of the existing wooded buffers is needed.</p> |





| Project Segment                              | Miles      | Height Range of Existing Structures | Height Range of Proposed Structures              | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas  |
|--|------------|-------------------------------------|--|--|--|
|  |            |                                     |  | <p>be expanded by 35 feet on the west side with associated vegetation removal.</p> <p>See: XS-8, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 20' – 80' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from Silver S/S to Structure 2286: 4</li> </ul>   |  |
| <p>Existing Structure 2286 to Agawam S/S</p> | <p>1.9</p> | <p>65' – 80'</p>                    | <p>Two monopoles 100' – 110' and 125' – 145'</p> | <p>The existing distribution line would be relocated within the ROW as required. The existing line on lattice steel structures would be removed and replaced by a 115-kV single-circuit line and a 345/115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW would require some vegetation removal to accommodate the new lines.</p> <p>See: XS-9, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 20' – 65' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Views of ROW from Agawam High School (approximately 500 feet west of the lines) would be increased.</li> <li>Residences within 100 feet of the edge of the ROW from</li> </ul> | <p>From structure 2287 to Tennis Road (east side of the ROW) - up to 80 feet.</p> <p>Near structure 2291 (east side of the ROW) - up to 80 feet</p> <p>Near structure 2293 (east side of the ROW) - up to 85 feet</p> <p>Near structure 2295 (east side of the ROW) - up to 70 feet</p> <p>Near structure 2300 (north side of the ROW) - up to 15 feet</p> |



| Project Segment           | Miles | Height Range of Existing Structures | Height Range of Proposed Structures      | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas  |
|---------------------------|-------|-------------------------------------|--|--|--|
|                           |       |                                     |  | Structure 2286 to Agawam S/S: 16   |  |
| Agawam S/S to Piper S/S   | 3.6   | 65' – 100'                          | Two monopoles 85' – 145' and 120' – 160' | <p>The existing distribution lines would be relocated within the ROW as required. The existing lines on lattice steel structures would be removed and replaced by a 115-kV single-circuit line and a 345/115-kV line, each using steel monopoles. The existing lattice structures would be removed and replaced by a 115-kV single circuit monopole and a 345/115-kV composite monopole. The taller structures would be more visible at some locations. Existing ROW would require some vegetation removal to accommodate the new lines.</p> <p>See: XS-10, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 0' – 95' increase. The tallest structures would be required at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Views of ROW from West Springfield High School (approximately 800 feet east of the lines) and West Springfield Middle School (approximately 500 feet west of the lines) would be increased.</li> <li>Residences within 100 feet of the edge of the ROW from Agawam S/S to Piper S/S: 95</li> </ul> | <p>Near structure 48030 (east side of the ROW) - up to 60 feet</p> <p>From structure 48026 to 48024 (east side of the ROW) - up to 70 feet</p> <p>From structure 48026 to 48025 (west side of the ROW) - up to 85 feet</p> <p>Near structure 48020 (west side of the ROW) - up to 10 feet</p> <p>Near structure 48018 (east side of the ROW) - up to 50 feet</p> <p>From structure 48017 to 48015 (east side of the ROW) - up to 50 feet</p> <p>Near structure 48012 (west side of the ROW) - up to 20 feet</p> <p>From structure 48010 to 48009 (east side of the ROW) - up to 80 feet</p> <p>From structure 48006 to 48005 (east side of the ROW) - up to 50 feet</p> <p>From structure 48006 to 48004 (west side of the ROW) - up to 25 feet</p> <p>Near structure 48004 (east side of the ROW) - up to 40 feet</p> |
| Piper S/S to Chicopee S/S | 3.5   | 65' – 100'                          | Two monopoles 75' – 150' and 80' – 145'  | <p>The existing distribution lines would be relocated within the ROW as required. The existing lines on lattice steel structures would be removed and replaced by a 115-kV single-circuit line and a</p>   | <p>From structure 55023 to 55022 (south side of the ROW) - up to 30 feet</p> <p>Near structure 55016 (south side of the ROW) -</p>   |



| Project Segment  | Miles      | Height Range of Existing Structures | Height Range of Proposed Structures  | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas  |
|--|------------|-------------------------------------|--|--|--|
|  |            |                                     |  | <p>345/115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW is already cleared for its full width; little or no removal of vegetation would be needed.</p> <p>See: XS-11, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 0' – 80' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Views of ROW from Massachusetts Turnpike would increase.</li> <li>• Residences within 100 feet of the edge of the ROW from Piper S/S to Chicopee S/S: 87</li> </ul>                 | <p>up to 25 feet</p> <p>From structure 55009 to 55006 (north side of the ROW) - up to 95 feet</p>  |
| <p><b>Chicopee S/S to East Springfield Junction.</b></p> | <p>0.7</p> | <p>80' – 90'</p>                    | <p>Two monopoles<br/>           95' – 130'<br/>           and<br/>           120' – 145'</p> | <p>The existing line on lattice-steel structures would be removed and replaced by a 115-kV single-circuit line and a 345/115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW is already cleared for its full width; little or no removal of vegetation would be needed.</p> <p>See: XS-12, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 5' – 50' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from</li> </ul> | <p>There are residential areas along the northwest side of the ROW in this segment, but it is not anticipated at this time that any further clearing of the existing wooded buffers is needed.</p> |



