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Transcription intégrale



16 February 2012

Henri Proglio

Good morning ladies and gentlemen. Welcome to this presentation of the EDF Group's 2011 results. The Group management, all of whom are here today, is pleased to welcome you and will, of course, be happy to answer any questions you may have. As ever, we will hear from Thomas Piquemal, and sum up the highlights of the year, and I will of course talk about the events in the year, which have been, to say the least, plentiful.

They relate to our priorities for 2012. We will briefly run through these, then Thomas will go into the figures in detail and Jean-Paul Bouttes, head of strategy will talk to you about renewable energy. Naturally, we will allow all the time you need to answer questions from the floor.

In 2011, as you know, we achieved a solid performance. This was particularly impressive as the environment in which we were working was, as you know, particularly troubled. Besides the summer financial crisis, I need only to mention the accident at Fukushima, which as you might imagine has had considerable consequences for our business. We will come back to that later. Despite these exceptional events, consolidated sales were up by 2.7% to EUR 65.3 billion. EBITDA, at EUR 14.8 billion, which includes the compensation paid in respect of the TaRTAM, grew by 6.6% in like-for-like terms, reflecting the excellent operating performance in France and the UK. Net income excluding non-recurrent items for 2011: EUR 3.5 billion. This was a rise of 13.4 %, thanks largely to a rise of more than 14 %¹ in ordinary EBIT. Net income - Group share reached EUR 3 billion and was more than three times the previous year's, which had been as you know held back

¹ EBIT was up 75.6% on 2010

by exceptional non-recurrent events. Finally, we end the year with a robust financial structure, indicated by our net debt/EBITDA ratio of 2.2.

Based on these figures, we can tell you that we have reached and even exceeded the financial targets that we had set for 2011. I say "exceeded" because in EBITDA we are above the top of the target range, which means we can meet the debt ratio target with net debt of 2.2 times EBITDA and, at the General Shareholders' Meeting on 24 May 2012, we will be proposing a dividend of EUR 1.15 per share, the same as last year. So that is a brief summary of the key figures for 2011 which give some idea of the general tone of the business.

I would now like to spend a little more time on the "why" and the "how" behind these figures. How did we achieve such performances in such a tough environment, amid volatile international energy markets and difficult macro-economic conditions? Basically, we pulled out all the stops as the highlights of 2011 testify. Let me start with my favourite area: operations. The results come from there, starting with our excellent industrial performance. Three facts illustrate our progress here: first, in French nuclear generation we outstripped the ambitious targets that we had set – a particularly impressive achievement as the schedule for 10-year inspections was working against us, with nine inspections in 2011 compared to five in 2010. This automatically added to planned outages for the reactors but was more than offset by significant cuts to unplanned outages thanks to the large-component replacement programme. As a result, output reached 421 TWh, beating our targets even though these had been twice upgraded during the year.

We also managed to increase our fleet availability factor. This rose to 80.7%, a record increase for a single year, since all our 58 reactors have been on-stream. You will recall that at the start of 2011 we had all 58 reactors connected simultaneously to the grid between 9 and 15 January 2011. The subsequent performance of our nuclear fleet reveals two points that I want to stress. First, we have been able to meet consumer demand continuously and without problems. This has been shown during the last few weeks when consumption hit all-time highs, and was several times over 101,000 MW. Second, nuclear generation allowed us to offset the slump in hydroelectric during 2011, the second driest year for 22 years with increasingly erratic weather conditions. We can see here the value of the kind of diversified energy mix that we advocate.

The second point illustrating our industrial performance in nuclear: the UK. Here too we outperformed our targets, generating 55.8 TWh.

Third example of our improved performance, this time in distribution: the clear improvement in the quality of our networks allowed ERDF to cut average outage time by 17% to 70.6 minutes, the result of a sustained policy of investment with EUR 2.8 billion in 2011, 10% more than in 2010, to improve the quality and reliability of the distribution network. These are all examples of the continuous improvement in the Group's operating performance.

Turning to another area, clarifying our investments, we can also say that we kept our promises. As you may have noticed, we are in the habit of saying what we are going to do and doing what we say. Having completed some large and complex deals at the end of 2010 – EnBW in Germany and Constellation in the US – we carried out two major transactions which also fitted our policy of

becoming masters of our own destiny. The first, which I discussed with you on a previous occasion, was the bid for 100% of EDF Énergies Nouvelles in April 2011. This offer was a total success. We now own 100% of EDF Énergies Nouvelles and can reaffirm EDF's commitment to low-carbon energies and our ambition to achieve a diversified energy mix by 2020 that will include 25% renewables. I will talk about this at greater length in a few minutes.

The second transaction that will be a big event in 2012 is the clarification of our position in Italy, with the Edison takeover. Here again, I will be coming back to this shortly because the decisions fit squarely within our strategy – a strategy announced last May and which I want to reaffirm today. A strategy that must serve EDF's ambition to become the world's leading electricity company with a diversified energy mix. And thermal most definitely has its place in this mix. The target for the Group is set at 25% thermal, which means growth of 7-10 GW by 2020. For that, we need to continue to modernise our thermal power plants. In France, we brought into service the 430 MW combined-cycle gas turbine at Blénod last October, and have run initial tests on another combined-cycle gas plant at Martigues, which will replace an old fuel-oil station. But we are also building in Poland, with the massive project to build the so-called "supercritical" 900 MW coal-fired power station, equipped with high-performance technology supplied by Alstom. This station will replace four older units of the Rybnik plant with one more efficient unit, delivering 45% net efficiency, one of the best rates in the market. Also, and this is essential since we are talking about coal, it will very substantially cut CO₂ emissions.

Sticking with the subject of innovation, and the record consumption of recent days has no doubt made you keenly aware of this issue, we have just signed an ambitious partnership with General Electric to develop a new generation gas-fired plant. This will reach maximum power in less than 30 minutes, a key advantage to meet peaks in demand, notably during the coldest time of the year. The first plant of this type will open in Bouchain, Northern France, and will extend the life of EDF's site there, which currently hosts a coal-fired station due to be shut down in 2015. If we are to make progress in thermal, it is vital that we secure the gas supply for our gas-fired power stations. Two major projects were begun in 2011: construction of the tanker terminal at Dunkirk, which has just started up. This is a huge project involving the investment of EUR 1 billion, most of it from EDF. It will involve more than 1,800 people and the new plant will come into service in 2015. The other initiative is our taking of a 15% stake, alongside Gazprom, Eni and Wintershall, in the South Stream gas pipeline. For EDF, this move into South Stream makes excellent strategic sense because it dovetails with what will be one of the big stories of 2012: turning Italy into the Group's future gas platform using Edison as the springboard for development.

The takeover of Edison, which will now happen quickly, is a trump card in EDF's European and gas strategy. Its importance rests on the coherent combination of elements linked to Italy's strategic situation. As you can see from the map, Italy is the convergence point for much of the South Stream gas infrastructure, as the graphic shows, and this gives Italy a key role in securing continental Europe's gas supplies. In addition, several projects outside Italy, notably in Turkey, confirm this geostrategic role. You will understand, therefore, our ambition to make Edison the

Group's gas platform and its base for development throughout the Mediterranean basin. The deal has today received political endorsement, an essential step for a public service company like EDF, and particularly so in a strategic sector like energy. We have also received the support of all Edison's Italian shareholders and I can tell you that we have just finalised the agreement with our Italian partners only a few hours ago.

Now, if I may, I would like to take a moment to honour the memory of Giuliano Zuccoli, chairman of A2A and Edison, who died last weekend. He was a partner who defended his positions step by step, but also a chairman of exceptional stature and for whom I had the greatest respect. His death came at a time when we are on the verge of finalising the great project. The only element now missing is the agreement of the competition authorities and of Consob about the price, as you will be aware.

This deal makes EDF a major gas operator in Italy, active throughout the supply chain – in exploration, production and supply – a position that will benefit the whole Group. At the same time, EDF becomes the third-largest electricity firm in the country, controlling more than 7 GW of generating capacity. The transaction also has only a limited financial impact for EDF Group, something that Thomas will talk about in a few minutes. Finally, it is a win-win deal. Edison gets a stable shareholder structure and a shareholder who is a major player in the energy business, opening up access to the big partners and big international partnerships, such as the one just negotiated with Gazprom.

Enough said: the strategic value is clear, the financial structure is good for all parties and for the Italian peninsula...And, as I was just saying, the deal gives us control of our own destiny. I think that it was important to spend a few minutes on this, as I will now do with what was the other dominant issue in 2011: nuclear.

I have come back to this issue again and again over the last few months, always to say the same thing: the only possible form of nuclear is safe nuclear. The Fukushima accident has thrown into relief this absolute imperative. In France and the UK the nuclear safety authorities have carried out the required audits and, in both cases, confirmed the high levels of safety of our nuclear fleets. In France, the ASN published its detailed report in January, endorsing proposals for additional safety work on the whole fleet.

