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November 3, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
HONEYWELL INTERNATIONAL INC.	)	Docket No. 40-3392
	)	
(Metropolis Works Uranium Conversion Facility)	))	ASLBP No. 11-910-01-MLA-BD01

NRC STAFF'S REPLY TESTIMONY

Q.1. Please state your name, position and employer, and briefly describe your job duties.

A.1.a. Roman Przygodzki. I am a Financial Analyst with the U.S. Pension Benefit Guaranty Corporation. Until October 21, 2001, I was a Financial Assurance Project Manager in the NRC's Office of Federal and State Materials and Environmental Management Programs (FSME). My revised statement of professional qualifications is included as Exhibit NRCR00002.

A.1.b. Kenneth Kline. I am a Financial Assurance Project Manager in FSME. I previously described my job duties in Exhibit NRC000001 at A.1.b. My statement of professional qualifications can be found at Exhibit NRC000003.

A.1.c. Thomas Fredrichs. I am the Senior Licensee Financial Policy Advisor in the NRC's Office of Nuclear Reactor Regulation. My job duties are described in Exhibit NRC000001 at A.1.c. My statement of professional qualifications can be found at Exhibit NRC000004.

A.1.d. Paul Bailey, Senior Fellow, ICF International. ICF International is a professional services company founded in 1969, with a staff in 2011 of over 3,500 employees. We are active in public policy areas such as energy, environment, health, and transportation. I lead much of the work that ICF has performed for the NRC and other clients on financial assurance, including research about financial assurance mechanisms and performance metrics. A statement of my professional qualifications is at Exhibit NRC000054.

A.1.e. John Collier. I am a Vice President with ICF International. I co-lead ICF's Economic and Financial Services group. My professional experience includes economic and financial analyses of entities in both the public and private sectors. My statement of professional qualifications is included as Exhibit NRC000055.

Q.2. What is the purpose of your testimony?

A.2.a. (R. Przygodzki, K. Kline, T. Fredrichs) The purpose of our testimony is to respond to the initial testimony and initial statement of position Honeywell filed on October 14, 2011. As explained in our initial testimony, each of us had a role in reviewing at least one of the three exemption requests Honeywell filed between 2006 and 2009. Exh. NRC000001 at A.4.

A.2.b. (P. Bailey) My testimony has a narrower focus. I was not involved in the NRC Staff's review of Honeywell's exemption requests, and I will not be addressing all the arguments Honeywell has offered in support of its 2009 request. Rather, I will respond to certain statements in Honeywell's initial testimony concerning the accuracy and reliability of bond ratings issued by recognized credit rating agencies.

A.2.c. (J. Collier) My testimony also has a relatively narrow focus. I was not involved in the NRC Staff's review of Honeywell's exemption requests, and I will not be addressing all the arguments in support of the 2009 request. I will respond to certain statements in Honeywell's initial testimony relating to negative net worth, goodwill, and the bases for certain financial tests in NRC and U.S. Environmental Protection Agency (EPA) regulations.

Q.3. Please give your general impression of the issues raised in Honeywell's initial statement of position and testimony.

A.3. (R. Przygodzki, K. Kline) The issue in this case is whether Honeywell can prove that the Staff improperly denied its request for an exemption from 10 C.F.R. § 40.36(e) for the period May 11, 2009 through May 11, 2010. However, in its submissions Honeywell raises a number of other issues, all of which should be decided against Honeywell. For example, Honeywell

argues that the Staff denied its 2009 exemption request by issuing an order against the company. We did not. Honeywell argues that its exemption request should be reviewed under the regulations applying to both exemption and amendment requests; that is, under both 10 C.F.R. § 40.14 and 10 C.F.R. § 40.32. This argument does not help Honeywell's case—Honeywell is in effect arguing that it must meet additional requirements in order to obtain an exemption—but in any event § 40.14 is the only regulation governing the NRC's review of the merits of Honeywell's exemption request.

Honeywell also claims that in reaching its decision the Board should rely on financial data from as recent as September 2011. This makes little sense, because current financial data is irrelevant to whether on December 11, 2009 the Staff properly denied an exemption covering a one-year period ending in May 2010.

Q.4. What is your general impression regarding the merits of Honeywell's arguments in favor of its 2009 exemption request?

A.4. (R. Przygodzki, K. Kline) Honeywell's primary argument is that bond ratings are reliable indicators of a company's financial condition and that its own "A" bond rating supports granting an exemption. However, Honeywell overlooks that the Staff's focus in reviewing its exemption request was not on Honeywell's financial condition generally. Rather, the Staff was specifically concerned with Honeywell's ability to promptly pay decommissioning costs, particularly in times of financial distress. Honeywell also overlooks that, when the Staff was reviewing its exemption request in 2009, the global economy was in crisis and there were widespread concerns over the reliability of bond ratings.

Honeywell also argues that its negative $5.265 billion tangible net worth at the time of its 2009 exemption request was not a sign of financial weakness and that its substantial goodwill provided assurance that funds would be available to decommission its facility. However, goodwill is a relatively illiquid asset. This means that, compared to tangible assets and even

intangible assets like patents or trademarks, it might take Honeywell much longer to convert its goodwill into cash. Honeywell's heavy reliance on goodwill to self-guarantee financial assurance in 2009 therefore created the risk that, if Honeywell fell into financial distress, it might experience a delay generating funds for decommissioning activities. Such a delay could have adversely affected the public by leading to increased doses and increased contamination. Accordingly, in 2009 Honeywell's reliance on goodwill meant that granting an exemption would not have protected the public as effectively as if Honeywell complied with 10 C.F.R. § 40.36(e).

