**CONCLUSIÓN.** De los estudios realizados hasta la fecha por el conferenciante y sus compañeros de investigación, se puede concluir lo siguiente:

- Un reacondicionamiento sísmico adecuado requiere: 1) evaluación fiable de la actividad sísmica en el emplazamiento de la instalación y sus alrededores; 2) identificación de las fuentes de peligrosidad sísmica para la instalación, por medio de la evaluación de la actividad sísmica y del entorno edificado alrededor de la instalación; y 3) valoración fiable de la vulnerabilidad del sistema entero (suelo-cimientos-superestructura y componentes no estructurales) ante las fuentes identificadas de peligrosidad sísmica, expresándola como una fracción de su valor.

- Los actuales códigos sísmicos no identifican apropiadamente actividad sísmica y fuentes de peligrosidad sísmica en el emplazamiento de la instalación. Su metodología y procedimientos para evaluar las características dinámicas, en particular la capacidad de deformación del sistema entero, y también la respuesta de este sistema a los movimientos del suelo críticos esperados, son inadecuados.

- El criterio comúnmente usado para reacondicionar las instalaciones existentes sísmicamente peligrosas es cumplir con las regulaciones del código de edificación para diseño sismorresistente de edificios nuevos. Esto normalmente produce una rehabilitación ineficiente de tales edificios y, en algunos casos, soluciones de reacondicionamiento económicamente prohibitivas.

- El uso de una aproximación energética, y particularmente el uso de una ecuación de conservación de energía, ofrece una base prometedora para reacondicionamiento sísmico racional de estructuras peligrosas existentes.

- El primer y más difícil problema al reacondicionar una instalación existente es el establecimento fiable del terremoto de re-diseño, para cada uno de los estados límite que pueden controlar este re-diseño, de acuerdo con el principal objetivo del programa de reacondicionamiento, el cual depende del comportamiento esperado en los niveles de servicio, funcionamiento y seguridad. Una aproximación prometedora para establecer estos elementos es el cálculo, representación gráfica, y análisis de los espectros de respuesta de $E_I$, $E_\xi$, $E_H$, $C_y$ y $S_d$ para cada uno de los niveles mencionados de los movimientos del suelo esperados.

- En la selección de la estrategia y la técnica más apropiadas de rehabilitación para mejorar las características dinámicas provistas, debería considerarse atentamente el sistema completo suelo-cimientos-superestructura-componentes no estructurales y no sólo la superestructura. Rigidizar y aumentar la resistencia de la estructura puede llevar a cambios que son significantes no sólo en las necesidaddes o exigencias de la cimientación existente, sino también en los efectos suelo-estructura.

- En la selección de la técnica de reacondicionamiento, el diseñador debería considerar no sólo el diseño más eficiente técnicamente y más barato en costes de construcción, sino también el que representa las mínimas molestias para el funcionamiento (operación) del edificio durante el proceso. Generalmente, la estrategia y técnica óptimas son términos medios entre la estrategia técnica ideal, la estratégia menos exigente en costes de construcción y la que causa mínimas molestias a los ocupantes del edificio.

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