Another key fact for our industry this year: the French nuclear business is now in marching order and ready to go, as regards both the existing nuclear fleet and its international outlook. A major step forward was taken in July, with the signing of a technical and commercial agreement between EDF and AREVA. It addressed three essential issues: ongoing optimisation of the EPR, improved maintenance and operation of the existing nuclear fleet and management of the fuel cycle. The finalisation in recent days of a new agreement between EDF and AREVA on long-term supply of uranium to EDF means that EDF and AREVA are now in a full operational strategic partnership which also involves the construction of new reactors. Three key projects have also taken big steps forward: Flamanville, where the revised calendar is now being met, with first commercialized

output planned for 2016. As it stands, 88% of the civil engineering and 21% of the electromechanical equipment are already done.

Taishan in China, being built in partnership with CGNPC, AREVA and China's biggest engineering companies. The topping out of the dome in October, a key milestone in this type of project, marks the end of more than two years' of work by more than 2,000 people.

Finally, in the UK, where we are the leading electricity generator, we are determinedly pursuing our ambition to build four reactors.

Last July, the British parliament ratified the programme to build the new nuclear power stations. The country has also embarked on a reform of the electricity market which will put in place a number of incentives to invest in low-carbon energies including nuclear. The reforms set a floor price for carbon and provide for long-term contracts that are meant to guarantee stable prices for nuclear energy over the long term.

As I said, in 2011 we also laid down a marker for our ambitions in renewable energies, with the 100% takeover of EDF Énergies Nouvelles.

I would like to remind you that a third of development investment (EUR 3.9 billion in 2011) went on developing new wind and solar capacity; comparable in scale to the Group's investment in new nuclear.

2011 was a record year for bringing EDF EN wind and solar projects into service, with more than 800 MW (gross capacity) coming onstream, raising gross generating capacity in operation to 3,500 MW (gross capacity) in wind and nearly 415 MWc (gross capacity) in solar. Renewable energies

also includes other renewable sources such as sea power, as demonstrated by the launch of the first marine current turbine, which was sunk 35 metres deep in the sea off Paimpol-Bréhat last autumn to test its performance under real-life conditions. Between four and six marine current turbines are in production and will supply 2,000 to 3,000 homes. This project should lead, in 2013, to the bringing into service of a complete farm which will be a world first.

As you see, innovation is a source of inexhaustible energy for EDF EN, which is today at a crossroads in its history. EDF EN is a nice corporate story and a nice story of entrepreneurship also. I would like, at this point, once again to salute and thank Pâris Mouratoglou and David Corchia for the remarkable trackrecord of EDF Énergies Nouvelles.

A new page is opening and I am happy to welcome Antoine Cahuzac who has just taken over as CEO along with Jean-Louis Mathias who will be chairman. They are taking on responsibility for a fascinating and high-potential businesses, with remarkable and highly motivated development teams. EDF EN is a global leader in renewable energies, active in 13 countries, with exceptional operating and financial results in 2011.

As I said, 2011 was a record year for bringing new wind and solar capacity into service.

Similarly, construction of new capacity progressed. These new projects involved nearly 1,800 MW of power at 31 December.

These figures underline our drive for development, as witnessed by EDF EN's tenders for offshore wind projects in France. In a consortium with ALSTOM, EDF EN has placed four bids, bringing together the best expertise to mount a competitive bid for these projects. This highly ambitious

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project on the industrial level will also have, if we are chosen, the massive advantage of creating 7,500 jobs. We expect an answer in April.

We also have a number of very important development projects in offshore wind in the UK.

Right. That is all for the highlights of 2011 which show the undoubted progress the Group is making. They have also served, in large part, to sketch out our priorities for 2012.

I will try to be brief on our 2012 priorities, since many things have already been said on this topic. And when I say "try", it is just that every day brings a new raft of important news for EDF's future. Nevertheless, I want to end by talking about the top priorities for EDF in 2012. These are simple and can be summed up in three words: investment, innovation and employment. Without investment and without innovation, it is illusory to talk of growth. Investments are the driver of a winning industry. In times of crisis or not, to guarantee the future, we need to be able to invest in a way that is controlled, of course, but also clear-headed and demanding. But one thing is certain. Investment cannot be an adjustment variable, all the more so when safety is an issue. This is how EDF has conducted itself and we did not wait for Fukushima to make the necessary investment in nuclear safety, any more than we have spared the investment necessary to the development of the Group which is currently near EUR 11 billion.

Between 2009 and 2011, Group gross capex rose by 13% to over EUR 11 billion, two thirds of this in France – a continually growing share. Clearly, the maintenance of nuclear and the distribution networks were big beneficiaries of this rise, accounting by themselves for EUR 4.8 billion.

Investment in nuclear maintenance in France has risen by 48% in three years and by 17% in the networks. And we will continue to support our priorities in 2012. In France, unsurprisingly, our priority remains to continue improving industrial performance, notably to meet our new target for nuclear generation in 2012, which is to at least equal that for 2011. The target takes account of the continuing fast pace of the programme to replace large components, most importantly the steam generators which require long and complex outages. This, on top of six new 10-year inspections due this year. We also need to factor in additional days offline for safety assessments.

Internationally, we have first and foremost a big issue in new nuclear, with this year's scheduled decision on investment in the UK, already mentioned. Another issue also looms on the other side of the Channel, with the extension of the lives of nuclear power stations. EDF Energy has completed new technical studies which allow it to set a life extension for AGR reactors of 7 years on average, compared to 5 years announced in 2010. We will, of course, need approval from the British safety authority² for this extension. At the same time, other countries are getting ready to call for tenders to develop new nuclear and, as I said, we will be bidding.

In the gas business, the priority will, of course, be Italy, for reasons I have already explained. One further point to stress, however: the importance of the smooth integration of Edison and the strong synergies between Edison and EDF. The construction of the Dunkirk terminal will require the skills of Edison's engineers who, as you know, built the terminal at Rovigo.

² The "Nuclear Decommissioning Authority" and not the ONR, which is the equivalent to the ASN in France.

In renewable energies, Jean-Paul Bouttes, Head of strategy, will give details of our strategy. I would simply say that international development in wind and solar should leverage the local complementarity between EDF and EDF EN, and must also, of course, benefit from EDF's knowhow in the workings of the electricity systems and its specific engineering skills. We will be looking for growth in zones of high potential for wind and solar power. We are on the hunt for opportunities in the US solar market, for instance, which is particularly fast-growing.

In France and the UK we are awaiting responses to several major offshore wind tenders, as I said. And in solar, 2012 will be the year we bring into service a number of big projects currently under construction.

We also have the ambition to develop major projects in grand-scale hydroelectric, similar to those we have already done in Laos, in South America, the Middle East and Asia. In networks, we are pressing ahead with international partnerships. As you know, having just signed a massive management outsourcing contract with MRSK in Russia, ERDF will now be consolidating its cooperation in China with the main electricity distributor in the province of Shaanxi (population nearly 40 million), a province with considerable power needs as consumption in the province has doubled over the last five years. Knowing how to invest also means devoting the necessary budgets to research and development. EDF is, I can tell you, a key R&D player in the energy field. EDF must, of course, remain so. The expansion of our research budget is a proof of this determination. We are investing EUR 500 million in R&D – this is a lot of money, this is a major effort, this is one of our priorities. To give some examples, I would point to heat pumps, an area

where EDF has long been at the cutting edge with a particularly innovative design of compact heat pumps offering very high technical performance. Again, there is the major advance in smart grid technology with ERDF's system of power line communications (PLC) developed by our R&D department and recognised as the international standard, a key step for the roll-out of smart meters. And, of course, innovation in the field of renewable energies, particularly in the manufacture of more competitive photovoltaic solar panels. Speaking of photovoltaic let me give you a precise update on the Photowatt project, just to get things clear.

EDF, via EDF Énergies Nouvelles Réparties, has just submitted a bid to buy the activities of Photowatt, the sole French manufacturer of silicon-based photovoltaic cells, which went into receivership in November 2011. Photowatt and EDF ENR know each other well, having been coshareholders since 2008 in PV Alliance, a research and development company in the photovoltaic technology field and developer of the odd-sounding but cutting-edge "heterojunction" technology. This is very important because, while we do not in principle harbour any great desire for vertical integration, the EDF ENR bid seemed to make sense, given this technology's high potential for future growth and the need to support development of the industrial base that serves our business.

Heterojunction technology allows the manufacture of silicon cells with high yields of over 20% and is set to replace current technology in the next few years. This is also an opportunity to establish a real industrial business line. We have therefore made our offer conditional on obtaining 100% of PV Alliance, its technologies and an exclusive worldwide licence for heterojunction. It would be a

consistent addition to EDF ENR's portfolio of activities. Here, again, there are several positives to this story and it seems to me important to flag them up: the responsible attitude of EDF which is contributing to the development of innovative and competitive technologies in France; the responsible attitude of EDF which is making sure the innovative results of French research stay in France – something we often fail to do; the responsible attitude of EDF, last but not least, since this deal will create a competitive European business. The transaction is an opportunity to save a company with innovative expertise, but also to save jobs.

Finally, I am going to talk about a subject that I care especially strongly about: the social ambitions of our Group.