Q.5. In its testimony, Honeywell repeatedly refers to an "alternate financial test." Honeywell states that the Staff applied such a test when granting Honeywell exemptions in 2007 and 2008, and it argues that this test should be used to evaluate Honeywell's 2009 exemption request. Has the Staff applied an "alternate financial test" when reviewing Honeywell's exemption requests?

A.5. (R. Przygodzki, K. Kline, T. Fredrichs) No. As we stated in our initial testimony, there is no "alternate financial test." The self-guarantee financial test in Appendix C of Part 30 could itself be viewed as an alternate to a licensee providing financial assurance through third-party arrangements such as a surety bond or letter of credit. However, there is no "alternate" to the Appendix C test. If there were such an alternate, it would be found in Appendix C. The Staff evaluated Honeywell's three exemption requests by reviewing all factors relevant to each request. We did not look solely at whether Honeywell met the criteria described in its so-called alternate test.

Q.6. In its testimony Honeywell presents information on its current financial status. Is this information relevant to the Staff's review of the 2009 exemption request?

A.6. (R. Przygodzki, K. Kline) No. Honeywell's 2009 exemption request covered the period May 11, 2009 through May 11, 2010. Information from 2011 says nothing about whether in December 2009 the Staff properly denied Honeywell's request for a time-limited exemption that

is now long expired. The 2011 information would not have been available to the Staff in December 2009, and it could not have contributed to the Staff's decision.

Q.7. A large part of Honeywell's testimony relates to bond ratings. Honeywell states throughout its testimony that, despite the recent financial crisis, bond ratings remain excellent indicators of a company's financial condition. Was Honeywell's financial condition the Staff's focus when reviewing Honeywell's exemption requests?

A.7. (R. Przygodzki, K. Kline, T. Fredrichs) The Staff's primary concern was with Honeywell's ability to promptly fund decommissioning activities, particularly in times of financial distress. The Staff was not concerned primarily with Honeywell's overall financial condition. Honeywell's overall financial condition may appear relatively stable despite significant changes that are highly relevant to its ability to promptly pay decommissioning costs. This is in fact what happened between 2008, when the Staff granted Honeywell's second exemption request, and 2009, when the Staff denied Honeywell's third request.

Q.8. Are bond ratings relevant to whether an NRC licensee can pay decommissioning costs?

A.8. (R. Przygodzki, K. Kline, T. Fredrichs) For licensees seeking to rely on a self-guarantee, bond ratings are part of the financial test in 10 C.F.R. Part 30, Appendix C, § II.A. However, they are only one part of Appendix C's three-part test. In other words, although bond ratings are relevant to whether a licensee can self-guarantee decommissioning funding, they by no means address all the NRC's concerns in this area.

Q.9. In A20, Honeywell describes the role of credit rating agencies in the U.S. bond market, specifically the corporate bond market. Do the NRC's financial assurance rules take into account bond ratings?

A.9. (R. Przygodzki, T. Fredrichs) The financial tests in certain NRC regulations look to bond ratings as one factor in determining whether a licensee's financial assurance adequately protects the public from the radiation hazards of a non-decommissioned nuclear facility.

However, unlike a credit rating agency, the NRC's mission is not merely to provide information to the public concerning risks, information the public can voluntarily accept or reject. Rather, the NRC's mission is to actually protect public health and safety by limiting risks associated with exposure to radiation. The NRC's rules therefore look to factors other than bond ratings in order to provide a reasonable level of financial assurance. In the case of a self-guarantee under 10 C.F.R. Appendix C, the financial assurance mechanism looks to tangible net worth and other factors, not solely a high bond rating.

Q.10. In A20, Honeywell also states that credit rating agencies measure long-term risk and look at the financial strength of a company over a period of years, rather than focusing on short-term business cycles. Is this correct?

A.10. (P. Bailey, R. Przygodzki) As applied to bond ratings, this statement is correct. Bond ratings reflect the rater's opinion of the relative risk of bond default by looking across the full business cycle. Because bonds have much longer terms than other securities such as commercial paper, notes and bills, the bond rating is described as reflecting a company's relative long-term ability to make debt payments on the long-term security. In other words, bond ratings express opinions on a company's bond default risk based on long-term factors, rather than short-term business cycles or earnings. During the global financial crisis in 2009, however, this focus on long-term patterns was a cause for concern. By design, bond ratings may not have moved quickly enough to respond to events that could have markedly affected Honeywell's ability to pay decommissioning costs when needed.

The NRC recognizes that bond ratings provide useful information concerning the relative, expected financial standing of licensees or guarantors over the long term. The NRC therefore requires a strong bond rating if a licensee seeks to rely on a self-guarantee or parent company guarantee. However, for a self-guarantee the NRC also requires that (1) the licensee's tangible net worth be at least 10 times its total decommissioning cost estimate, and

(2) the licensee have assets in the United States that are at least 90 percent of its total assets or at least 10 times the total current decommissioning cost estimate. These are the first two parts of the self-guarantee financial test in Part 30, Appendix C.

We would emphasize that bond ratings and the NRC's financial assurance rules are not directed toward the same concerns. Credit rating agencies provide ratings opinions so that investors can decide whether to invest capital in a particular company. As explained in the general disclosure statement from Moody's, the risk assessed by ratings is the "risk that an entity may not meet its contractual, financial obligations as they come due and any estimated financial loss in the event of default." Exh. HNY000024 at 55. The NRC, on the other hand, requires that licensees provide financial assurance in order to protect the public against risks associated with delays in decommissioning. These risks include increased contamination and exposures tied to decommissioning delays, as well as the substantial financial costs associated with a "legacy site," *i.e.*, a facility that is in decommissioning but has an owner who cannot complete the decommissioning work for technical or financial reasons. In brief, bond ratings are not intended to address the specific concerns underlying the NRC's financial assurance rules.

