August 28, 2016

Mike Manieri Jr.
Principal Engineer
OSH Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833

RE: Estimated Costs of Injuries Incurred During Reinforcing Steel and Post-Tensioning Activities

Dear Mr. Manieri:

Pursuant to your request for additional information pertaining to the costs of injuries incurred during reinforcing steel and post-tensioning activities, following are case studies that represent a small portion of the claims reported. The proposed amendments to the California Division of Occupational Safety and Health (DOSH), Title 8, Construction Safety Orders, Article 29, Erection and Construction, Sections 1711 and 1712 Safety Standards were developed by labor and management representatives to address the specific causation factors of the following fatalities and disabling injuries.

1. Fatality – primary causation factor: struck by post-tensioning jack in chest
   $1.6 million estimated costs for statutory workers compensation death benefit claim and subsequent general liability claim

2. Disabling injury – primary causation factor: rebar column collapse from improper guying
   $3-4 million estimated costs for workers compensation claim and subsequent general liability claim

3. Disabling injury – primary causation factor: impalement in groin by unprotected rebar
   $700,000-900,000 estimated costs for workers compensation claim

4. Disabling injury – primary causation factor: vertical concrete form collapse
   $1.3 million estimated costs for compensation claim and general liability claim
5. Fatality – primary causation factor: fall from exterior of 36 story building
   $3-4 million estimated costs for statutory workers compensation death benefit claim and subsequent general liability claim

6. Disabling injury – primary causation factor: material handling poor site conditions
   $200,000-300,000 estimated costs for workers compensation death benefit claim

7. Fatality – primary causation factor: struck by overhead equipment of general contractor
   $4-5 million estimated costs for statutory workers compensation death benefit claim and subsequent general liability claim

8. Fatality – primary causation factor: vertical rebar column collapse
   $1-2 estimated costs for statutory workers compensation death benefit claim and subsequent general liability claim

9. Disabling injury – primary causation factor: failure of improper interior guardrail
   $1-2 million estimated costs for statutory workers compensation claim and subsequent general liability claim

10. Disabling injury - primary causation factor: rebar impalement through thigh
    $200,000-300,000 estimated costs for workers compensation claim

11. Fatality – primary causation factor: forklift overturn due to poor site conditions
    Case still in litigation: estimated costs for statutory workers compensation death benefit claim and subsequent general liability claim undetermined

12. Disabling injury - primary causation factor: improper curtain-wall and rigging failure
    $200,000 – 300,000 million estimated costs for workers compensation claim

13. Disabling injury – primary causation factor: collapse of deck formwork
    $1-2 million estimated costs for compensation claim and general liability claim

14. Disabling injury – primary causation factor: back injury from slipping on form oil
    $100,000-200,000 estimated costs for compensation claim and general liability claim
The above case studies and associated costs represent a small portion of the number of injuries and total costs that are incurred by California employers. We do not have access to all the workers compensation claims and settlement data for hundreds of injury claims that occurred each year. However, we can project that reinforcing steel and post-tensioning claims costs pertaining to workers compensation benefits, general liability claims, medical treatment, first-aid, vocational rehab, and increase in insurance costs could range from $20-40 million per year.

I appreciate your efforts to help determine the increased safety performance and reduction in claims costs by the adoption of the proposed amendments to the California Division of Occupational Safety and Health (DOSH), Title 8, Construction Safety Orders, Article 29, Erection and Construction, Sections 1711 and 1712 Safety Standards. It is our belief that the proposed standards will substantially reduce the frequency and severity of the representation claims listed above.

Please feel free to contact me if you have any questions or need additional information.

Sincerely,

Steven L. Rank
Executive Director of Safety and Health
Iron Workers International Union

C: Marley Hart, Executive Officer, Occupational Safety and Health Standards Board