Sales & Highlights
First Quarter 2022

4 May 2022
Good morning, everybody. I am pleased to welcome you to this conference call. I will present you the sales of Q1 2022, starting with the main highlights. As usual, I will leave as much time as possible for the Q&A session.

**Key Operational Indicators – Q1 2022**

Let’s start with the key operational indicators of the first quarter.

French Nuclear output decreased by 7.5TWh or -7.6% at 91.7TWh. This is a consequence of lower availability of the Nuclear fleet mainly due to the impact of stress corrosion indications.

Nuclear output increased by 8.6% in the UK at 11.4TWh due to better availability of the fleet despite end of generation for Hunterston in January 2022.

Wind & Solar output reached 6.5TWh, a 28% increase versus Q1 2021 thanks to the commissioning of new capacity in 2021 and to favourable wind conditions in the UK and the USA in Q1 2022.

On the contrary, Hydro output in France decreased by 31.5% year-on-year due to significantly lower hydroelectric conditions during Q1 2022, whereas Q1 2021 was above average.

Carbon intensity decreased to 54g CO2/kWh this quarter from 56g CO2/kWh in Q1 2021.

Last indicator: Wind & Solar capacities under construction remained very high at 7.9GW gross at the end of March 2022.

**Q1 Highlights**

*Strengthening of the Financial Structure & Liquidity*

Let me now update you on some highlights of the period. At Group level we strengthened the financial structure and liquidity of the Group with a rights issue for €3.15 billion. We also signed three-year bilateral term loans for a total amount of circa €12 billion.

*Existing Nuclear in France*

In France the Board approved the launch of the second phase of the Grand Carénage programme for the period from 2022 to 2028. It will cover the first ten-year visits for the 1,300MW fleet and the studies and some works allowing the fleet to operate beyond 50 years. On the stress corrosion matter, investigations are underway. The Group has ongoing
exchanges with the ASN. Regis Clement, Deputy Head of Nuclear Generation Division, is with me today to answer any questions you may have on that matter.

United Kingdom

In the UK, the British government announced its target to triple nuclear installed capacity to 24GW by 2050. The Nuclear Energy Financing Act was enacted on 31 March, allowing the implementation of a Regulated Asset Base model for new nuclear projects.

Renewables

Renewables keep on developing, with the award of the seabed lease in New York Bight to develop offshore wind energy of 1.5GW with Shell, and of seven solar power plant projects in France for a total capacity of 110MW. The first offshore wind turbine in France was installed in April in Saint-Nazaire.

EDF Innovation to Net Zero: Launch of the Hydrogen Plan

As regards innovation, the Group has launched its Hydrogen Plan aiming at becoming a European leader in 100% low-carbon hydrogen generation by 2030 and at developing 3GW-growth of low-carbon hydrogen generation projects by 2030 worldwide.

Customers

As regards customers, the number of electricity, gas and services contracts has increased regularly since last September. In Q1 2022 it represented a positive 190,000 net variation versus a negative 126,000 in Q1 2021. Though it is a great long-term commercial news, it could have nevertheless a short-term negative impact on the EBITDA of the Group depending on the price of the sourcing needed.

ESG

‘Say on Climate’ resolution on the Group’s climate transition plan to contribute to achieve carbon neutrality by 2050 will be submitted to the shareholders’ assembly next week.

Impact of the Ukrainian Conflict

As regards the Ukrainian conflict, to-date, the Group has no exposure to Russian companies affected by international sanctions. It has no long-term gas contracts with Russian companies. Edison has a 1Bcm short-term contract for balancing purposes with Gazprom Italia which is expiring end-2022. It represents less than 10% of Edison’s supply and is not significant at Group level. The Ukrainian conflict has an indirect impact on the Group related to the increase in market price volatility penalising EDF in a context of significant buybacks in the markets and to some tensions in supply chain, as of today.

On top of that, some regulatory steps have a negative impact, in particular in Italy. The taxation of extra profit has a significant impact on Edison’s net results, as you can see on Edison price release this morning.