Q.11. Honeywell further states in A20 that bond ratings "are not intended to ratchet up and down with short term business or supply-demand or to reflect last quarter's earnings report." Does this mean that a company's bond rating might not capture a rapid or short-term downturn in its financial position?

A.11. (R. Przygodzki, K. Kline) Yes, and it means that bond ratings may not capture short-term changes in a company's financial status that are relevant to the company's ability to self-guarantee decommissioning funding. Because in its 2009 request Honeywell sought an exemption for one year, the Staff was concerned with short-term impacts on Honeywell's ability to provide decommissioning funding. The Staff recognizes that bond ratings are not intended to address these short-term impacts. Nonetheless, this explains in part why the NRC does not rely

solely on bond ratings as a measure of a licensee's ability to self-guarantee decommissioning funding.

Q.12. In A22 through A24, Honeywell focuses on corporate defaults as a measure of the accuracy of bond ratings. Are there other situations in which a company's bond rating may be viewed as inaccurate?

A.12. (P. Bailey, R. Przygodzki) If a company has an "A" bond rating when in fact it should have a "BBB" rating, the rating would be inaccurate. Likewise, if a company has a "BBB" bond rating when it should have an "A" rating, that should be considered inaccurate as well. However, there is no data showing to what extent bond ratings suffer from these types of unreliability. It would be incorrect to state that unforeseen defaults are the only circumstances that might cast doubt on the reliability of bond ratings.

Further, in arguing that bond ratings are excellent financial indicators, Honeywell focuses solely on the default rate of companies in its particular bond rating categories. This overlooks that companies with bond ratings both higher and lower than Honeywell also experienced numerous defaults in 2008 and 2009. Even if we exclude companies with speculative-grade bonds, there were enough additional defaults each year to further call into question the reliability of bond ratings.

Q.13. Was the NRC concerned solely with whether Honeywell might default during the period covered by its 2009 exempt request?

A.13. (R. Przygodzki, P. Bailey) Circumstances short of default could also have affected Honeywell's ability to timely fund decommissioning activities. If Honeywell's bond rating dropped significantly in a short period of time, it might have difficulty meeting the Appendix C requirement that it establish alternate financial assurance within 120 days after notifying the NRC of its downgrade. Obtaining alternate financial assurance in a timely manner could have

been difficult during a credit crunch like we saw in 2008 and 2009, when there was a sudden tightening of loan conditions.

Q.14. Is it fair to say, as Honeywell does in A24, that bond ratings are "excellent indicators" of a company's financial condition?

A.14. (P. Bailey, R. Przygodzki, K. Kline) In late 2008 and through 2009, there were widespread concerns expressed over the reliability of bond ratings. In October 2009, the World Bank reported that "[i]n the United States and Europe faulty credit ratings and flawed rating processes are widely perceived as being among the key contributors to the global financial crisis. . . ." Exh. NRC000044 at 1. Another expert report from late 2009 stated, "In view of the widespread criticism of the performance of the CRAs before and during the credit crisis, it is surprising that we still lack consensus about how they should be reformed." Exh. NRC000046 at 17. These widespread concerns were well founded, because 2008 and 2009 saw an unprecedented number of corporate defaults. These defaults included a large number of companies whose ratings did not necessarily point to defaults in the near future. Events such as the September 2008 failure of Lehman Brothers, which maintained an "A" bond rating until the very day it filed for bankruptcy, gave strong reason to question the reliability of bond ratings. Exh. NRC000026.

Q.15. In A24, Honeywell argues that bond ratings provide an assessment of a company's financial strength that "is more accurate than focusing on one or two financial metrics such as tangible net worth or U.S. assets, as required by the NRC's standard financial test." Is this correct?

A.15. (P. Bailey, R. Przygodzki, T. Fredrichs) No. Honeywell provides no support for its claim, and its claim is in fact contradicted by published findings. For example, analysts have found that financial and accounting metrics outperform bond ratings. Exh. NRC000059 at 254–56. Honeywell also appears to overlook the multiple components of the Appendix C financial test.

The Appendix C financial test already looks to bond ratings. Appendix C, § II.A(3). This means that the real question is not whether bond ratings, compared to tangible net worth and U.S. assets, is a better single measure of a company's ability to pay decommissioning costs. Rather, the question is whether bond ratings alone or bond ratings *plus* the tangible net worth and U.S. asset requirements is the better measure. We would further note that published studies find that bond ratings alone provide little explanatory power compared to a group of financial and accounting metrics. *Id.*

In addition, bond ratings and the other requirements in the Appendix C financial test speak to different concerns. For example, while bond ratings are a general indicator of a company's ability to pay specific debts over a longer period, the tangible net worth requirement provides greater assurance that a licensee will be able to provide decommissioning funding in the short term. In other words, the tangible net worth requirement is not a redundant and less accurate financial indicator; it is a requirement intended in part to address an entirely different concern. Similar reasoning applies to the U.S. asset requirement in the Appendix C financial test.

Q.16. In A36, Honeywell argues that a company's bond rating is in itself a sufficient indicator of its financial stability. In support of its argument, Honeywell cites language from the proposed version of the NRC's self-guarantee rule. Could you address Honeywell's argument?