Those who know me well have heard me say, from my first day in the office, that EDF's social ambition is one of my priorities. I have not changed and, as a first point and something of which we are very proud, EDF is a net recruiter. In 2011, we hired 1,600 people in nuclear, 1,400 in distribution, 450 in supply. In 2012, we will be hiring more than 6,000 people in France and nearly 540 in the UK via EDF Energy.

One reminder: EDF now has 160,000 employees worldwide, more than 100,000 of them in France and in 4 years faces 30% retirements in France, including 1 in every 2 in the nuclear industry. These are questions that we have to face squarely.

This means a major effort on training, given the degree of technical knowledge and expertise required in our businesses.

And I am determined that at EDF training should be open to all, that EDF is a model of support for employment by helping to renew skills but also by encouraging the hiring of young people. For this reason, we favour *sandwich courses*, still rarely offered in France but a good way to uncover talents within a company. It must be used as a modern and universal tool for social integration. At EDF, 1 technician in 4 has come through such a scheme. We take on 5,000 students on *sandwich courses* each year.

And I will finish with the project that will be the springboard for our social ambitions, the creation of the EDF campus at Saclay. I cannot resist showing you the photo of the future Saclay campus. I am proud of it. This will be another advantage for EDF, reinforcing its public service culture. You can see on the right, the research area; on the left, the training and skill-building area. Multidisciplinary and multicultural, the campus, the left-hand part, will welcome 15,000 students every year after 2015, ranging from simple apprentices to battle-hardened managers of all nationalities. The 25,000 square metre campus will be Europe's biggest training centre in the energy sector with EUR 150 million in investment. This is what I was saying: investment, innovation, employment. These three words perfectly sum up the ambition of an EDF as a successful and committed business that values its responsibilities as an industrial company in the world of today and the world of tomorrow.

Thank you for your attention. I hand over now to Thomas Piquemal and I will be back shortly to answer your questions.

Thomas Piquemal

Good morning ladies and gentlemen, I am now going to give our 2011 results in detail.

I will also confirm our outlook and our 2011-2015 trajectory. For now, I will just say that our targets for 2012 are in line with the trajectory at every point. Finally, I will talk about some of the development milestones the Group has come through over these last two years.

So, our results: you know them already. The chairman Henri Proglio presented the key figures just now.

I would simply add that they are better than our objectives. Less than a year ago I gave you a target range for EBITDA of between EUR 14.7 billion and EUR 15 billon before the exceptional charges related to the TaRTAM. In fact, we hit EUR 15 billion (14.8 + 0.2) or 6.6% growth compared to target growth of 4-6%. We had a consensus for net income excluding non-recurrent items of around EUR 3.3 billion. In fact, we made EUR 3.5 billion, growth of 13.4% on the previous year.

I gave you a target range for the net debt/EBITDA ratio of 2.1-2.3 times, thinking that we would get Exeltium. We did not get Exeltium but net debt/EBITDA now stands at 2.2. Basically, we are beating our targets. Now let me tell you why.

First and foremost, it is thanks to EBITDA growth – as I already said, 6.6% growth before the exceptional TaRTAM cost of EUR 170 million – driven by a good performance in France, up by EUR 540 million, and in the UK among other areas, up by EUR 153 million.

Another way to view the growth of these results is to break them down by the broad areas of Group business, particularly in France by separating out the unregulated businesses (i.e.

generation, supply and optimisation) from the regulated part (i.e. in these figures mainly ErDF since RTE is equity-accounted). You can see that in France, while overall EBITDA grew by 6.3%, this was due to a remarkable performance by ERDF, which grew by 13.4% in 2011 compared to 2010. This strong performance was achieved not only thanks to good management of Opex but also to first-time billings for the cost of connecting photovoltaic generators, one of the gains from the debate on the NOME law, and to the falling cost of losses. This, despite the milder weather in 2011 than in 2010.

Excellent performance by ERDF, a good performance also by the unregulated business in France (+3%) but with a lower growth rate.

UK: + 8.5 %.

However, in Italy EBITDA fell by 25.2%. This reflected the ongoing squeeze on margins, for electricity and gas alike. It was, however, expected and I would even say that, despite these figures, Edison's results are actually better than anticipated for 2011. I will come back to this shortly. The other segments improved, as well, especially "Other International", which was up 19.5%. This was due to this 6.6% EBITDA growth, as well as to a reduction in charges for depreciation and renewal provisions from 6.9 billion to 6.5 billion euros, that recurring EBIT, meaning EBIT before these items, rose by 14% – I will come back later to the non-recurring items of the previous year and those of this year. Why are depreciations and renewal provisions down, whereas, as you know, the Group continues to invest in its operations. There are two main reasons for this. The first is that in late 2010 we received approval to extend the operating lives of two reactors in the UK,

which allowed us to reduce the depreciation charge by about 140 million euros by spreading it out over a longer operating life. The second reason is that, at ERDF, the renewal provision is about 200 million euros lower than what had been booked in 2010, based on a more precise statistical calculation of renewal durations and the value of fixed assets at ERDF.

So, in all, recurring EBIT was up 14%, or a 75.6% increase when compared with figures reported the previous year. This is why net income excluding non-recurring items rose by 13.4% on the year, as I told you earlier during the introduction – to 3.5 billion euros from 3.1 billion euros. It was due to a good operating performance. Then there is the depreciation impact that I mentioned earlier. There was also a decline in our financing costs from about 3.9 billion the previous year to 3.8 billion (-3%), thanks to better rotation of dedicated assets, as well as a shift towards relatively more floating-rate debt during the course of 2011 that was profitable to the Group.

Net income, group share is 3 billion euros, which is triple the amount reported the previous year, and was marked by a number of exceptional items. As you remember, we had booked 2.7 billion euros in exceptional charges the previous year. The biggest item was 1 billion on the United States, 900 million on Italy and other items. This year, non-recurring items are -510 million euros. There is good news and bad news. The good news is the capital gain on the divestment of EnBW (253 million euros), which we had already booked in the first half. On Italy, we booked an additional charge, an impairment of 304 million euros. 250 million euros of this was due to goodwill between the sale price of Edipower and its book value at Edison (250 million euros). At DALKIA International, the -135 million euros had already been booked in the first half. This is the

impairment charge on the Italian subsidiary. A new item in the second half is the -320 million on Alpiq. Since we own 25% of this Swiss company, this is 25% of the impairment charge booked by Alpiq.

A positive item is the 266 million euros at ERDF, which re-estimated the operating lives of a number of fixed assets, mainly low-voltage twisted cables, from 40 years to 50 years. Hence, a non-recurring gain of 266 million euros can therefore be booked based on historic cost with an impact on the stock of provisions for renewal.

Let's now turn to a breakdown by country and by major sector of activity, beginning, naturally, with France. As I said earlier, EBITDA was up 6.3%. Of course, this is due to market prices (+106 million euros) and the tariff impact between TURPE and the energy portion, but, as you can see on the chart, it is mostly due to the nuclear fleet's solid performance (+587 million euros), which offset the decline in hydropower output. As you can see on the left side here, nuclear output was 13 TWh higher than in the previous year, whereas hydropower output fell by 12 TWh. This was a year, I'm almost tempted to say, that was disastrous in hydropower output. There isn't much we can do about that. Everything depends on rainfall. Everything depends also on filling up the reservoirs. But it was thanks to nuclear power's good performance that we were able to offset this impact in 2011.

Since we're on the subject, I'll comment on the right side of this electric supply/demand balance, where you can see in the upper right-hand corner, ARENH sales volumes, which is the new mechanism in France: 31 TWh, that's the volume that we sold in the second half. End-client sales

fell by 41 TWh. This was due to two things: the weather (as I told you earlier, the weather was milder in 2011 than 2010), for about 26 TWh, and also a loss of market share, particularly in the portfolio's high end – major clients.

As Chairman Henri PROGLIO mentioned earlier, the nuclear fleet's performance was quite remarkable. As you can see on this chart, this performance was possible because the total number of outage days declined (4,435 days in 2010, vs. 4,125 in 2011), even though – as you can see on the grey part of this chart – planned outages, meaning mainly 10-year inspections, which are planned and normal, were up. This is due to the fact that there were more 10-year inspections in 2011 than in 2010 (nine vs. five), but, as you can see, even with the higher number of inspections, the number of outage days declined, thanks mainly to the decline in days of unplanned outages. This is due to better preventive maintenance. This is due to major operating investments. Extended outage days improved slightly (1,017 vs. 1,078). This is our objective for next year – to continue improving our management of planned outages, to continuing deploying technology for exactly that, managing outages, for example COPAT, which will be fully deployed by the end of 2013 with its full effect showing up in 2014.

Although we have set our sights high for 2012, and although the 2011 results are quite remarkable, with, as the Chairman said earlier, an availability factor of 80.7% (even though we lost 1.5 point of Kd due to these 10-year inspections), we are still conservatively setting our nuclear output target at between 420 and 425 TWh for 2012, vs. 421.1 in 2011. We are conservative because, although we will have fewer 10-year inspections, two of them overlap slightly onto 2012 and, moreover, the

inspections are long, mainly because we will be replacing two steam generators, vs. just one the previous year. This is a major replacement that allows us to secure Kd for the future.