Q1 2022 Key Figures & Highlights

Let’s now review the sales for the first quarter which increased organically by +61% versus Q1 2021.
Power prices have increased strongly as compared to Q1 2021, leading to a positive price effect on sales in the four key European countries of the Group. At an EBITDA level, though, this impact is more than offset by significant buybacks at very high prices due to the level of output in France.

The second element: the resale of purchase obligations in France at much higher prices in Q1 2022 versus Q1 2021. This has no impact on EBITDA because of the CSPE mechanism and has a temporary positive impact on working capital.

The third element: the very significant rise in gas prices. As the sourcing cost has risen at the same time, the impact on the EBITDA of the Group remains limited.

To wrap up, sales increased very significantly year-on-year but only a small portion of it has an impact on EBITDA as most of these effects are almost passed through or because the sourcing of costs has increased in a similar way. I will come back to 2022 EBITDA later on.

**Q1 2022 Group Sales by segment**

This slide, number eight, shows the main variation of the sales by segment. As you can see, nearly all segments booked a positive variation, the most significant ones in value being France Generation & Supply, Italy and the Other Activities segments. I will focus first on the segments with the most significant variations in value, and then come back to this slide for the other segments.

**Sales France – Generation and Supply Activities**

Let’s start with France Generation & Supply activities. Sales increased by €4.1 billion, from €8.8 billion to €12.9 billion, a 46.4% organic growth.

Turnover increased mainly due to favourable price effect for an estimated €2.3 billion. This is explained notably by the rise of power prices on the market leading to an increase of the regulated sales tariff excluding taxes as well as increased selling prices to professionals. Nevertheless, decline in nuclear output and, to a lesser extent, in hydro generation, required buybacks at very high prices with negative impact on EBITDA.

Second block, a negative volume effect for less than €0.1 billion. Indeed, even though the balance in electricity contracts is positive since September 2021, its level is still below the one of Q1 2021.

The milder winter in 2022 represented a decrease in sales estimated at -€0.2 billion.

The Group presented a net purchasing position on the wholesale market for Q1 2022 which does not contribute to turnover but to the cost of goods sold, unlike Q1 2021 when it had a net selling position. This reflects the lower sales volume in 2022 due to the decrease in Nuclear and Hydro output. The impact on turnover was estimated at minus €0.2 billion.

The resale of purchase obligations increased by an estimated €1.5 billion in connection with the rise of spot prices. This is a pass-through mechanism and has no impact on EBITDA.
Last, the other effects improved by €0.8 billion. It is mainly linked to the energy sales by aggregator entities and to the gas supply sales, with limited EBITDA impact. For example, Agregio is a subsidiary of EDF with a portfolio of more than 4GW under contract in 2021, which optimises renewable energy generation, demand response and storage assets’ flexibility. The power prices increase has mechanically increased the value of their resales on the market.

**Sales France – Regulated Activities**

Sales of Regulated Activities increased by €0.4 billion, a 7.2% variation. It is mostly explained by a positive price effect estimated at €0.4 billion, due mainly to the increase in power and gas prices for island activities and Electricité de Strasbourg, and to the favourable revision of the TURPE 6 indexation on 1st August 2021. The growth in volumes distributed excluding climate effect also contributes to this positive evolution for an estimated €0.1 billion. On the other hand, the milder weather in Q1 2022 versus Q1 2021 had an estimated impact of minus €0.1 billion.

**United Kingdom**

In the UK, sales increased by €0.7 billion, a +26.6% organic variation which is mainly explained by the retail activity which benefitted from the sharp rise in electricity and gas prices. However, for the residential customer segment, the increase in energy prices was not fully passed on to the customers with a capped tariff. B2B volumes contributed positively year-on-year with a plus 9%-increase.

**Italy**

Italy’s sales increased by 3.5x from €2 billion to €7 billion. This is mainly explained by the gas activities with a €3.7 billion increase in sales in connection with the sharp rise in gas prices on the wholesale market. The impact on the EBITDA is nevertheless limited as the sourcing costs have increased meanwhile. The electricity business increased by €1.3 billion, as a consequence of the rise in electricity prices, with limited EBITDA impact, and of a positive volume effect on thermal generation following the increase in the clean spark spread.