| Project Segment                                       | Miles | Height Range of Existing Structures | Height Range of Proposed Structures       | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|---|-------|-------------------------------------|---|--|---|
|   |       |                                     |   | Chicopee S/S to East Springfield Junction: 10  |   |
| East Springfield Junction to Existing Structure 49091 | 1.5   | 85' – 90'                           | Two monopoles 100' – 120' and 125' – 145' | <p>The existing line on lattice-steel structures would be removed and replaced by a 115-kV single-circuit line and a 345/115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW would be expanded by 25 feet on the south side with associated vegetation removal.</p> <p>See: XS-13, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 10' – 60' increase. The tallest structures would be required at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Wooded buffer between ROW and Massachusetts Turnpike would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from East Springfield Junction to Structure 49091: 4</li> </ul> | There are residential areas along both sides of the ROW in this segment, but it is not anticipated at this time that any further clearing of the existing wooded buffers is needed. |
| Existing Structure 49091 to Exit 6 Junction.          | 1.0   | 90'                                 | Two monopoles 75' – 120' and 115' – 145'  | <p>The existing line on steel monopoles would be removed and replaced by a 115-kV single-circuit line and a 345/115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW would require some vegetation removal on the southern side to accommodate the new lines.</p> <p>See: XS-14, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 0' – 55' increase. The tallest structures would be required only at road</li> </ul>   | None  |





| Project Segment                     | Miles | Height Range of Existing Structures | Height Range of Proposed Structures      | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|-------------------------------------|-------|-------------------------------------|--|--|---|
|                                     |       |                                     |  | <p>crossings, hilly topography, and to span waterbodies.</p> <ul style="list-style-type: none"> <li>• Wooded buffer between ROW and Massachusetts Turnpike would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from Structure 49091 to Exit 6 Junction: 0</li> </ul>  |   |
| Exit 6 Junction to Shawinigan S/S   | 0.3   | 90'                                 | Two monopoles 50' – 105' and 115' – 135' | <p>The existing line on steel monopoles would be removed and replaced by a 345-kV single-circuit line and a 115-kV single-circuit line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW would require some vegetation removal on the southern side to accommodate the new lines.</p> <p>See: XS-15, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 0' – 45' increase. The tallest structures would be required at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from Exit 6 Junction to Shawinigan S/S: 2</li> </ul> | There are residential areas along both sides of the ROW in this segment, but it is not anticipated at this time that any further clearing of the existing wooded buffers is needed. |
| Shawinigan S/S to Orchard Junction. | 1.4   | 50' – 90'                           | Two monopoles 90' – 150' and 110' – 155' | <p>The existing lines on wood-pole structures and steel monopoles would be removed and replaced by a 345/115-kV line and a double-circuit 115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW would require some vegetation removal on the southern side to accommodate the new lines.</p> <p>See: XS-16, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to</li> </ul>   | Near structure 45053 (south side of the ROW) - up to 35 feet  |



| Project Segment                               | Miles      | Height Range of Existing Structures | Height Range of Proposed Structures             | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas  |
|---|------------|-------------------------------------|---|--|--|
|   |            |                                     |   | <p>change in structure heights ranging from a 0' – 105' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</p> <ul style="list-style-type: none"> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from Shawinigan S/S to Orchard Junction: 31</li> </ul>   |  |
| <p><b>Orchard Junction. to Ludlow S/S</b></p> | <p>4.8</p> | <p>50' – 90'</p>                    | <p>Two monopoles 70' – 130' and 105' – 155'</p> | <p>The existing distribution lines would be relocated within and outside the ROW as required. The existing lines on wood-pole structures and steel monopoles would be removed and replaced by a 345/115-kV line and a double-circuit 115-kV line, each using steel monopoles. The taller structures would be more visible at some locations. Existing ROW is already cleared for its full width; little or no removal of vegetation would be needed.</p> <p>See: XS-17, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 0' – 105' increase. The tallest structures would be required at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from Orchard Junction to Ludlow Substation: 28</li> </ul> | <p>Near structure 49062 (west side of the ROW) - up to 25 feet</p> <p>Near structure 45047 (south side of the ROW) - up to 20 feet</p> <p>From structure 46 to 44 (south side of the ROW) - up to 20 feet</p> <p>Near structure 36 (west side of the ROW) - up to 10 feet</p> <p>Near structure 66 (south side of the ROW) - up to 20 feet</p> <p>Near Ludlow Substation (south of Center Street) - up to 110 feet</p> |