In the United Kingdom, performance was also quite remarkable in nuclear output (+7.5 TWh, or +15.5% of output). True, 2010 had its share of unplanned outages – you may recall Sizewell and Heysham, but the performance is quite remarkable, and I believe that output reached a six-year high. In addition to favourable price effects, sold volumes declined, due – as we can also see on the supply/demand electric balance that I will project later – to market share losses in certain B2B clients.

Another way of measuring the UK trend is to analyse EBITDA growth before the impact of accounting effects that were made when we acquired British Energy, which we explained at our Investor Day in December 2010. Accounting effects when determining the opening balance sheet, which produced a 324 million euro favourable effect in 2010, fell to 122 million euros in 2011 and, incidentally, will be negative in 2012. So it is indeed EBITDA before these accounting entries that is the key item, and, as you can see, EBITDA rose by 22.1%. This is a clear sign of the excellent operating performance of our UK activities in 2011.

As I said earlier, nuclear power output rose (+8 TWh). On the right side of this chart, you can see that – and I alluded to this just now – 10 TWh was lost in B2B volumes, due mainly to the fact that this is a highly competitive segment. Structured sales fell by 14 TWh. This is due to a number of loss-making contracts that go back to the British Energy days, and which had been provisioned, provisions that will be gradually written back.

In Italy, as I told you during the introduction, performance was down 25.2% (592 million euros in EBITDA, vs. 801 million), due to Edison's problems that we are familiar with, particularly in the gas segment and the fact that take-or-pay contracts must be renegotiated. This occurred just as Edison, if I reason at 100%, meaning Edipower included, beat its 900 million euro target for 2011. In fact, it was closer to 1 billion euros.

In other international segments, EBITDA rose by 19.5%. All segments were up, but I would point out specifically the good performance of Belgium, which was driven by improved margins in all segments, whether electricity or gas. I also mentioned the very solid performance of our Brazilian asset, which turned in an excellent year, thanks to favourable market conditions and its capability of exporting to Argentina.

In the other activities, trading is up 7.2%, thanks to a good performance as such, but also due to the fact that nuclear output was above our forecasts and our trading teams got the most out of this additional output on the wholesale market. The other segments, DALKIA and TIRU, are down by 7.9%. This is mainly due to weaker profitability at DALKIA in Italy and in the Czech Republic. EDF Énergies Nouvelles' EBITDA was up very sharply (+17.4%). EDF Énergies Nouvelles met its target of 560 million euros EBITDA for 2011. This target is in line with the plan that we analysed during the takeover we made before summer, and EDF Énergies Nouvelles met this target in 2011 with record net capacity of 692 MW being brought on line. This had never been done before and was a very great accomplishment.

Now I would like to have a look at Group cash flow in 2011. It was negative at -1.5 billion euros vs. less than 200 the previous year. The previous year is not comparable, since we had received the first Exeltium payment of 1.7 billion euros. So, -1.5 billion euros in cash flow for the Group in 2011. There are two main reasons for this. The first is that the CSPE compensation shortfall got worse in 2011. The CSPE receivable, meaning the amount that we have still not been compensated, came to 3.8 billion at the end of 2011, vs. 2.8 billion at the end of 2010. This cost us 1 billion euros in cash. The second reason is that we maintained operating investment in 2011. Gross operating investments rose by 8.4% to 11.1 billion euros, with special efforts in nuclear maintenance in France. Operating investments rose from 1.7 to 2 billion euros. This was also the case in distribution, at ERDF, where total operating investments rose 10%, with, however, a very sharp increase in the improvement of the quality of the grid (+25% operating investment in 2011. compared to 2010).

We also continued to develop new capacities, with almost 4 billion euros (3.9 billion euros), with a greater amount invested in renewable energies— which accounted for 33% of investments in newly developed capacities – than in nuclear power (29%). So, given the negative 1.5 billion euros in cash flow, the provision that we kept for dedicated assets (300 million euros on the year), and the payment of the dividend and acquisitions, mainly of EDF EN, of 1.5 billion euros, financial debt should have risen, but, in fact, it fell by 1 billion in all, thanks to the divestment of EnBW, proceeds of which were paid for almost the entire purchase price, early 2011.

Financial debt thus shrank to 33.3 billion euros vs. the 34.4 billion figures reported last year. A quick word on our debt. Almost all of it is bonds. We continued our policy of extending the average maturity on financial debt. Average maturity is now more than nine years (9.2 years, to be precise), while lowering the average coupon to 4.3% from 4.4% the previous year. We still have a high level of liquidity, about 25 billion euros.

I will close this presentation of 2011 earnings by providing an update – as I told you I would last July – on the Synergies and Transformation programme, which is a programme to optimise our costs and to enhance efficiency within the Group. This is a programme that I detailed for you in July 2011 and I can tell you today that we have achieved 28% of the target we announced for 2015. 28% means that 705 million euros in savings have been achieved, 600 millions in opex and 100 million in capex. It is through this programme that we are slowing the increase in our opex, an increase that is made necessary by our reinvestments. When we invest, those aren't just operating investments; they're also our maintenance spending, particularly for the French nuclear fleet. So we are well on the way to meeting this target, probably even before 2015.

Here are some concrete examples of synergies that exist in particular in combined-cycle gas-fired power plants. We have set up two such plants (or we are doing the initial tests) in France, and we use the synergies that exist in these French projects and the UK project at West Burton, which will go on line late this year, to optimise outages and restarts and also the stock of spare parts. This is a concrete example of the synergies that we can achieve within the Group. This is also true of

nuclear power, between the French and UK fleets. I won't go into these examples, but they are significant. They allow us to optimise our cost base.

As I told you in the introduction, I confirm our 2011-2015 trajectory, the trajectory that I had announced to you last July and which projects 4% to 6% average annual EBITDA growth and 5% to 10% average annual growth in net income excluding non-recurring items. I would point out that these figures are before the impact of the Edison acquisition, and the opening balance sheet of the Edison acquisition, simply because work is still in progress. I am not able today to tell you the precise impact. Nevertheless, our objective is a 5 to 10% increase in net income excluding non-recurring items. All this while controlling our debt trajectory, keeping our net debt/EBITDA below 2.5 throughout the period and maintaining a payout of 55 to 65%, keeping in mind that the payout that we will propose to the shareholders' meeting in May is right in the middle of that range: 60%. For 2012, our objectives are in line with this trajectory in all ways, and our target is to serve a dividend that is at least stable compared to last year.

I also confirm that after work done in the aftermath of the Fukushima accident and the ASN review, we have updated our capex trajectories, but I am still able to confirm to you that our total net operating investment will be lower than or equal to 15 billion euros by 2015, which is consistent with the trajectory that I announced to you in July.

As I told you, I also wanted to update you on some of the Group's significant developments over the past two years – two years during which the Group has undergone a profound transformation. Two years ago, EDF owned 46% of EnBW, with no prospect for taking control. So we sold it,

bringing in more than 7 billion euros and realising a capital gain of 253 million euros, which was booked in 2011. Two years ago, EDF was in a partnership with Constellation in the United States. This agreement with Constellation was completely renegotiated in late 2010, with the elimination of the put, the acquisition of 100% of UniStar, and preservation of interests in CENG with a reconfiguration of the company's operations. But EDF continued to defend its CENG interests in 2011 by intervening in the proposed merger between Exelon and Constellation, notably our interests in the CENG joint-venture. Incidentally, it was thanks to this that we obtained additional governance rights, which allow us to hold onto our entire CENG joint-venture.

As the Chairman alluded to earlier, we acquired 50% of EDF Énergies Nouvelles while two years ago EDF owned 50% of it, and the rest was listed on the market. We now own 100%, and the integration has now been successfully completed. And, lastly, as you know, we made the Italian transaction, which was signed a few hours ago. This is a simple transaction that allows EDF to take full control of Edison. Simple, because it is being done in four stages. The first is the purchase of 50% of TDE, which is the holding company through which we co-controlled Edison with our Italian partners, for about 700 million euros, which values Edison at 0.84 euros per share and including about 600 million euros in holding company debt, that makes an implied multiple of 9 times 2011 EBITDA for Edison.

The second stage consists in Edison's selling its 50% stake in Edipower to Delmi for 600 million euros, with Delmi also assuming 550 million euros in debt owed by Edipower to Edison. This produces an implied divestment multiple of 10 times EBITDA.

The third stage, which is a commercial transaction, consists in an agreement to sell Edison's gas to Edipower, which will cover 50% of Edipower's needs. And the fourth and final stage, which is still subject to Consob approval, is the launch of a squeeze-out offer on the remaining Edison shares at 0.84 euros per share. All in all, we will own at least 80%, perhaps 100% if all minority shareholders tender their shares. The impact on our debt is more than 2 billion euros in absolute terms, simply because we will consolidate 100% of Edison, whereas today we consolidate only 50% of it. The range between 2.2 and 3.1 depends on how successful the squeeze-out is, between 0 and 100%. The impact on our credit ratios is very limited, about 0.1 times EBITDA and is neutral on the bottom line – net income, group share, obviously – before taking into account the determination of the opening balance sheet.