**Other Activities**

Q1 2022 revenue for Other Activities segment is up 3.9x organically compared to Q1 2021.

The Group’s gas activities revenue increased significantly in the context of a sharp rise in gas prices on the wholesale markets for around €1.3 billion and better use of the Group’s capacity for around €1.0 billion, with a significant increase in the number of LNG cargo ships delivered to France. However, these effects are limited in terms of EBITDA.

EDF Trading delivered once again a strong trading and optimisation performance across all desks during Q1 2022 thanks to the high price and volatility market environment.
Other Segments

Let’s now have a look at the other segments.

The sales of EDF Renewables increased by an 11% organic growth. The electricity output amounted to 5.5TWh, a 30.4% increase driven by the commissioning of new capacities and more favourable wind conditions in the UK and the USA. Positive price effects in the UK also contributed to this growth.

Dalkia sales increased by €0.7 billion (or close to +50%) mainly due to the pass-through of the sharp rise in gas prices since the end of 2021, multiplied by five compared to the first quarter of 2021, with no equivalent on EBITDA. It also benefitted from the commercial dynamism in the UK and France.

The sales of Framatome slightly decreased by 3% in organic terms mostly linked to the decreased deliveries of fuel assemblies including uranium with limited impact on EBITDA. Moreover, revenue benefitted from better contribution from the installed base business, particularly in North America.

The ‘other international’ sales nearly doubled to €1.5 billion. In Belgium it increased by €0.6 billion, reflecting the strong increase in prices on the wholesale electricity and gas markets. However, the overall impact on EBITDA is limited as low output in the context of the unavailability of Chooz led to energy purchases at high prices. It also benefitted from the increase in gas and electricity volumes sold to professional and industrial customers and the growth in ancillary services. As for Brazil, sales increased by 20.9% organically mainly due to the 17.6% revaluation of the Power Purchase Agreement price in November 2021 in connection with the indexation to the gas price.

Group Sales – Synthesis

This slide presents another view of the positive change in sales focusing on the main effects.

First, a favourable price effect for €12.9 billion. This was mainly due to positive gas price effect for €6.1 billion, with limited impact on EBITDA, the positive increase in downstream prices in France for €2.3 billion, the resale of electricity from purchase obligations at higher prices for €1.7 billion with no EBITDA impact, and other price effects for €2.8 billion out of which €2.4 billion have a limited impact on EBITDA.

Second, a volume effect estimated at €0.5 billion. It is split between a gas volume effect for €1.1 billion, with limited EBITDA effect, a negative volume effect for the non-regulated activities in France for minus €0.8 billion, and other volume effects for plus €0.2 billion.

Overall, out of €13.4 billion sales increase, around €10.5 billion have no or limited impact on EBITDA and only around €3 billion have a material impact on EBITDA.

As France’s low output level leads to energy purchases at high prices, the overall EBITDA evolution is negative despite these very strong sales increase.
2022: A Challenging Year

This negative evolution of the EBITDA is in line with what we said during the full-year 2021 presentation. To update the bricks of the 2022 EBITDA trend, as you see on this slide, the cost of missing nuclear volumes buybacks is estimated at around minus €14 billion based on market prices on 21st April 2022 versus minus €16 billion mid-March.

2022 remains a very challenging year. The volatility in the markets remains extreme. The impacts of the Ukrainian conflict are difficult to quantify. So, in the current situation we will still not provide any guidance for 2022.

Ambitions 2023

The ambition for 2023 remains unchanged with a net financial debt to EBITDA ratio at around 3.0x, and adjusted net debt to adjusted EBITDA as per current S&P methodology between 4.5x to 5.0x.

This ends my presentation for Q1 2022 sales and highlights, and I now open the floor to your questions.
Questions & Answers

**Vincent Ayral (JP Morgan):** Good morning, Xavier, good morning, everyone. Two sets of questions. The first one is on the corrosion on the SIS pipes. Thank you for bringing a specialist on this important topic today. I would like to get more colour. What is the percentage of the fleet which has been reviewed to-date? When will the whole fleet be de-risked? We understand that it is a slow progressing and superficial issue. Could we consider the repairs during planned outages in the future? Really trying to get a sense of where we are going on this one and when we could have a floor.