**Table 5-13a: Summary of ROW and Structure Visual Changes: Overhead Portion<sup>2</sup> of Noticed-Alternative Southern Route<sup>3</sup>**

| Project Segment   | Miles      | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas |
|---|------------|-------------------------------------|-------------------------------------|--|---|
| <b>CT/MA Border to Existing Deadend Structure 2249</b>                  | <b>0.2</b> | 65 feet to 75 feet                  | H-frame 85 feet to 100 feet         | <p>The existing 115-kV line on lattice-steel structures would remain and a new 345-kV line would be added on H-frame structures. The taller H-frames would be more visible at some locations. Existing ROW would require some vegetation removal on the eastern side to accommodate the new line.</p> <p>See: XS-3. Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights, ranging from a 10' – 35' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and agricultural area would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from MA/CT border to Structure 2249: 0</li> </ul> | None  |
| <b>Existing Deadend Structure 2249 to Existing Angle Structure 2252</b> | <b>0.3</b> | 65 feet to 75 feet                  | Monopole 125 feet to 130 feet       | <p>The existing line on lattice-steel structures would be removed and replaced with a 345/115-kV line on steel monopoles. The taller steel monopole would be more visible at some locations. Existing ROW would require some vegetation removal on the south side to accommodate the new line</p> <p>See: XS-4. Exhibit 5.1</p>  | None  |

<sup>2</sup> This table does not include the Connecticut portion of the Project.

<sup>3</sup> **Note:** ROW vegetation removal widths identified are conservative and are indicated as if all vegetation is forestland. Little or no removal would be required in areas where the ROW traverses land uses (e.g., cropland, orchard, lawns, pasture, landfill and other non-woodland land areas) that are compatible with transmission line construction and operation or where terrain permits spans of certain vegetation.

This table addresses potential long-term visual changes along the overhead portion of the Project.



| Project Segment  | Miles | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change  | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|--|-------|-------------------------------------|-------------------------------------|---|---|
|  |       |                                     |                                     | <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 50' – 65' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and agricultural area would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from Structure 2249 to South Agawam: 2</li> </ul>   |   |
| Existing Angle Structure 2252 to Existing Angle Structure 2267 | 1.7   | 65' - 75'                           | Monopole 125 - 130'                 | <p>The existing line on lattice-steel structures would be removed and replaced with a 345-kV line on steel monopoles. The taller steel monopoles would be more visible at some locations. Existing ROW would be expanded by 10 feet on the southeast side with associated vegetation removal.</p> <p>See: XS-5. Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 50 feet to 65 feet increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• View of ROW from golf course would be increased.</li> <li>• Residences within 100 feet of the edge of the ROW from Structure 2252 to Structure 2267: 11</li> </ul> | <p>Near structure 2252 (south side of the ROW) - up to 35 feet</p> <p>Near structure 2254 (south side of the ROW) - up to 30 feet</p> |
| Existing Angle Structure 2267 to South Agawam S/S              | 0.6   | 65' - 75'                           | Monopole 120 - 145'                 | <p>The existing line on lattice-steel structures would be removed and replaced with a 345/115-kV line on steel monopoles. The taller steel monopoles would be more visible at some locations. Existing ROW would be expanded by 10 feet on</p>  | <p>There is one residence near structure 2269, but there is currently no wooded buffer in this area.</p>                              |