We also estimate potential synergies at about 50 million euros annually, mainly in trading, even though, as you know, that was not the main objective of this transaction. Synergies will come mainly in development and in the consolidation of Edison into our Group strategy. There are still two conditions: first of all, the confirmation, as I said, by Consob that the squeeze-out price will be no higher than 0.84 euros per share, and, second, regulatory authorisations, which are of two types, first the European competition authorities regarding EDF's exclusive control of Edison and the Italian competition authority regarding the Edipower transaction. We expect the deal to close in summer 2012. All these operations have reinforced the EDF Group's avenues of development. I just spoke about Edison within the EDF Group's gas strategy. And there is also renewable energy,

meaning EDF Énergies Nouvelles and for that I give the floor to Jean-Paul to present our strategy, the EDF Group's strategy in renewable energies. Thank you.

Jean-Paul BOUTTES

Hello, everybody. As Henri PROGLIO told you, EDF is firmly committed to renewable energies, a commitment that is in accordance with our ambition of being a benchmark power generator and a leader in decarbonised energies. In 2020, 75% of our production fleet will be low-carbon, with 25% of renewables, including hydropower. Indeed, our long-term vision is decarbonised electricity worldwide to preserve the climate and to ensure a secure supply. And renewable energies are one way to achieve this and have a key role to play, alongside nuclear power, and in controlling energy demand. So the challenge is to reconcile, on the one hand, the economy and growth, and, on the other, climate and hence, to control electricity costs. To do so, we have to deploy technologies and renewable technologies in particular, at the right time, at the right place and with the right mix. At the right time, by drawing a distinction between those renewable energies that are already competitive, like hydropower or onshore wind power, and those that still need work to lower their costs, such as, for example, offshore wind power, and concentrated solar. At the right place: in regions with more than 3,000 hours of wind per year, such as Mexico, onshore wind power is already competitive, whereas in Europe, with 2,000 or fewer hours of wind annually, it is still slightly loss-making. The same goes for photovoltaic. In very sunny areas, like California, we are coming close to being competitive. In northern Europe, which has half as much sun, less than

1,000 hours annually, we are obviously further away. And, finally, the right mix; for, as long as there is no technological breakthrough in electricity storage, in particular in batteries, intermittent renewable energies will remain a complementary and not a competing form of baseload energy, where nuclear, gas and coal are in competition. And so with the momentum and agility of EDF EN, we have – as we just saw in the results – some solid bases for our development, and that's the first stage of the rocket. We will now add a second stage to the rocket – new sources of growth, thanks to synergies in three areas: international development, engineering, and R&D.

In international development, two words: complementarity and consistency. Complementarity of the countries that EDF and EDF EN operate in: more than ever, the driver of EDF EN's geographical choices is to seek out growth where we can find it. This is what was done in Europe and North America, and we, of course, intend to stay and expand there. That's what we are doing in seizing opportunities in wind-rich and sun-rich countries, where electricity demand is growing fast, such as Mexico, Canada and Turkey, with a growing portfolio of projects, or in Morocco and in South Africa, where we will be bidding on projects.

And consistency, by taking a pragmatic approach by developing geographical synergies between EDF and EDF EN, by leveraging EDF's presence, for example in Poland and Brazil, to facilitate the development of EDF EN, and vice versa.

The second avenue is leveraging EDF's engineering capabilities to develop high-performance industrial solutions and to continue controlling risks. Our offshore wind farm bid in France, which has already been discussed, is a good example of mastering technological choices. We have

identified an innovative and long-term, high-performance turbine, made by Alstom, after intense studies on both the machine's intrinsic quality and the quality of the industrial set-up. In terms of controlling uncertainties by systematic measurements of wind resources and a geological probe of the ocean floors, which are the two key points and, lastly, in industrial terms, by forming partnerships with skilled, experienced operators like Dong and developers like WPD Offshore and Nass&Wind. And, of course, from the point of view of the local industrial fabric, we have already mentioned the possibility of creating 7,500 jobs in France.

One last thing: our capacity for innovation and our R&D are key to help achieving the technological breakthroughs of the future. In photovoltaic energy, our R&D people are at work on key technologies of the competitive panels of tomorrow, thin films with Nexis and IRDEP (the *Institute for Research and Development of Photovoltaic Energy* with CNRS) and the other high-performance silicon technology that uses, as we have also seen, heterojunctions. We have begun to work with the CEA and with Photowatt though the PV Alliance.

In marine energy, we are working on enhancing offshore performances and on technological disruption in floating wind farms. Also in marine energy, we are testing hydropower production at Paimpol-Bréhat. And the last important example of how we are working to improve renewable energies' insertion into the grids, is in storage, with for example, our pilot 1MW sodium sulphur battery on Reunion Island, smart grids with the Lyon and Nice pilots, but also with a millennium project – a thousand energy management installations in the islands.

Let me just wrap up by saying that, through its momentum, its skills, the motivation of its people, and the results it has achieved, EDF EN is the base and driver of our ambition in renewable energies. The synergies that we have just described briefly in international development, engineering and R&D should lead to new possibilities in profitable and sustainable development for EDF EN with true new sources of growth, in consistency with the Group's international strategy, in phase with countries' needs, expectations and resources and in controlling the risks of these new technologies. Thanks for listening. I believe it's time for questions and answers. Thank you.

Henri PROGLIO

Thank you, Jean-Paul. Ladies and Gentlemen, you have the floor.

Michel DEBS, Crédit Suisse

Thank you. Hello. I have questions on Edison, if you don't mind, particularly on the renegotiating of existing gas contracts, which you said have created difficulties this year. What is the outlook there? And what will their financial impact be?

And the second question: could you give us an idea of the EBITDA trajectory that you expect for Edison over the next two to three years? Thank you.

Thomas PIQUEMAL

The Edison gas contracts are indeed the big challenge in Edison's 2012 results. Early this week, Bruno LESCOEUR and Edison confirmed their objective for the current year of an EBITDA in line with the 2010 figure – meaning, to simplify, about 1.2 billion euros – half of which will depend on the ability to bring the current gas contract adjustments to a successful conclusion. That gives you an idea of the total impact: about 600 million euros expected for 2012. Of course, everything depends on the final deal closing date for EDF, but, assuming the deal is closed on 30 June, you can see that, for us, the impact is 75% of that figure in 2012.

If your question is whether I give you a longer-term EBITDA trajectory for Edison, my answer is: "No, not at this point". We will close this deal in the coming months and then we will announce the impact of Edison's consolidation in the Group, the setting of our trajectory and our strategy. I will then be able to comment on the figures in greater detail.

Benjamin LEYRE, Exane

Hello. I have three questions, please. The first deals with tariff levels and the methodology that will be used to set tariffs in the future. In a reply to the government auditing agency, the government said it agrees with the use of the Champsaur model to set ARENH price. Do you have some insight into what will support the methodology for setting tariffs?

A second question please. Regarding the nuclear availability factor, could you confirm your 85% target by 2015? And, could you detail your view of the safety measures' impact on nuclear

availability in 2012 and perhaps in 2013-2014? You seem to have already news of this before the ASN meeting in June...

And a third question: could you also indicate the first items of the PPA impact on Edison? Thank you.

Henri PROGLIO

Your question was insufficiently precise. I think you were thinking of ARENH and not tariffs. Were you speaking of electricity tariffs? The answer would obviously be much different. Regarding ARENH, let me remind you of what it is. This is a 15-year sale price to our competitors covering 25% of nuclear output of the existing fleet.

In the distant past – an entire year ago, which, for a financier, is an eternity! – I happened to be speaking before parliamentary commissions and trying to explain to them that the full cost of the nuclear fleet was about 46 euros. I don't know if you remember, I think I told you about this last year. The months went past, events came after events – Fukushima and others – and the government auditing agency conducted an in-depth study of the full cost of a nuclear megawatt, pertaining to the existing fleet and came to the conclusion of 49.5 euros/MWh. Naturally, when taking all costs into account and validating last year's 46 euros – with the effects of discounting – we are not too far from what EDF had estimated. I would just like people to acknowledge that. So this had two lessons. The first was to prove that nuclear power is competitive, in fact, Europe's most competitive energy in terms of total cost. That is something that people should remember. I

am speaking, of course, of existing fleets, the French fleet, since that is the benchmark. The second lesson was that selling one quarter of production capacity over a period of 15 years far below its economic cost is not a viable or sustainable proposition. This led to discussion with public authorities who basically said that there's a beginning and end to everything. Even the beginning has to be connected to an existing parameter. You know the TaRTAM phenomenon; TaRTAM was at 42 euros and so I negotiated it, saying that "we agree to make an effort from this level on to gradually move up to the full cost by 2015", which was the timetable set by the public authorities for deregulating the market. So that's where we are now.