A.16. (R. Przygodzki, P. Bailey) Honeywell claims "the Commission has previously recognized that since a company's 'tangible net worth' is an important factor comprising its bond rating, 'the bond rating itself may be a sufficient indicator of financial stability.' 58 Fed. Reg. 3515, 3518 (Jan 11, 1993) (Exh. HNY000042)." The Commission actually stated, "A company's tangible net worth is an important factor comprising its bond rating, and the rating itself, *combined with the other criteria,* may be a sufficient indicator of financial stability." Exh. HNY000042 at 6 (58 Fed. Reg. 3515, 3518) (emphasis added). In other words, Honeywell leaves out the reference to the

“other criteria.” The language upon which Honeywell relies actually supports only the more limited claim that bond ratings, combined with the other factors specified in the Appendix C financial test, are an indicator of financial stability. Further, as we note above, published reports state that bond ratings alone are significantly inferior to other financial and accounting metrics in predicting performance. Exh. NRC000059.

Q.17. Honeywell states in A45 that it is rare for “A-rated” companies such as Honeywell to move rapidly from a state of strong financial health to a state of distress or default, even in times of economic distress. Do you agree?

A.17. (R. Przygodzki, P. Bailey) 2008 and 2009 saw the defaults of 25 companies whose bonds Standard & Poor’s had rated as investment grade. Exhs. HNY000030 at 9, Table 4; HNY000031 at 1–2, Table 1. For Moody’s ratings, the number of investment-grade defaults over this two-year period was 23. Exhs. HNY000024 at 19, HNY000025 at 24. At the time the Staff was reviewing Honeywell’s 2009 exemption request, there were numerous reports suggesting that credit rating agencies may not be reacting quickly to market events causing rapid changes in companies’ financial positions, even companies as highly rated as Lehman Brothers. Exh. NRC000026.

The Staff’s concern over the reliability of bond ratings was shared by others. In September 2009, the Securities and Exchange Commission (SEC) unanimously approved a number of rulemaking actions to strengthen oversight of credit ratings agencies. These actions were directed toward enhancing disclosures and improving the quality of credit ratings. Exhs. NRC000057 and NRC000058. In October 2009, the World Bank reported that “[i]n the United States and Europe faulty credit ratings and flawed rating processes are widely perceived as being among the key contributors to the global financial crisis. . . . That has brought them under intense scrutiny and led to proposals for radical reforms.” Exh. NRC000044 at 1. Other experts

were raising additional questions concerning the practices of credit rating agencies, including questions related to conflicts of interest. Exh. NRC000046 at 17.

In fact, at the time the Staff was reviewing Honeywell's 2009 exemption request, regulators were attempting to address some of these questions and concerns. In April 2009, the European Union approved regulations establishing registration and supervision requirements for credit rating agencies. Exh. NRC000004 at 5. Also in April 2009, G-20 leaders reached an agreement stating that agencies whose ratings are used for regulatory purposes should be subject to oversight. *Id.* In the United States, in 2009 the SEC amended its regulations for rating agencies by mandating "disclosure of performance statistics and rating methodologies, disclosure on their Web site of a sample of rating actions for each class of credit ratings, enhanced record keeping and annual reporting, and additional restrictions on activities that could generate conflicts of interest. . . ." *Id; see also* Exhs. NRC000057 and NRC000058.

In sum, when the Staff denied Honeywell's exemption request in December 2009, there were numerous other agencies and organizations questioning the reliability of bond ratings or taking remedial actions.

Q.18. Honeywell states in A45 that the default rates for the recent global financial crisis have not materially affected the long-term default averages for a particular bond rating, and that the recent information on defaults supports the reliability of bond ratings for investment-grade companies. Can you address these comments?

A.18. (R. Przygodzki, K. Kline) When we reviewed Honeywell's exemption request in 2009, our concern was not with the long-term default averages for a particular bond rating. Rather, we were concerned that granting Honeywell even a short-term exemption increased the risk that it would lack the funds necessary to timely decommission its facility. With the benefit of hindsight, it is clear that Honeywell did not in fact experience a credit rating downgrade or default in 2009. However, at the time we were reviewing Honeywell's exemption request, the defaults of major

companies such as Lehman Brothers, CIT Group, General Motors and Ford were still fresh news. As we testified previously, we were reluctant to exempt Honeywell from financial assurance requirements at a time when the global financial crisis cast serious doubt on the reliability of bond ratings. Exh. NRC000001 at A.25.

Q.19. Is Honeywell correct when it states in A45 that a company is obligated by NRC regulations to report a credit downgrade?

A.19. (R. Przygodzki, K. Kline, T. Fredrichs) Not entirely. As Honeywell more accurately states in A44 and footnote 5 to A36, the requirement in Appendix C, Section III.E to notify the NRC is triggered only when a company's most recent bond issuance ceases to be rated in any category of "A" or above by either Standard & Poor's or Moody's.

Q.20. In A45, Honeywell also states that "bond rating companies continually re-evaluate the rating. . . . Any adverse changes in financial condition would trigger a downgrade in rating." Is this correct?

A.20. (P. Bailey) No. First, rating agencies do an imperfect job following up on their initial ratings. This conclusion is supported by a 2008 report from the SEC staff. Exh. NRC000060 at 21–23. Second, rating agencies do not downgrade bonds based on "*any* adverse changes" (emphasis added). Even Honeywell appears to acknowledge that adverse changes which are expected to be short-term may not result in downgrades. Third, questions regarding the reliability of bond ratings arose largely because rating agencies did not timely downgrade companies where there were, in fact, significantly adverse changes in their financial positions. Lehman Brothers, for example, experienced adverse changes that were not reflected in its bond rating until the same day it filed for bankruptcy.