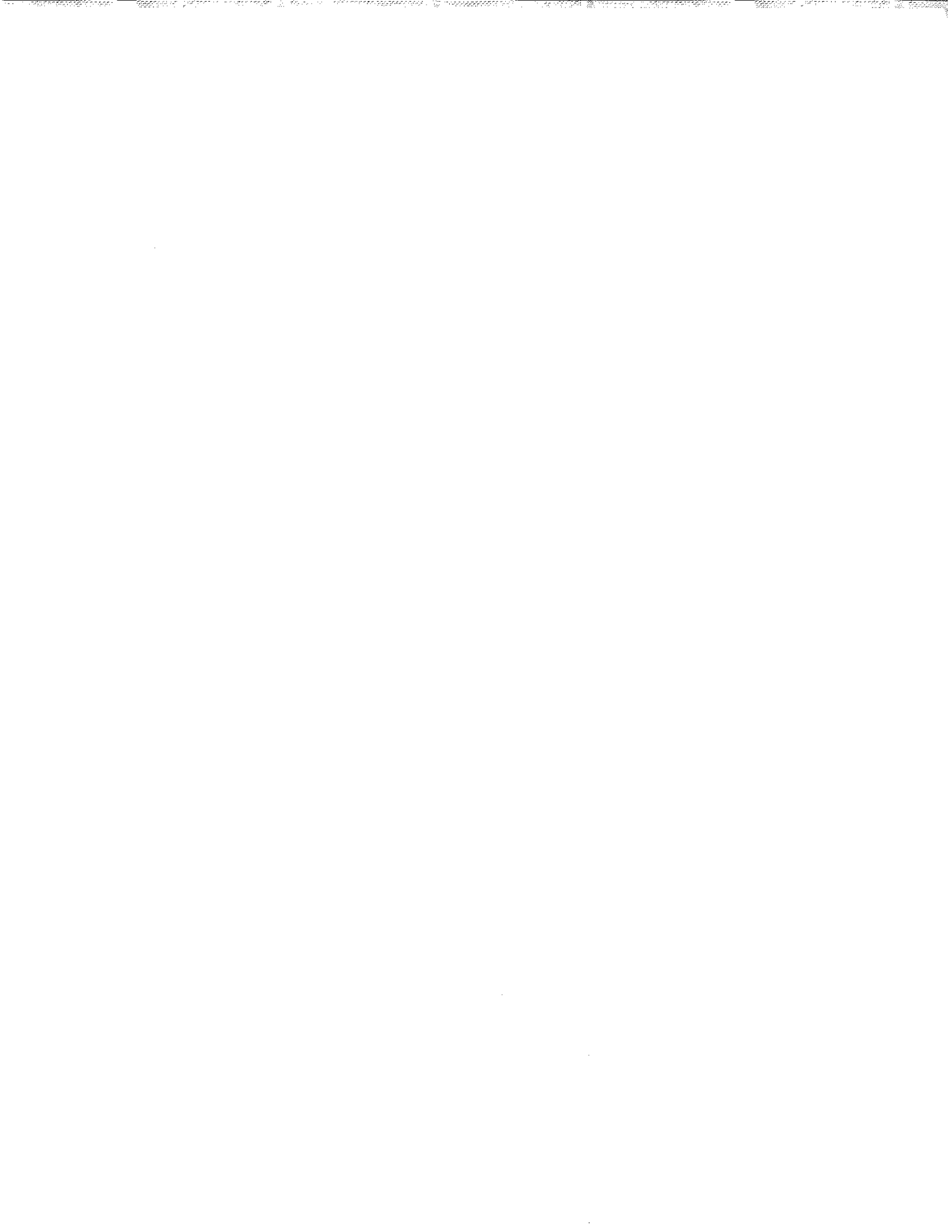
| Project Segment  | Miles      | Height Range of Existing Structures | Height Range of Proposed Structures  | Modifications/Visual Resource Change  | Decrease in Wooded Buffer Between ROW and Residential Areas  |
|--|------------|-------------------------------------|--------------------------------------|---|--|
|  |            |                                     |                                      | <p>the west side with associated vegetation removal.</p> <p>See: XS-6, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 45' – 80' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from Structure 2267 to South Agawam: 1</li> </ul>  |  |
| <p>Note: The Noticed-Alternative Southern Route description below begins at Agawam Substation and extends south to South Agawam Junction then southeast through Agawam to the MA/CT border</p> |            |                                     |                                      |   |  |
| <p><b>Existing Structure 2286 to Agawam Substation</b></p>   | <p>1.9</p> | <p>65' - 80'</p>                    | <p>Two monopoles<br/>125' – 145'</p> | <p>The existing distribution line would be relocated within the ROW as required. The existing line on lattice-steel structures would be removed and replaced by two sets of 345/115-kV lines on steel monopoles. The taller structures would be more visible at some locations. Existing ROW would be expanded by 15 feet on the west side with associated vegetation removal.</p> <p>See: XS-S01, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to change in structure heights ranging from a 45' – 80' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from Structure 2286 to Agawam</li> </ul> | <p>Near structure 2291 (east side of the ROW) - up to 80 feet; and (west side of the ROW) – up to 100 feet</p> <p>Near structure 2293 (east side of the ROW) - up to 85 feet; and (west side of the ROW) – up to 20 feet</p> <p>Near structure 2252 (south side of the ROW) - up to 35 feet</p> <p>Near structure 2300 (north side of the ROW) - up to 15 feet</p> |