ARENH price has been set at 40 euros for just six months because, after discussion and negotiation, the public authorities decided on 42 euros, effective 1 January 2012. We're now there, and ARENH is 42 euros, after a six-month period during which it was at 40 euros. And it is rather natural that ARENH should be at 49.5 euros, in constant euros, by 2015. That's my vision. That's what I can answer on the ARENH price. Any other method would be surprising, economically indefensible and legitimately difficult to analyse as rational. That's what I can answer on the ARENH price, and nothing has changed in that area. What has the government auditing agency contributed for ? A confirmation of the estimates that we had simply given, as I told you, in terms of both competitiveness and economic cost.

For Kd, Thomas will provide you with some precise figures, but I can tell you that the winter Kd came to 92% – this is the right Kd to be looking at, since it's the cold season and the period of maximum use of our power plants – and that's a very high number. In my opinion it's not bad at all,

and I would like to congratulate EDF's people for the very substantial increase in the fleet's availability factor over the past 18 months. I believe this is worth pointing out. On Kd trends to come, Thomas?

Thomas PIQUEMAL

Unfortunately, I will not give you very precise figures on the subject simply because some rather intricate discussions are in progress with ASN to try to set the calendar for carrying work. Naturally, I will be able to give you a precise answer, once this calendar has been decided, which is expected by the end of the first half.

For this reason, we are cautious on our Kd for 2012, but I will give you a more precise answer in July.

As for your question on the PPA impact and, hence, of the determination of the opening acquisition balance sheet for Edison, it's too early to tell. What I can now say to you is that Edison has some very good assets, such as its brand, and we intend to conduct an extremely precise analysis of all these assets to determine the opening balance sheet. Nor would I want to get too much into accounting techniques, to keep from boring you with the operations that we will be undertaking in the first half, but on the whole, apart from the impact of the opening balance sheet for future years, there are no very significant effects to mention in 2012.

Emmanuel TURPIN, Morgan Stanley

I would like to go back to the findings of the report of the government auditing agency. First of all, the government auditing agency said that about 5 billion of the 10 billion in capex estimated post-Fukushima, was already in long-term capex. That leaves us with 5 billion. You are in discussions about the timing, but could you perhaps give us an indication of how this 5 billion, in your view, will be spread out over time? What levers do you think you can activate over the next three to four years to avoid raising total capex, capped at 15 billion. Are you reducing other investments? Are you postponing them?

And, second, the government auditing agency mentions a nuclear maintenance capex of 55 billion over the 12, 13, 14 years to come. Can you confirm this figure? Does that ultimately mean that we will stay at annual paces of capex that are basically at the level of the current or coming years, i.e., about 4 billion? And, one more thing on the government auditing agency, which has investigated nuclear provisions in great detail; the report asks whether the discounting rate applied to the provisions is not too high at 5%, given the uncertainties on the underlying portfolio. I would like to know what EDF's chief financial officer thinks about this.

And then some easier questions. You mention that regulated activities in France had benefited from the start of the billing of the photovoltaic connection cost. Could you perhaps give us a figure (and I'm guessing that it's a sustained amount)? And, lastly, regarding the 200 million reduction in renewal provision, that must also be a sustained level, I imagine, and do you think that we can go

further in changing the accounting on renewal provisions? Have you made any headway there? Thank you.

Thomas PIQUEMAL

I did confirm the 15 billion euro maximum in 2015. I obviously confirm the trajectory of 55 billion, a capex trajectory that the government auditing agency reviewed. So amongst these 55 billion, 10 can be characterised as safety-enhancing, and of this 10, 5 were already planned as part of work that we must do to gain extensions in operating lives. The only difference is that it will probably have to be done a little faster than originally expected. We are in the process of fine-tuning these figures, as I told you, and, most of all, we are awaiting the ASN calendar and its orders. We do have levers, and that's the main reason why I confirmed this 15 billion. We can optimise our operating investments, since they are net operating investments, as you had certainly noticed. I will not explain what a net operating investment is.

So, yes, 55 billion means that the strong operating investment effort in the French nuclear fleet will increase. I told you that back in July, but this will continue. And it is this trajectory that was analysed by the government auditing agency and that produces the 49.5 full cost price for nuclear power. Everything is consistent there.

You then asked me about the 5% discounting rate for provisions compared with the returns on dedicated assets. Regarding returns on dedicated assets, everything depends on your timeframe. We feel that, given the calendar of payout for the assets – it will extend over several decades – the

returns of underlying assets, such as equities and bonds, should be analysed over a period of more than 5-6 years. And as you know well, when we look at long-term returns on equities and bonds, they are over 5%. So I feel that this discounting rate is quite justified. As for the cost of photovoltaic connections, I would say that it's (if memory serves me correctly) 150 million euros³. As for renewal provisions, which were 200 million euros lower in 2011 than in 2010, we still have about 220 million euros. So is the 200 less sustainable? I think so, as all this comes from a precise statistical model. Are other efforts in store? I can't tell you at this point. The only thing I can tell you is that a huge amount of work was done by ERDF teams to fine-tune this statistical model further, which for the moment is global and based on major asset class, meaning that it is not identified concession by concession. We now aim to fine-tune this model further so we can see what happens concession by concession, given that the law does not require us to build up renewal provisions for assets renewed after the end of the concession. Work is continuing, and I hope to be able to tell you little more on the subject in July.

Philippe OURPATIAN Natixis

Hello. I have two questions. The first deals with the AREVA agreement. You have signed a longterm uranium supply agreement. There is one option that is mentioned in the press release about possible operating investments in mining projects... Could you shed some light on this and tell us

³ ErDF connection revenue is up by €132m, due in part to the increase in customer lines (+16% in volume). The sales figure excluding transport was affected, among other things, by the NOME law, which eliminated the 40% scarcity payment received by PV producers, but this only applies to new invoice.

what amount you might invest? The second question concerns the agreement with Riverbank Power. A few days ago you signed an agreement to develop hydropower in the United States in dams but also pumping and storage. Could we have some ideas about this type of operating investment in terms of size and amount? Thank you.

Henri PROGLIO

I'm going to give the floor to Hervé MACHENAUD to discuss supply contracts and the outlook for upstream cooperation. Hervé MACHENAUD, as you know, is executive director in charge of all energy production, particularly nuclear power.

Hervé MACHENAUD

Indeed, we have signed an agreement dealing with, on the one hand, sourcing from AREVA's existing assets. We agreed on a long-term contract for 2014–2020, with an extension till 2030. And, on the other hand, on the possibility — yes, which is not yet fully concluded, but that we are working on – of a mining asset in which we would take a 10% stake and we would therefore have access to 10% of this mining asset covering a number of geographically dispersed mines, but most of which are in Africa.

Henri PROGLIO

This is an accompanying minority stake to guarantee us in-house uranium volumes.

Thomas PIQUEMAL

On hydropower and, more generally, renewables in the United States and our strategy in this area. Indeed, renewables are one of the main growth drivers of our US and North American activities, especially as it offers strong synergies between the enXco teams, who have proven to be very talented, and the Houston-based EDF Trading North America teams, who know the local markets perfectly. They are able to optimise everything, especially energy savings certificates. In that context, hydropower has a real role to play. I won't go into the details, but we have a tidal power plant project in North America. We also have a portfolio of projects that indeed range from small hydropower projects to pumping stations. Others are more significant, but this is a major avenue of our expansion in the United States.

John HONORÉ, Société Générale

Hello, Gentlemen. In fact, three questions. You have taken care of Germany. You are now taking care of Italy. You have resolved the RTE issue. What is your next project, Mr. PROGLIO? On the US, I have a vision that is slightly different. You say that you have solved the problem. There are no nuclear power plants under construction in the United States. Well, there may be a restarting of two plants in a state with regulated tariffs... UniStar has been passed from hand to hand over the last seven years. That does not solve the problem. You have no operating licence in

the United States. So wouldn't it be better to turn the page once and for all there and go to countries where there is true demand?

Another question. You mentioned a 140 million positive impact in the UK due to a five-year extension in operating life. Have you modelled what the situation will be like in France in 10 years and, if so, could you share it with us?

And, lastly, regarding the portfolio of dedicated assets to cover nuclear provisions, it is quite volatile. Has your thinking changed on the type of asset contributions to the portfolio, as you did with RTE, by contributing real estate, for example? Thank you.

Henri PROGLIO

The first question was for me. I believe it was important to aggressively resolve certain problems that resulted from the Group's commitments or positions. Some of these were obvious, such as the finalisation of negotiations in the United States to secure the Group on the American issue, negotiations that were worth 2 billion dollars due to the risk of a put in the US. That issue was resolved. Then a number of other subjects, which you mentioned, loomed ahead. The German problem was, rather hard to deal with, as we had a long-standing and very close partnership with EnBW and with our local government partners in the federal state of Bade-Wurttemberg. We had a big stake, but a minority one, just 45%. The decision was a tough one, given that, as you know, I had served notice of my wish to not remain a minority shareholder forever in the Group's strategic holdings and to be able to take our destiny into our own hands, which I mentioned earlier. But in

Germany there appeared to be little chance of acceptance of an increased stake for us. Moreover, Germany was going through a stormy period in the area of political options on the energy mix that we were aware of, with a tense pre-electoral climate in certain federal states, in particular Baden-Wurttemberg. That was the context of 2010.