Q.21. In A46, Honeywell states that "[s]ince 2005 there have only been defaults by 'A-rated' companies (S&P) in 2008 (0.38%) and in 2009 (0.22%)." Is Honeywell's focus on a single rating category warranted?

A.21. (R. Przygodzki, P. Bailey) If the concern is with the accuracy or reliability of bond ratings generally, there is no reason to limit the inquiry to a single rating category. In 2008, there were defaults involving 14 companies that Standard & Poor's rated as investment-grade. Exh. HNY000030 at 9, Table 4. In 2009, there were 11 more such defaults. Exh. HNY000031 at 1–2, Table 1. If we look to Moody's, the relevant numbers are 13 for 2008 and 10 for 2009. Exhs. HNY000024 at 19, HNY000025 at 24. The Staff recognizes that "investment-grade" is a category slightly broader than "A-rated" in that it includes companies rated both higher (AAA and AA for Standard and Poor's) and slightly lower (BBB) than Honeywell. However, if our concern is the accuracy or reliability of bond ratings, the number of investment-grade defaults provides useful information.

Q.22. In A46, Honeywell also states that since 2005 the category of companies rated A2 by Moody's only experienced defaults in 2008, at a rate of 0.259%. Is this significant?

A.22. (R. Przygodzki, K. Kline) 2008 was actually the year most relevant to our review of Honeywell's 2009 exemption request. Moody's published its 2008 data in February 2009, so that was the most recent end-of-year data available to us when reviewing Honeywell's 2009 exemption request. In addition to the corporate defaults in 2008, there were continuing defaults in 2009, a number involving highly rated companies. Although Honeywell focuses on Moody's category A2, other investment-grade categories experienced a number of defaults in 2009, as we've discussed above.

Q.23. In A48, Honeywell states, "A rating agency cannot realistically be expected to precisely anticipate future changes in macroeconomic conditions. As a consequence, actual, measured default rates by rating category will exhibit pronounced cyclical patterns, rising in recessions and falling in recovery. . . . " Could you comment?

A.23. (R. Przygodzki, K. Kline, P. Bailey) Honeywell appears to acknowledge that, even during a recession, credit rating agencies may be unable or unwilling to respond promptly to

market events. This limitation understandably increased the Staff's concern about the reliability of bond ratings in 2009, when the global economy was still in a recession. In fact, Honeywell's argument appears to support the Staff's position, because Honeywell seems to acknowledge that criteria in addition to bond ratings are needed in order to provide adequate financial assurance.

Q.24. In A48, Honeywell disputes the Staff's finding that credit rating agencies may be reluctant to downgrade companies due to the impact on the triggers in private financial contracts. Did the Staff have a basis for its finding?

A.24. (R. Przygodzki, K. Kline) We based our finding on analyses that were available when we were reviewing Honeywell's 2009 exemption request. As we stated in our initial testimony, in October 2009 the World Bank issued a report identifying these very concerns. Exhs. NRC000001 at A.25 and NRC000044. Honeywell seems to be suggesting that these concerns were the Staff's alone. To the contrary, the Staff's concerns were first identified by experts who had no role in the review of Honeywell's exemption request.

Q.25. In 2008 and 2009, were there additional concerns over whether credit rating agencies may rate corporate bonds accurately?

A.25. (R. Przygodzki, K. Kline) Other reports identified additional concerns with credit rating agencies, particularly with respect to conflicts of interest and information disclosure. Exh. NRC000046 at 17. These reports gave the Staff additional reason to conclude that, at the time we were reviewing Honeywell's 2009 exemption request, bond ratings were not as reliable as previously thought. Exh. NRC000001 at A.25.

Q.26. Honeywell seems to be arguing in A48 that, in a recession, it is inevitable that the number of corporate defaults by investment-grade issuers will increase. Honeywell states that, "[t]o maintain constant default rates by rating category [from year to year], rapid wholesale downgrades would be required in recessions." Such downgrades would be inappropriate,

Honeywell suggests, because “investment-grade issuers generally possess sufficient financial strength to weather a recession.” Could you comment?

A.26. (R. Przygodzki, K. Kline) These statements serve to highlight the Staff’s concerns about the reliability of bond ratings, particularly in a recession. These statements also reinforce the Staff’s finding that, during a recession, credit rating agencies may have difficulty predicting the short-term performance of individual companies.

Q.27. Also in A48, Honeywell states that rating agencies are not reluctant to downgrade bond ratings. Could you address this statement?

A.27. (R. Przygodzki, K. Kline) In the very same answer, A48, Honeywell states that agencies focus their ratings “on long-term risk and the level and predictability of an issuer’s future cash generation in relation to its commitments to repay debtholders.” This is essentially an admission that rating agencies may be unwilling to downgrade bond ratings based on short-term risk. This is significant, because the ability to provide decommissioning funding when needed, including over the short-term, was a major part of what the Staff was assessing during its review of Honeywell’s 2009 request for a one-year exemption from 10 C.F.R. § 40.36(e).

Q.28. In A24 and A55, Honeywell appears to argue that requiring it to provide financial assurance through a surety bond or letter of credit would serve no purpose because its “bond rating may be higher than the issuer of a surety bond or letter or credit.” In other words, the risk of default for the issuer may be greater than for Honeywell. Is this a relevant consideration?

A.28. (R. Przygodzki, K. Kline, T. Fredrichs) Honeywell’s statements overlook that a surety bond or letter of credit provides an independent second line of defense. It is possible that in some circumstances Honeywell could have a higher bond rating than certain issuers of surety bonds or letters of credit. However, the relative ratings of Honeywell and the issuer are irrelevant because the surety bond or letter of credit is a backup plan for a circumstance where Honeywell is unable to decommission its facility.