| Project Segment                       | Miles | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|---------------------------------------|-------|-------------------------------------|-------------------------------------|--|---|
|                                       |       |                                     |                                     | S/S: 16  |   |
| Silver S/S to Existing Structure 2286 | 0.5   | 65' – 80'                           | Two monopoles 125' – 145'           | <p>The existing distribution line would be relocated within the ROW as required. The existing line on lattice-steel structures would be removed and replaced by two sets of 345/115-kV lines on steel monopoles. The taller structures would be more visible at some locations. Existing ROW would be expanded by 65 feet on the west side with associated vegetation removal.</p> <p>See: XS-S02, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 45' – 80' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from Silver S/S to Structure 2286: 4</li> </ul> | Near Silver Substation (west side of the ROW) - up to 85 feet |
| South Agawam S/S to Silver S/S        | 0.7   | 65' – 80'                           | Two monopoles 125' - 145'           | <p>The existing line on lattice-steel structures would be removed and replaced by two sets of 345/115-kV lines on steel monopoles. The taller steel monopoles would be more visible at some locations. Existing ROW would require some vegetation removal to accommodate the new lines.</p> <p>See: XS-S03, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to change in structure heights ranging from a 50' – 65' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> </ul>   | Near structure 2280 (west side of the ROW) - up to 25 feet    |



| Project Segment                                       | Miles             | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change   | Decrease in Wooded Buffer Between ROW and Residential Areas  |
|---|-------------------|-------------------------------------|-------------------------------------|--|--|
|   |                   |                                     |                                     | <ul style="list-style-type: none"> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from South Agawam S/S to Silver S/S: 1</li> </ul>  |  |
| <p><b>South Agawam Junction. to CT/MA border</b></p>  | <p><b>1.8</b></p> | <p>80'</p>                          | <p>H-frame 70' - 120'</p>           | <p>One existing 115-kV line on wood-pole H-frame structure averaging 80 feet in height would remain and a new 345-kV line would be installed using H-frame structure averaging about 90 feet in height. The new structures will be placed south of and close to the existing H-frame locations. The ROW would require some vegetation removal to accommodate the new line.</p> <p>See: XS-S04, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to addition of extra H-frame structures with a 0' - 40' increase in height compared to existing structures.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from South Agawam Junction to CT/MA border: 27</li> </ul> | <p>Near structure 22007 (west side of the ROW) - up to 105 feet</p> <p>Near structure 22009 (south side of the ROW) - up to 110 feet</p> <p>From structure 22009 to 22012 (southwest side of the ROW) - up to 135 feet</p> |
| <p><b>CT/MA border to CT/MA border (CT River)</b></p> | <p><b>1.1</b></p> | <p>75' - 215'</p>                   | <p>H-frame 70' - 120'</p>           | <p>One existing 115-kV line on wood-pole H-frame structures averaging 80 feet in height would remain, and a new 345-kV line would be installed using H-frame structures averaging about 90 feet in height. The new structures will be placed south of and close to the existing H-frame locations. The ROW would require some vegetation removal to accommodate the new line. The ROW would require some vegetation removal to accommodate the new lines.</p> <p>One existing and one proposed</p>   | <p>There is one residential area near structure 22019, but there is currently no wooded buffer in this area.</p>   |



| Project Segment                                       | Miles             | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change  | Decrease in Wooded Buffer Between ROW and Residential Areas |
|---|-------------------|-------------------------------------|-------------------------------------|---|---|
|   |                   |                                     |                                     | <p>new steel structure at the crossing of the Connecticut River are approximately 215 feet in height due to the long span length over the river.</p> <p>See: XS-S05, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• Higher visual impact due to addition of extra H-frame structures with a 0' - 40' increase in height compared to existing structures.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> <li>• Residences within 100 feet of the edge of the ROW from CT/MA border to CT River/CT/MA border: 2</li> </ul>   |   |
| <p><b>CT/MA border (CT River) to MA/CT border</b></p> | <p><b>0.5</b></p> | <p>85' - 215'</p>                   | <p>H-frame 85' - 215'</p>           | <p>One existing 115-kV line on wood-pole H-frame structures averaging 80 feet in height would remain, and a new 345-kV line would be installed using H-frame structures averaging about 90 feet in height. The new structures will be placed south of and close to the existing H-frame locations. The ROW would require some vegetation removal to accommodate the new line. The ROW would require some vegetation removal to accommodate the new lines.</p> <p>One existing and one proposed new steel structure at the crossing of the Connecticut River are approximately 215 feet in height due to the long span length over the river.</p> <p>See: XS-S06, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>• High visual impact due to addition of extra H-frame structures.</li> <li>• Wooded buffer between ROW and residential areas would be decreased.</li> </ul> | <p>There are no residential areas in this segment.</p>      |