The decision to exit EnBW was not taken lightly and, in-house, it was a tough call to make. For 10 years, this stake has brought us close ties with EnBW teams. Many of our very-high-level employees had committed themselves to this relationship and had made a strong contribution to it. Indeed, the industrial and international adventure that was the EnBW partnership was deeply anchored in the Group's philosophy and strategy. Deciding to leave was a tough call, not to say painful in some ways. At the same time, it looked like the right move, and I took it upon myself to leave at that moment when I had the feeling that the most likely outcome was that we might be relegated to an eternal role of passive minority shareholder, even more than in the past, or that the elections would bring changes in energy policy that would probably not be very promising for the company. The trade-off was made, the decision taken, and negotiations went fast. You can see the results: 7 billion euros in cash for the Group, and ultimately, without any bitterness. EnBW's situation is indeed very tense for the reasons that you are familiar with.

In contrast, the Italian matter was difficult because 11 years of negotiations are tough to handle. Yes, we had been in negotiations since 2000 with the Italians on a stake in Edison, with more or less tense episodes all along the way. And then, in the second half of 2011, we had the opportunity, at last, to take a strong position and control this company that is very prominent and

deeply rooted in the national landscape of Italy and not just locally. We still had to obtain the agreement of our partners. Here, again, we were in a strong minority position (about 49%). We had to obtain approval from the public authorities because we are a public service utility and, we only feel comfortable when we run our business without external dissension, in a climate of mutual understanding and acceptability And, finally, the economic conditions were right for these negotiations to go through. Earlier today, I paid tribute to Chairman ZUCCOLI, and I say very sincerely that we brought these negotiations to a successful conclusion, through the spasms of a rather tense economic situation, under terms that I believe are satisfactory for everybody. We are now in a country that is highly strategic for the reasons I gave earlier, a geostrategic country situated along the major avenues of energy supply covering the entire European continent, from Russian, the Middle East and Central Asia. In terms of financials, I believe that this majority shareholder position, which allows us to consolidate Edison in the EDF Group, will have important repercussions in terms of business development, in terms of industrial, professional and economic synergies, in terms of strengthening our teams, in terms of expanding in a location that is very important for our activities in the Middle East, Central Asia and southern Europe. I expect EDF to strength Edison's highly strategic position in the coming months.

So this was a move worth thinking about. And, of course, many other projects are under way. Among the major industrial partnerships in the works, we have mentioned those with major players, major French partners, but they aren't the only ones. We could also mention the major partners of far Eastern Europe, the major Asian partners, of course, whether historic or more

recent partners, who will make important contributions to the Group in the years to come. So it is this strategy, heavily focused internationally, focused on major industrial partnerships and major partnerships, that plays a prominent role in EDF's strategic vision and, hence, will keep the Group's senior management busy in the coming period.

And, of course, there are all the cycle-upstream developments that we hardly touched on, in production, in our major partnerships with major countries. We mentioned, not enough, but we did mention Great Britain, an extremely important country for the Group, and Central Europe, a region with very great potential. So we are certainly not lacking in opportunities that will form a very ambitious vision of what the EDF Group should be like in the future, which will mean a big boost to its valuation, value for our Group and, hence, for its shareholders.

So there are many conditions for success. We mentioned technologies and research. We mentioned human resources, which are absolute prerequisites to success. We mentioned organisations, developments to build up, and so on. These are the major issues that I expect to devote much of my time to, not counting commercial aspects and new forms of development. We talk too much about the physical aspect, meaning upstream in production and grids. We also have to integrate all downstream added value, meaning marketing, optimisation, trading, new marketing offers, structuring an innovative vision and new developments, energy enhancement, and new energies, which we hardly touched on, and so on. So, you see, there is a lot to do out there, and EDF is staking its claim. We will go into greater detail on strategic visions with you during more specialised work sessions. The Group is ambitious; the Group has the means of its

ambitions and it has set up meetings to present these prospects to you over a period that will necessarily stretch into the medium and long term and not just in the coming months. That does it for what I can tell you. Let's give the floor to Thomas for more specific questions.

Thomas PIQUEMAL

A question on the United States, on new nuclear in the United States... Yes, nothing has changed except gas prices, which have not gone in the right direction since the last time we spoke about them. Nothing has changed in a deregulated environment like Maryland, where energy prices go wherever they go, where there is steep volatility and shale gas. So prospects have receded of an operating investment in a project as ambitious as new nuclear. Even so, EDF has spent a lot of money in this area – we provisioned everything in 2010 – and our objective is not to lose what we have achieved: know-how and all our licence applications and so on. Incidentally, we are working in this area with AREVA, which is pursuing its efforts to obtain an EPR licence in the United States. Our objective is to cut spending, as it is fully expenses, and to do so every year without losing what we have already achieved, in particular our people's know-how.

You then asked me two financial questions: what is the impact on depreciation of a 10-year extension in the operating life of the French nuclear fleet? You are right to point out that our accounting plan is based on 40-year operating lives. So we sometimes read here and there of the risks of greater provisions if such or such an estimate or such or such deep-underground storage study was to be far above our estimates. So we do see the potential downside risks. Not actual

risks but potential ones. On the other hand, we rarely hear talk on the upside potential for our results if we obtain an extension from 40 to 50 or even 60 years. So thank you for asking this question. And now, let me answer it. There are, in fact, several effects. There is the effect on depreciation; there is the effect on provisions; there is also the effect on the full cost price, which was pointed out clearly in the government auditing agency report. Now, to your question. What I can tell you is that it is very significant. If we try to reason on the basis of current depreciation, that could mean up to 2 billion euros in value⁴. So you can see that this is a very high figure compared to our total depreciations, but, once again, I would not really like to see this figure used in your models, as we are in the process of fine-tuning all our calculations in this area, and we will have an opportunity, if you're interested, to go into greater detail.

Next, do we have other plans to optimise the dedicated assets, including real estate? Yes, we believe that diversifying more the dedicated asset portfolio is extremely important. The fact that we put 50% of RTE in there helped us to achieve a performance that was almost stable (-0.5) in 2011 in an environment that you know all about, with steep market volatility. We want to continue diversifying our portfolio in two directions: continue shifting towards infrastructure, but also in two new directions: real estate and equity operating investments. In this area, you perhaps took note of the plan to create an operating investment fund in nuclear-oriented SMEs, mainly

⁴ The €2bn mentioned are based on an economic approach of the full production cost mentioned previously, using the same reasoning of the "Energies 2050" Commission. As Thomas Piquemal stated during the subsequent press conference, EDF has started working on the future accounting impacts of life extension which affects both provisions and depreciation lines. This is a complex project, as its assessment is done on a plant by plant basis and within each series (900 MW, 1300MW and N4).

ones set up in France; and we have confirmed our intention to invest 50 million euros in this fund, and this fund is meant to be included, for example, in the dedicated assets. As for real estate, we have set aside a small portion of our dedicated assets for this asset class. If we decided to put our own assets in it, a change in the ministerial order will be required, and I cannot at all venture an opinion on this subject.

Thibaut MADELIN, Les Échos

Hello. I have a few questions. How far along are you and can you tell us more on the discussions with AREVA and CGNPC on the French-Chinese reactor project? AREVA seems to be insisting on its ATMEA reactor. How are discussions coming along, and what sort of timetable has been set for further negotiations? And, more marginally, would this future reactor be built in France? Regarding Fessenheim, the Énergies 2050 commission seems to agree with your strategy to extend the reactors' operating lives. Are works still in progress in Fessenheim? How far along are you? What is the precise timetable for work on Fessenheim? And one more thing: you spoke a lot about renewable energies. Is your goal to be the French leader in renewable energies? And a question for Mr. PIQUEMAL: could you give us an idea of free cash flow for the end of 2012? Thank you.

Henri PROGLIO

The discussions with AREVA, the partnership with AREVA are very close. The cooperation project, the partnership with the Chinese has gone very, very well. It is now complete, the tripartite

partnership between CGNPC, AREVA and EDF, aiming to develop a medium-capacity thirdgeneration reactor, as you know, of about 1000 MW... All these subjects have made considerable headway in a perfect atmosphere of cooperation. I will not say much more, as we would then get into a discussion of the technical details that are the purpose of this cooperation and this partnership, on the type of technology that will be adapted. In any case, that will be done in full cooperation with the two partners, and the project is now well under way on a concrete basis.

Regarding Fessenheim, yes, work is under way. As you know, reactor n°1 passed its 10-year inspection and has now been reconnected to the grid, and reactor n°2, as well. After getting authorisation and the green light from ASN, it is good to go for a 10-year period.