The second set of questions is obviously post-elections. We know Hercule is dead but “vive Hercule” or Hector. Macron said basically in his programme that potentially he would consider the nationalisation of some sovereign assets. We clearly think here about nuclear & hydro, and BFM said basically that discussions with the [European] Commission would start as early as May. Clearly there is a follow-up on that and that is highly needed. The question I will ask you is a bit different from what you may expect. It is basically when we look at Hercule it is unlikely that its successor would be a perfect lookalike. So what in your views are a couple of key points that potentially would be changed. If you were to fly (?) internally (national politics) and with the European Commission especially in the current context with Russia. Thank you.

**Xavier Girre:** Thank you Vincent. Regis Clement will answer your first question about stress corrosion indications.

**Regis Clement (Deputy Head of Nuclear Generation, EDF):** Good morning, everybody. First of all, I would like to make an overall situation about how many reactors to-date are affected by stress corrosion phenomenon. To-date inspections and examinations have been carried out confirming the presence of stress corrosion in a section of piping in three reactors, Civaux 1, Chooz 1 and Penly 1. Investigations are ongoing for nine other reactors: Civaux 2, Chooz 2, Chinon 3, Cattenom 3, Bugey 3 and 4, Flamanville 1 and 2, and Golfech 1. Indications have been found during ultrasound inspection process but we are not yet to-date able to establish whether these are minor flaws in the composition of the steel, traces of thermal fatigue or stress corrosion. To be able to answer these kinds of questions, we have to carry out some expertises in laboratory and it is not yet done.

**Xavier Girre:** Thank you, Regis. As regards your second question Vincent, of course we will see. I do not have any specific insights about these questions. Just to remind you, as regards a potential nationalisation, there are two potential modalities of nationalisation in France. Either by law and in this case there is a law which organises the nationalisation of the company, as it was done 40 years ago, or via a public offer. As regards the potential reorganisation of the Group, it is also of course too early to tell. What is significant today is to set the proper regulation in order to enable the proper financing of the EPR-2 that have been announced by the French president on 10th February. As far as this matter is concerned, the funding scheme of the potential future EPR is currently under discussion between EDF and the French authorities. Then the French authorities of course will have to submit the case to Brussels and this is also part of your question. Our main objective is to secure the financing of this programme while preserving the Group’s ability to finance its development in other
businesses and in all our businesses. One of the topics under discussion is the regulatory framework which will guarantee a sufficient level of renumeration in relation to the investment and operating costs of the asset.

**Vincent Ayral:** Thank you. I just want to do a follow-up on the first question. We understand that there are some reactors which are being investigated but the question was what is the percentage of the fleet which has been reviewed and when do we plan, indeed what is the timeline, to have the whole fleet reviewed to be de-risked on the corrosion issue? To you Xavier, I understand that we need a new investment framework for new nuclear, like in the UK where they have a RAB base but the question is on the existing assets, the ARENH, with all its flaws is ending at the end of 2025. There is massive volatility in prices [?] on open markets in Europe. Do you believe there is still indeed a very strong need to regulate the existing fleet without talking about new build? Thank you.

**Regis Clement:** Back to the first question, we have forecast that all the reactors will be inspected by the end of the year 2023 and we will continue this programme during the scheduled maintenance outage cycles of all our reactors. It means that at this time more or less 20% of the fleet is undergoing examination and expertising programme. By the end of the next year, we will have carried out the inspections of all our reactors. It is due to the high level of expectation of requirements in terms of stress corrosion or welding programme survey and it is the reason why we will restart this kind of control related to this new topic of stress corrosion for all our reactors. Is this clear enough for your question?

**Vincent Ayral:** Yes, thank you.

**Xavier Girre:** As regards your second question Vincent, you are right. There are today three key questions. The first one is the regulation of the future EPR-2 which is necessary to enable the financing of these new assets. You are right, there are different options including a RAB option which is currently worked upon and of course which still requires a significant amount of work and then discussions between the French state and the European Commission.