In any event, the NRC does not rely on the bond ratings of institutions that issue letters of credit or sureties. For issuers of surety bonds, the NRC looks to whether the U.S. Department of the Treasury has included the issuer in its listing of acceptable surety companies and whether the issuer has an underwriting limitation equal to or greater than the coverage of the surety. For issuers of letters of credit, the NRC determines if the issuer is regulated and examined by a Federal or State authority. Exh. NRC000061. The existence of specific regulatory oversight is the determinant of whether an issuer is acceptable, not the issuer's general financial condition as summarized in a credit rating.

Q.29. We'll now turn from bond ratings to goodwill, which is another factor Honeywell relies on to support its exemption request. As described in A34, Honeywell's "alternate approach" to providing financial assurance would allow Honeywell to use goodwill to meet the requirement that a self-guaranteeing licensee's tangible net worth be at least 10 times its decommissioning cost estimate. In effect, Honeywell is arguing that its goodwill should be treated the same as tangible assets. Are there differences between goodwill and tangible assets that are relevant to assessing Honeywell's ability to promptly fund decommissioning activities?

A.29. (R. Przygodzki, J. Collier) One relevant difference between the two types of assets is their relative liquidity. Compared to tangible assets, goodwill is relatively illiquid. What this means is there may be a longer delay in converting goodwill into cash to fund decommissioning activities. This is by no means a controversial statement. To the contrary, the Generally Accepted Accounting Principles (GAAP) Guide states, "The rights to a patent, copyright, or franchise can be identified separately and bought or sold. Goodwill, on the other hand, is inseparable from a business and is transferable only as an inseparable intangible asset of an enterprise." Exh. NRC000023. The EPA has also recognized that intangible assets such as goodwill are illiquid relative to tangible assets. This was part of the reason why the EPA

adopted a tangible-net-worth requirement in its financial tests. Exh. NRC000011 at 4 (47 Fed. Reg. at 15,035).

Q.30. Why does it matter that goodwill is a relatively illiquid asset?

A.30. (R. Przygodzki, J. Collier) As explained in the EPA's rulemaking, companies may experience delays in converting intangible assets like goodwill into cash to pay for cleanup costs. Delays result because, unlike selling individual assets, in order to convert goodwill into cash a company will need to sell an entire business or business line. Moreover, if the company needs to sell goodwill quickly, this increases the chance that the company will not be able to realize book value for its goodwill. On the other hand, if the company holds off selling goodwill in order to strike a better deal, this might cause a delay in the company obtaining decommissioning funding.

Q.31. Practically speaking, what would a company have to do in order to convert goodwill into cash?

A.31. (J. Collier) As stated in the GAAP Guide, goodwill "is inseparable from a business and is transferable only as an inseparable intangible asset of an enterprise." Exh. NRC000023. For that reason, it would be imprecise to say a company can "sell off its goodwill" in order to obtain funding. Rather, the company would need to negotiate and execute the sale of the underlying enterprise (the business or business line) associated with the goodwill. The sale of the enterprise might include various tangible and intangible assets, but more significantly, the sale also would include the enterprise's operations. Clearly, the due diligence that potential purchasers would undertake with respect to such a "living" enterprise would greatly exceed that required in a sale of only tangible assets. For example, the process may involve solicitations of interest, execution of confidentiality agreements, analyses of business plans and staff qualifications, appraisals, negotiations, inspections of financial and accounting records, reviews of procedures, the drafting and execution of contracts, and other steps. In brief, the process

would likely be more complicated and far more time-consuming than the sale of only tangible assets like buildings, vehicles, or equipment.

Q.32. In A36, Honeywell argues that allowing it to use goodwill to meet the first part of the Appendix C financial test provides adequate assurance "that timely decommissioning can be carried out following shutdown." Please address this statement.

A.32. (R. Przygodzki, K. Kline, J. Collier) Honeywell implies that the NRC's rules are designed to ensure decommissioning funds will be available at the time of planned shutdown. In fact, funding must be available so that decommissioning can be carried out *when needed*, which may not necessarily be after a planned shutdown of the facility. The NRC must consider whether funds may be required for immediate decommissioning and cleanup after an unplanned, emergency shutdown—for example, after an accident or if the facility had to close following a sudden bankruptcy.

In addition, the NRC must consider the possibility that a self-guarantor might experience financial distress short of default. This raises concerns that are not present when an independent third party provides financial assurance (*e.g.*, a letter of credit or surety), or where a decommissioning trust holds the funds. This type of situation must be identified sufficiently quickly so that the self-guarantor's weakened financial condition does not prevent the company from obtaining an alternate financial assurance mechanism as required by Appendix C, § II.C. As we have explained above, for a company whose financial position is significantly weakened, obtaining alternate financial assurance in a timely manner could be challenging. It could be particularly challenging during a credit crunch like we saw in 2008 and 2009, when there was a sudden tightening of loan conditions.

Q.33. Honeywell argues in A38 that, under the NRC's revised decommissioning planning rule, all intangible assets can be used to meet the 10-to-1 requirement in the first part of the Appendix C financial test. Honeywell argues that the Staff's denial of its 2009 exemption

request is inconsistent with the treatment of intangible assets under the revised rule. Can you address this claim?