| Project Segment   | Miles      | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change  | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|---|------------|-------------------------------------|-------------------------------------|---|---|
|   |            |                                     |                                     | <ul style="list-style-type: none"> <li>Residences within 100 feet of the edge of the ROW from CT River/CT/MA border to MA/CT border: 0</li> </ul>   |   |
| <b>MA/CT border to CT/MA border (Franconia Junction), all in CT</b> | <b>4.3</b> | <b>75' - 85'</b>                    | <b>H-frame 70' - 120'</b>           | <p>One existing 115-kV line on wood-pole H-frame structures averaging 80 feet in height would remain, and a new 345-kV line would be installed using H-frame structures averaging about 90 feet in height. The new structures will be placed south of and close to the existing H-frame locations. The ROW would require some vegetation removal to accommodate the new line.</p> <p>See: XS-S07, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to addition of extra H-frame structures with a 0' - 45' increase in height compared to existing structures.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from MA/CT border to MA/CT border/Franconia Junction: 36</li> </ul> | <p>From structure 22024 to 22027 (south side of the ROW) - up to 120 feet</p> <p>Near structure 22030 and from 22037 to 22040 (south side of the ROW) - up to 135 feet</p> <p>Near structure 22049 (east side of the ROW) - up to 120 feet</p> <p>Near structure 22051 (east side of the ROW) - up to 110 feet</p> <p>Near structure 22052 (southeast side of the ROW) - up to 115 feet</p> <p>From structure 22053 to 22056 (southeast side of the ROW) - up to 130 feet</p> |
| <b>CT/MA border (Franconia Junction) to Hampden Junction</b>        | <b>4.0</b> | <b>85' - 95'</b>                    | <b>H-frame 70' - 120'</b>           | <p>One existing 115-kV line on steel-monopole structures averaging 90 feet in height would remain, and a new 345-kV line would be installed using H-frame structures averaging about 90 feet in height. The new structures will be placed south of and close to the existing steel-monopole locations. The ROW would require some vegetation removal to accommodate the new line.</p> <p>See: XS-S08, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to addition of extra H-frame structures with a 0' - 35' increase in height compared to</li> </ul>   | <p>From structure 54/42 to 54/41 (south side of the ROW) - up to 150 feet</p> <p>From structure 54/29 to 54/28 (south side of the ROW) - up to 105 feet</p> <p>From structure 54/26 to 54/21 (south and southeast side of the ROW) - up to 130 feet</p> <p>From structure 54/18 to 54/15 (southeast side of the ROW) - up to 160 feet</p> <p>From structure 54/11 to Hampden Jct. (southeast</p>  |



| Project Segment                                     | Miles              | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change  | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|---|--------------------|-------------------------------------|-------------------------------------|---|---|
|   |                    |                                     |                                     | <p>existing structures.</p> <ul style="list-style-type: none"> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from CT/MA border/Franconia Junction to Hampden Junction: 4</li> </ul>  | <p>side of the ROW) - up to 190 feet</p>  |
| <p><b>Hampden Junction to Ludlow Substation</b></p> | <p><b>10.8</b></p> | <p>90' – 105'</p>                   | <p>Monopoles 125' - 145'</p>        | <p>One existing 345-kV line on wood-pole H-frame structures averaging 95 feet in height will remain, as will one existing 115-kV line on steel-monopole structures averaging 100 feet in height. A new 345-kV line would be built on the east side of the existing 345-kV line on steel-monopole structures averaging 130 feet in height. The new structures will support the line conductors in a vertical configuration. New structure placements will be close to existing structure locations.</p> <p>See: XS-S09, Exhibit 5.1</p> <ul style="list-style-type: none"> <li>Higher visual impact due to addition of new monopole structures and associated change in structure heights ranging from a 20' – 55' increase. The tallest structures would be required only at road crossings, hilly topography, and to span waterbodies.</li> <li>Wooded buffer between ROW and residential areas would be decreased.</li> <li>Residences within 100 feet of the edge of the ROW from Hampden Junction to Ludlow Substation: 45</li> </ul> | <p>From structure 44093 to 44092 (east side of the ROW) - up to 60 feet</p> <p>From structure 44079 to 44078 (east side of the ROW) - up to 45 feet; and (west side of the ROW) – up to 55 feet</p> <p>From structure 44075 to 44073 (east side of the ROW) - up to 75 feet</p> <p>Near structure 44068 (east side of the ROW) - up to 65 feet</p> <p>Near structure 44067 (east side of the ROW) - up to 60 feet</p> <p>Near structure 44061 (east side of the ROW) - up to 115 feet</p> <p>From structure 44052 to 44049 (east side of the ROW) - up to 35 feet</p> <p>From structure 44035 to 44034 (east side of the ROW) - up to 70 feet</p> <p>From structure 44033 to 44032 (east side of the ROW) - up to 70 feet<br/>       From structure 44022 to 44020 (east side of the ROW) - up to 75 feet</p> |