Reactor n°2 was subjected to a 10-year inspection, and it has also been reconnected to the grid, and I expect ASN's opinion rather soon. I am highly optimistic that this opinion will be positive and will therefore extend operations at Fessenheim for another 10 years. This is awaiting a final decision from ASN, but the reactors have undergone two 10-year inspections.

Next, post-Fukushima work has been proposed and is under way. This will obviously be completed in time, in accordance with ASN agreements and standards and with opinions that we ourselves submitted. That's what I can tell you on Fessenheim, which, once again, just like any other nuclear power plant, meets and will continue to meet ASN standards in all components that have been and are constantly enhanced, given that, as you know, this is a daily item on the agenda for both EDF and ASN.

We have set our sights high in renewable energies. We want EDF to be prominent in this sector and it is one of our key sectors and a part of the Group's strategy in its international presence, and it is therefore important that we have a footprint, a consistency and backing to important players who make this development possible.

I'll let Thomas answer your question on free cash flow.

Thomas PIQUEMAL

For 2012, the issue is the trend in financial debt. Free cash flow is the trend in financial debt. We expect financial debt to rise by about 1.5 to 2 billion euros compared to a base including Edison. I mentioned earlier that the impact of the Edison acquisition could be as great as 3.1 billion euros, due to the consolidation of 50% of its financial debt. Incidentally, I would like to take this opportunity, if you don't mind, to detail that figure, since I have an Internet question asking me to explain Edison deal's impact on financial debt. In fact, I showed you earlier that it was between 2.2 and 3.1 billion euros. It happens that for the first time we are consolidating 100% of financial debt, i.e., +2 billion euros. Thereafter, buying the high end and selling the low end has raised our debt by 200 million euros, given that, the high was, in all, 1.3 billion in investments, and the low was a sale at 1.1 billion, including debt. So, 2 + 0.2. And the impact of the takeover can be as great as between 0 and 900 million euros. This is the Internet question that I had.

Now, to get back to Mr. MADELIN's question, yes, we expect our debt to increase. As I said earlier, it could go to 1.5 billion euros, assuming that we have Exeltium simply because in 2012 as well, we

are going to increase our operating investments. We believe that our operating investments will be about 12.5 billion euros, so higher than in 2011, due to higher operating investments in nuclear power in France; due also to the final decision on operating investment, which is in the figures I just gave you for the United Kingdom, due to the launch of the Rybnik project in Poland – the Chairman mentioned this briefly earlier – and due also to continuing operating investments in grids. This is why our debt is likely to rise in 2012 compared to 2011.

I would simply point out that our objective is a net debt/ EBITDA ratio of below 2.5 and that, obviously will be met in 2012, as we will even be below 2.5, and even below 2.4, in 2012.

Maybe this is a good time to take some Internet questions:

- Question from Mr. DE BLIC on ERDF: What's the latest on your plans for external financing at ERDF and its negative impact on accounting EBITDA?

Indeed, at ERDF, we are suffering from the fact – it is not really accounting EBITDA – from the fact that in the tariff, while we are entitled to a 7.25% payment, from which third party financing is deducted . Work is in progress. I believe I said earlier that it is even more in progress as it must be done within the framework of the TURPE 4 negotiations, which have just begun. But I would like to stress the fact that this review of both the contractual set-up, the accounting plan and the tariff set-up is taking a long time and, naturally, at this point not all the results are in. What I would like to specify on this royalty amount is the considerable effort made in the last two years by the ERDF team to better control these royalties, which for the second consecutive year, in 2011 and 2010

compared to 2009, fell, thanks to better execution control, notably in contracts. I believe this is worth pointing out.

- Another question from Mr. DE BLIC: what impact will the Edison deal have on 2012 EBITDA? Has the 4 to 6% objective been adjusted for this impact?

Indeed, our 4 to 6% objective takes the Edison consolidation into account, assuming consolidation at the end of June.

- What is Edison's impact on our EBITDA?

As I said earlier: the objective for Edison is 1.2 billion euros for 2012, including 50% from the renegotiation of gas contracts. You simply have to adjust 2011 to make it comparable to what I just said for 2012 while adding 200 million euros in EBITDA for 2011.

- I answered Mr. MOULDER's question on Edison's financial debt.

- As for the question on tariff assumptions, I therefore cannot reply for 2012.

- Question from Mr. Martin YOUNG on ARENH price. I believe that Chairman Henri PROGLIO answered that earlier.

- A question from Mr. CHARLTON on CSPE and the CSPE amount that is due to us at the end of December. The answer is 3.8 billion euros, vs. 2.8 billion at the end of 2010.

- **Question from Mr. BECKER**, also on tariff trends and the link with the full cost of nuclear power. I believe that Mr. PROGLIO answered this one earlier.

- Question on what will happen after the elections. I don't think we will answer that one.

- **Question from Mr. MOULDER** again, of CreditSights: *"In the US, is there any opportunity for you to work with Exelon to grow your US nuclear business?"*

I don't think that Exelon has demonstrated a huge appetite for new nuclear, especially in Maryland, so we do not expect, at this stage, any cooperation in our project in Maryland with Exelon. Maybe in the future, in the nuclear new build field, with a long term view.

That does it for Internet questions.

Emmanuel TURPIN, Morgan Stanley

I wanted to go back to nuclear output and your Kd target. You mentioned a little earlier that you are sticking to the 85% target, but that you were waiting for discussions with ASN to possibly discuss an impact. This is the type of information and comments that can create a stir in terms of financial impact . Lowering Kd can have a big downside impact in the models. Could you precise what might possibly happen after the discussions with ASN? Would there be possible temporary reductions in Kd due to surplus post-Fukushima work in the 1-2-3-4 years to come? Or would there be a structural reduction, due, for example to restrictions on the pace of maintenance? And by what measures would you be able to offset a slightly lower Kd by an increase in the dispatching rate? Thank you.

Henri PROGLIO

It is always extremely difficult to answer questions on the impact of ASN decisions, as you must realise. Out of respect for ASN, it is hard to say that, whatever they decide, that will have no impact on anything! That seems to me to be on the order of provocation and, out of respect for ASN, I do not wish to comment in any way on its decisions. ASN has complete discretion and, of course, independence, in deciding what it will demand to operators. And when you say "operators in France", well they are all gathered around this table.

That our relationships with ASN are based on trust goes without saying, because we live on a daily basis with them. This is not like a tax audit that pops up now and then. It is an ongoing inspection. It is accordingly based on cooperation that is inevitably the work of professionals, of specialists, with no indulgence, no complicity, but a true daily working relationship. When we submitted our report to ASN, in accordance with what had been expected and what we had been requested to do, on the fleet's condition and on the recommendations that we could make, post-Fukushima, this report was immediately put online and you were able to read it, courtesy of ASN. When you read this report and then the ASN recommendations you see that there is a big convergence between the Group's professionals and ASN officials on this vision of nuclear safety.

Hence, when we present to you our ambitions and our objectives in operating investment, in fleet maintenance and productivity, and availability, we include everyday life and the natural anticipations of our understanding of what should be the trends in fleet productivity, while remaining in compliance.

So I don't want hazard an opinion that would be pure intellectual speculation. Perhaps Hervé would like to add something?

Hervé MACHENAUD

Perhaps to the specific question on whether ASN decisions will have structural consequences on Kd, the answer is no. The challenge is indeed the workload during these periods, a considerable workload, and that is the challenge that was expressed by Thomas PIQUEMAL earlier, that is, this phase of heavy operating investments requiring good organisation in order to enhance efficiency during outages. Our Kd problems in previous years were due basically to unplanned outages. What we are talking about here are planned outages. And, hence, the more work there is to do, the busier the workload is for planned outages in terms of content and, hence, in terms of volume, as well. But it is indeed with an outlook to reducing unplanned outages and, hence, ultimately returning to maximum availability.

Blanca RIEMER, MergerMarket

Mr. PROGLIO, Mr. PIQUEMAL, financial debt will rise by 1.5 billion in 2012. As it is, it did not fall much between 2011 and 2010. What is your strategy for reducing Group debt? Thank you.

Thomas PIQUEMAL

It is not so much the increase in financial debt in absolute terms that we have to look at, but rather compliance with key ratios. That's why I have given you a medium-term pledge to stay below this ratio of 2.5 times net debt/ EBITDA.

Moreover, I would like to recall that, in this Group debt, we had, at the end of 2011, a 3.8 billion euro CSPE receivable that earns 0, that we are carrying and that we are financing through this debt. So for us this subject is a major challenge. We have the best rating in the sector. We fully intend to hold onto it, and that's why I told you that the important thing is staying within the ratios and not so much the increase in financial debt in absolute value terms.

Question from the floor

Question on possible divestments

Thomas PIQUEMAL

You want to know if we are going to make any divestments. We have a trajectory of net capex that shows you that we undertook slightly more divestments in 2011 than in 2010 (400 million vs. 100 million). These are recurring divestments. For the others I won't make any comment. I believe that we now have a session especially for the press and that we can move onto other

questions, I believe.

Henri PROGLIO

I believe that we have covered about all the questions that were asked. Thank you very much. See

you soon. Thank you for being here. Thank you.