A.33. (R. Przygodzki, K. Kline) First, the revised decommissioning planning rule is not relevant to Honeywell's 2009 exemption request. The revised rule does not go into effect until December 17, 2012, which is more than 30 months after Honeywell's 2009 exemption would have expired. Second, Honeywell's quotation from the final rule is incomplete. The full language to which Honeywell is referring states, "*Therefore, after the minimum tangible net worth requirement is met*, this final rule will allow the use of intangible assets, in conjunction with an investment grade bond rating, to meet specified criteria in the financial tests for parent company and self-guarantees." Exh. NRC000015 at 13; 76 Fed. Reg. at 35,524 (emphasis added). Honeywell's quotation omits the minimum tangible net worth requirement in the revised rule. Contrary to Honeywell's suggestion, the revised rule does not allow the unlimited use of intangible assets to meet the Appendix C test unless this minimum tangible net worth requirement can also be met.

Q.34. In A40, Honeywell describes as "outdated" the EPA analysis upon which the NRC relied when adopting the self-guarantee financial test in Appendix C. In its analysis, the EPA explained that it was adopting a minimum tangible-net-worth requirement based in part on concerns over the liquidity of intangible assets. Are these concerns outdated?

A.34. (R. Przygodzki, J. Collier) The EPA's concerns over the liquidity of intangible assets are not outdated. To the contrary, these concerns remain valid, particularly as they apply to goodwill. The Staff is unaware of any recent studies demonstrating that goodwill can be converted into cash as quickly as tangible assets, and Honeywell did not cite any such studies in support of its 2009 exemption request. We would also note that, apart from selling tangible assets, a company might be able to generate decommissioning funds by using tangible assets as collateral for a loan. Goodwill cannot be used this same way.

Q.35. In A50, Honeywell suggests the Staff incorrectly found that Honeywell's negative tangible net worth was a sign of financial weakness. Did the Staff make such a finding?

A.35. (R. Przygodzki, K. Kline) No. Honeywell's $3.814 billion decline in tangible net worth between its 2008 and 2009 exemption requests was important because it meant that, for the latter year, Honeywell was seeking to use significantly more goodwill to meet the first part of the Appendix C financial test. Exhs. NRC000018, NRC000020, NRC000021. This change pointed to potential difficulties in Honeywell's ability to promptly obtain decommissioning funding, particularly in times of financial distress. The Staff did not find that Honeywell's negative $5.265 billion in tangible net worth at the time of its 2009 exemption request was a sign of weakness in Honeywell's overall financial condition.

Q.36. In A57, Honeywell argues that the EPA based its minimum tangible net worth requirement on concerns that are irrelevant to its exemption request. Honeywell argues that "[t]he EPA clearly viewed a minimum net worth test as a surrogate for whether a company was 'small' and therefore unlikely to have diversified sources of income and was also looking at the relative net worth of a company relative to its decommissioning obligations." Were there additional concerns that caused the EPA to adopt a minimum tangible net worth requirement?

A.36. (R. Przygodzki, J. Collier) Yes. The Federal Register notice accompanying the EPA's final rule clarifies that the EPA was also concerned about the liquidity of intangible assets. The EPA explained that assets of firms often include intangibles such as goodwill that may be difficult to convert into cash to pay for closure and post-closure costs. For that reason, the EPA included a $10 million tangible net worth requirement in its financial test. Exh. NRC000011 at 4 (47 Fed. Reg. at 15,035). This concern over the liquidity of intangible assets is heightened in the case of goodwill. Although intangible assets may be relatively illiquid compared to tangible assets, goodwill is relatively illiquid compared to other intangible assets such as patents or trademarks. Exh. NRC000023. Again, this is significant because it means that a company like

Honeywell might experience delays when trying to convert goodwill into cash to pay for decommissioning costs.

Q.37. Is the Appendix C financial test concerned with the size of the licensee, the concern that Honeywell argues was part of the basis for the EPA rule?

A.37. (R. Przygodzki, K. Kline, T. Fredrichs) The first part of the Appendix C financial test requires that the licensee's tangible net worth be at least 10 times its total current decommissioning cost estimate. The second part requires that the licensee have assets in the United States amounting to at least 90 percent of total assets or 10 times its total decommissioning cost estimate. Each of these parts requires that, financially speaking, the licensee be a certain "size" relative to its decommissioning costs. However, these requirements address other factors as well. A licensee's assets may be offset by substantial liabilities or include a large number of assets that are relatively illiquid. The first part of the current Appendix C financial test therefore serves to ensure that, at the time of decommissioning, the licensee has assets that are not heavily encumbered and which can be promptly converted into decommissioning funds.

Q.38. In A58, Honeywell argues that the NRC's minimum tangible net worth test "is not particularly meaningful as applied to large diversified companies like Honeywell." Could you address this statement?

A.38. (R. Przygodzki, T. Fredrichs) Our assumption is that here Honeywell is referring to the first part of the current Appendix C financial test, not the revised rule's requirement that a licensee have at least $21 in tangible net worth. When it adopted the self-guarantee financial test in 1993, the NRC took into account the circumstances presented by large, diversified companies. In fact, the rulemaking was based in part on comments from two large, diversified companies, General Electric and Westinghouse. It would therefore be inaccurate to say that Honeywell's exemption request presents unique circumstances not contemplated by the NRC

during rulemaking. Furthermore, the statements of consideration to the final rule explicitly state, "In addition, all companies, *irrespective of their overall size,* must demonstrate that they possess tangible net worth of at least 10 times the current decommissioning cost estimate . . . for all decommissioning activities for which the company is responsible. . . ." (Emphasis added.) Again, this shows that the NRC took into account the circumstances presented by large, diversified companies when adopting the Appendix C financial test.

Q.39. In its initial testimony, the Staff stated that it was concerned by the possibility that Honeywell's goodwill might suffer rapid impairment during the period covered by the 2009 exemption request. Honeywell argues in A39 that, when the NRC issued the proposed version of its revised decommissioning planning rule, it recognized that financial accounting standards ensure goodwill impairment is captured appropriately. Shouldn't accounting standards have addressed the Staff's concerns over goodwill impairment for 2009?