| Project Segment | Miles | Height Range of Existing Structures | Height Range of Proposed Structures | Modifications/Visual Resource Change | Decrease in Wooded Buffer Between ROW and Residential Areas   |
|-----------------|-------|-------------------------------------|-------------------------------------|--------------------------------------|---|
|                 |       |                                     |                                     |                                      | <p>From structure 44021 to 44016 (west side of the ROW) - up to 25 feet</p> <p>From structure 44014 to 44009 (east side of the ROW) - up to 70 feet</p> <p>From structure 44003 to 44002 (east side of the ROW) - up to 65 feet</p> |



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-006**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**

**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.2 and mapsheet 05 of 22. Please describe in detail how the views of the ROW from the West Springfield High School would change. Please include from what areas of the school and schoolyard the views would be changed and a photo simulation of such views, based on the three configurations listed in EFSB-V-4.

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of July 20, 2009. WMECO will file these photo simulations as soon as possible thereafter. The descriptions requested will be included with the photo simulations when the supplemental filing is made.





**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-007**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**

**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.2 and mapsheet 06 of 22. Please describe in detail how the views of the ROW from the West Springfield Middle School would change. Please include from what areas of the school and schoolyard the views would be changed and a photo simulation of such views, based on the three configurations listed in EFSB-V-4.

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of July 20, 2009. WMECO will file these photo simulations as soon as possible thereafter. The descriptions requested will be included with the photo simulations when the supplemental filing is made.



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-008**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**

**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.2, mapsheet 03 of 22 and Figure 7-13. Please describe in detail how the expansion of the Agawam Substation and new lines would affect the views from Prospect Street, including the location and amount of tree removal (and specify the types of trees, such as the rows of red pines) associated with the expansion and the new transmission line. Please provide the distance from the new fence line to the closest residence. Please provide a photo simulation including the current views, and future views based on the new components both inside the existing fence line and the expanded area to the north of the existing facility, and the associated tree clearing.

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of August 7, 2009. WMECO will file these photo simulations as soon as possible thereafter. The descriptions requested will be included with the photo simulations when the supplemental filing is made.

As stated in the response to Information Request EFSB-LU-021, the Agawam Substation layout will be changing from that shown in the Petition. With this new layout, the nearest residence (#30 Prospect St.) is approximately 158 feet from the expanded fence line to the north. This dimension is 6 feet less than the distance from this residence to the existing fence line to the north.

The fence line on the east side of Agawam Substation will not be moved as part of the substation modifications being proposed. The distance to the closest residence (north end of Sutton Place) is and will remain approximately 68' feet from fence to building. The shortest distance between the tennis court fence and the substation fence is and will remain approximately 50 feet.



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-009**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**

**Request from: Energy Facilities Siting Board**

**Question:**

At the May 7, 2009, Public Hearing in Agawam, the Company indicated that it would meet on-site with residents of Prospect Street to discuss the expansion of the Agawam Substation (Tr. A at 90). Has the Company met with the residents? If so, please provide a summary of the meeting, if not, when does the Company anticipate conducting such a meeting.

**Response:**

Project representatives met with approximately 20 residents of Prospect Street in Agawam, MA on May 15th, 2009 to discuss proposed upgrades to the substation and the transmission lines in the area. During the discussion, the residents expressed a consistent concern with the proposed tree clearing on the northwest corner of the substation property. Residents were concerned that removing this buffer would increase the visibility of the substation and transmission facilities from their nearby homes.

As a follow-up to the meeting, the project team is evaluating several alternatives to minimize impacts to the Prospect Street residents, as well as the apartment complex west of Agawam Substation. These options include: 1) a baseline alternative; 2) the re-use of steel poles and cutting across the northwest fence corner; 3) placing a section of one of the circuits for the Agawam-West Springfield Circuit Separation Project underground; and 4) placing a section of both of the circuits for the Agawam-West Springfield Circuit Separation Project underground.

A revised layout for the Agawam Substation will be provided to the EFSB as part of the Pre-filed Direct Testimony of John C. Case (to be filed July 17, 2009).



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 2**

**Dated: 06/24/2009**

**Q-EFSB-V-010**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**  
**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the Petition at Exhibit 5.2, mapsheet 03 of 22 and Figure 7-13. Please describe in detail how the expansion of the Agawam Substation would affect the views from Sutton Place West, including the residences and the recreational facilities. Please provide the distance from the new fence line to the closest residence and recreational facility. Please provide a photo simulation including the current views, and future views based on the new components both inside the existing fence line and the expanded area to the north of the existing facility, and the associated tree clearing.