A.39. (R. Przygodzki, K. Kline, T. Fredrichs) Not entirely. The NRC's statements must be read in the context of the proposed rule, which required that in order to self-guarantee a licensee must have at least $19 million in tangible net worth. Where a licensee seeks to rely on intangible assets without having a baseline of tangible net worth, as Honeywell did in 2009, the Staff understandably looks for even greater assurance that those intangible assets will be properly valued.

For 2009, Honeywell would have needed to use $6.8 billion in goodwill to meet the 10-to-1 test in Appendix C. This amount represented 67% of Honeywell's total goodwill. This was a 67% increase from 2008, when Honeywell needed 40% of its goodwill to meet the test, and an 857% increase from 2007, when Honeywell needed only 7% of its goodwill to meet the test. Exh. NRC000022. Because in 2009 Honeywell was relying on such a high percentage of its goodwill to meet the 10-to-1 test, the Staff was concerned that in the event of goodwill impairment Honeywell might no longer meet the test. If this goodwill impairment was

unrecognized or not timely recognized, Honeywell could fall below the 10-to-1 threshold without the NRC becoming aware of its noncompliance. Due to concerns over goodwill valuation and impairment in 2009, this was a legitimate concern. Exh. NRC000040.

Q.40. In A51 and A52, Honeywell states that it has considerable free cash flow that, under normal circumstances, could be used to pay for decommissioning. Does free cash flow provide adequate assurance that decommissioning funding is available when needed?

A.40. (R. Przygodzki, K. Kline) Honeywell focuses entirely on the availability of free cash flow under normal circumstances. Honeywell does not claim that free cash flow is relevant to assessing its ability to fund decommissioning activities in times of financial distress. In 2009, however, the Staff was concerned with how Honeywell might obtain decommissioning funds during a time of financial distress. Honeywell has essentially acknowledged that free cash flow does not address that concern. If Honeywell wishes to use its free cash flow to provide financial assurance for decommissioning, it can use the prepayment method provided for in 10 C.F.R. § 40.36(e)(1).

Q.41. In A58, Honeywell refers to its "diversified income stream," which it argues could be used to pay for decommissioning of the Metropolis Works Facility. Is this income stream relevant to assessing Honeywell's ability to pay decommissioning costs?

A.41. (R. Przygodzki, K. Kline) Honeywell refers to its annual revenue, free cash flow, and market capitalization. These factors are largely irrelevant to whether Honeywell can promptly fund decommissioning activities in times of financial distress. If Honeywell falls into financial distress, its revenue, free cash flow and market capitalization could all drop significantly in a short period of time.

Q.42. In A54, Honeywell estimates that a surety bond or letter of credit for the Metropolis Works Facility would cost approximately $1.8 million per year. Can you comment on this estimate?

A.42. (R. Przygodzki, K. Kline) Honeywell's estimate of $1.8 million appears to be a current estimate, and it is irrelevant to what Honeywell *actually* paid to obtain a surety bond after the Staff denied its 2009 exemption request. That proprietary information can be found on page 4 of Exhibit NRC000056. When the NRC adopted the self-guarantee rule in 1993, it assumed a licensees would typically need to pay 1.5% of its decommissioning cost estimate in order to provide financial assurance. Exh. NRC000013 at 1 (58 Fed. Reg. at 68,726). In 2009, Honeywell's decommissioning cost estimate for the Metropolis Works Facility was $156 million. Multiplying $156 million by 1.5% gives us $2.34 million. We will leave it to the Board to compare that amount with Honeywell's actual cost of obtaining a surety bond after the Staff denied its 2009 exemption request.

Q.43. In A56 through A60, Honeywell testifies that the minimum tangible net worth requirement in the revised version of Appendix C, which becomes effective December 17, 2012, is unsupported and should not apply to Honeywell. Is this testimony relevant to the Staff's review of Honeywell's 2009 exemption request?

A.43. (R. Przygodzki, K. Kline) Honeywell's testimony regarding the new requirement is irrelevant to the Staff's review of its 2009 exemption request. Moreover, Honeywell's arguments are a direct challenge to the tangible-net-worth requirement in the revised decommissioning planning rule. It would be inappropriate to address Honeywell's challenge to the revised rule in the present hearing, and Honeywell's arguments are in fact foreclosed by 10 C.F.R. § 2.335(a).

Q.44. Honeywell states that, compared to 2007 and 2008, for 2009 there were "no significant, long-term changes in Honeywell's financial condition that would warrant the drastic change in the NRC's conclusions or its approach to evaluating the [exemption] request." Exh. HNY000001 at A14. Is that true?

A.44. (R. Przygodzki, K. Kline) No. In fact, the Staff denied Honeywell's third exemption request because of changed circumstances. These changes included Honeywell's greatly

increased reliance on goodwill to meet the first part of the Appendix C financial test, increased concerns over the reliability of bond ratings, and significant concerns stemming from the global financial crisis. The Staff was concerned about the negative effects the global financial crisis was having on credit markets, the possibility that the crisis might negatively affect Honeywell's future financial performance, and the potential for these combined factors to negatively affect Honeywell's ability to obtain an alternative financial assurance mechanism if needed. In brief, the Staff was not persuaded by Honeywell's arguments that its end-of-year 2008 financial data provided reasonable assurance of the availability of decommissioning funds.

Q.45. Does this conclude your testimony?

A.45. (R. Przygodzki, K. Kline, T. Fredrichs, P. Bailey, J. Collier) Yes.