**Response:**

WMECO commissioned a visual simulation consultant to develop the requested visual simulations associated with this request with a target completion date of August 7, 2009. WMECO will file these photo simulations as soon as possible thereafter. The descriptions requested will be included with the photo simulations when the supplemental filing is made.





**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 4**

**Dated: 07/31/2009**

**Q-EFSB-V-051**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**  
**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the response to EFSB-V-5. Please explain the discrepancy between columns 5 and 6, where in some areas it says "wooded buffer between ROW and residential or agricultural area would be decreased" in column 5 and then the last column for decrease in wooded buffer, the chart shows "none." (pages 6, 7, 8, 10).

**Response:**

The original Information Request (EFSB-V-005) regarding this issue was as follows – "Please refer to the Petition at Tables 5-12 and 5-13. For each project segment where it is indicated that 'wooded buffer between ROW and residential areas would be decreased,' please indicate the specific amount of wooded buffer, in linear feet, that would be removed for each segment." Based on the wording of the question, the Company assumed that the answer should focus on residential areas only. Therefore, column 6 was added to the original table in the Petition to respond to the question about the decrease in the wooded buffer between the ROW and residential areas. Agricultural areas were not included in the analysis.

Accordingly, there is no discrepancy between columns 1 and 2 in Table 5-12a, included as EFSB-V-005 Attachment 1. In each of the project segments where there is an entry "None" in column 6, indicating that there would be no decrease in the wooded buffer between the ROW and residential areas, the bullet in column 5 indicates that the wooded buffer between the ROW and agricultural areas or the Massachusetts Turnpike (not residential areas) would be increased.



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 4**

**Dated: 07/31/2009**

**Q-EFSB-V-052**

**Page 1 of 1**

**Witness: Scott Newland, Timothy Barton**  
**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the response to EFSB-V-5. Please explain why the southern route would require such significant areas of buffer removal – between 100 to 190 feet, for the construction of one line of 345 kV monopoles.

**Response:**

The construction of one 345-kV line on steel monopoles would not require vegetation removal of up to 190 feet. The proposed line from Ludlow Substation to Hampden Junction along the Noticed-Alternative Southern Route would be constructed on a set of monopole structures with a vertical conductor configuration and would require a maintained corridor of about 100 feet in width. Between Hampden Junction and South Agawam Switching Station, the Company would propose to use H-frame structures for the new 345-kV line which requires a 150-foot- wide corridor to be maintained. These widths of required area to be maintained would not necessarily require an equivalent amount of new clearing, because some of that width may overlap with area that is already maintained for existing transmission lines on these right-of-way segments.

The decrease in the wooded buffer from Table 5-13a that is referenced in the response to Information Request EFSB-V-005 often includes some area that is currently required to be maintained. There are existing transmission lines within the Noticed-Alternative Southern Route ROW for which there is an existing maintained width of 90 to 185 feet. In some of these areas, trees have been allowed to grow under or near the existing lines, and these trees will likely be removed when the maintained corridor is expanded. This clearing was included when determining the widths of the areas of buffer removal. The 190-foot width mentioned in the response to Information Request EFSB-V-005 relates to an area where H-frame structures would be used for the new line, and where tree removals in the maintained area for an existing adjacent line would also be required.



**Western Massachusetts Electric Company**

**Docket No. EFSB 08-2/D.P.U. 08-105/08-106**

**Information Request EFSB**

**SET 4**

**Dated: 07/31/2009**

**Q-EFSB-V-053**

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**Witness: Scott Newland, Timothy Barton**

**Request from: Energy Facilities Siting Board**

**Question:**

Please refer to the response to EFSB-V-9. Based on John Case's pre-filed testimony, has the Company selected option number three? Please provide the status of the reconfiguration of the Agawam Substation as it relates to the Agawam-West Springfield project.

**Response:**

Company representatives met with Prospect Street residents on July 23<sup>rd</sup> and presented Option Number 3, undergrounding one of the Agawam to West Springfield 115-kV circuits, re-using existing structure locations, and eliminating most of the vegetation removal that was planned near the Prospect Street residents. Option Number 3 improves the overall reliability of the transmission system and was well received by the residents; therefore the Company is now proposing Option Number 3 as the preferred layout.

In conjunction with partial undergrounding of one of the 115-kV circuits between the Agawam and West Springfield Substations, as stated in John Case's pre-filed testimony, the proposed 345-kV switchyard bays have also been reconfigured in this new layout, and the expansion of the substation to the north, towards Prospect Street, has been significantly reduced. This requires relocating the 115-kV capacitor banks to an expanded area in the southwest portion of the substation. Please see the response to Information Request EFSB-G-034.