Then you have the second question which is the regulation of the existing assets. You referred to the Hercule project which was based on the regulation of these existing assets by the reform of the current ARENH, the consequence of which was some demands by the European Commission which were very significant on the organisation of the Group and which led to limiting the integrity of the Group. The question that will have to be tackled is how to give visibility to the existing assets because today these assets of course are submitted to the very high volatility with very high prices but we also experienced some very low prices in 2016 if you remember that. How to assume to give visibility to these assets and how to give also a sustainable price. It is important to give visibility to investors and sustainability both to investors and to customers.

The third question that has to be dealt with is the market design of course because we all experience today the very high volatility, in particular the link between the gas price and the electricity price. As you know, the French government has been pushing for a reform also of the European energy market for several months to ensure that electricity prices paid by European consumers and companies are no longer so closely linked to gas price fluctuations. You have certainly noticed also that the European Agency for the Cooperation of Energy Regulators, ACER, believes that the current electricity market design is worth keeping, as
stated in their report published last Friday. This debate will I am sure take place about that but you are absolutely right. These three questions have to be tackled, financing of the EPR-2, legal framework of the existing assets and market design.

**Vincent Ayral:** Okay, thank you very much.

**Ajay Patel (Goldman Sachs):** Good morning and thanks for the presentation. A couple of questions please. Firstly, on the corrosion issue, when will we get a better assessment of what the capex will be to remedy the situation? Will we get an initial stab and then maybe more clarity as we go along? When will this become clear? Then on the investment side you have a huge opportunity to invest behind new nuclear and there are various models still being discussed but in concept is the aim here to be under a regulated structure? Who would be the person that would bear the risk of construction and the permissions?

**Xavier Girre:** Thank you for your questions. As regards your first question, for the time being it is too early to tell. As Regis Clement explained we are still in an early phase during which we are assessing the situation about stress corrosion. It is too early to give you a precise assessment about the capex that will be needed. Of course, we will update you when possible but today it is too early. Nevertheless, I would like to tell you that of course our financial guidance for 2023 includes the necessity to finance this stress corrosion issue. I also remind you that our guidance for 2023, as we highlighted, is also subordinated to the fact that there is no additional negative regulatory steps for 2023 as we are suffering for 2022. It is also linked to our nuclear generation goal for next year which is around between 300TWh and 330TWh.

As regards your second question, it is clearly a key point also because what is important for these regulations to be set in order to enable the financing of this new EPR-2 fleet, it is important to give visibility to the investors from the outset; not only from the start of the operations but from the start of the construction in order to avoid a massive impact on the balance sheet. The first point is to get pre-financing. The second point, of course you are right, is to set the rule of sharing the risk between the industrial operator and investors. The third point is to get a price which is at the end of the day sustainable and acceptable for all the stakeholders. These are clearly the three main stakes that are currently considered in the work that is currently being done about these future regulations. There are of course different options and different formulas so it is also too early but you are right, this is one of the three key points of these future regulations.

**Ajay Patel:** If you do not mind, if I could just have one follow-up on the corrosion issue. I know that we will not have a full assessment until the end of next year but in terms of narrowing down how much output can vary this year, could we see sizeable changes to the output guidance over the course of this year? When can we actually maybe have at least a narrowing down of what the programme is for this year? Is it just going to be left open for the whole year and we could see outputs all the way up to the end of the year which could change the workflow programme for these assets?

**Regis Clement:** One of the key points is that the ASN, the safety regulatory authority, will give their position we think by the end of May. It is a very important key aspect of the topic because related to the position of the safety authority we will be able to confirm or to adjust
the overall strategy of the topic. At this moment, it is the reason why Xavier Girre said that it was too early to give a capex aspect of the topic. At this moment, we are still in the examination stage of the topic. It means that there are solutions. We are working on solutions, means of repair or replacement. We are working on the industrial programme to be able to face the issue and we are very confident about the way to face this issue. However, we are still waiting for the key point of the safety authority’s position on the topic.

**Ajay Patel:** Thank you very much, that is very clear.

**Arthur Sitbon (Morgan Stanley):** Hello, thank you for taking my questions. The first question is we have seen that the French government’s decision to increase ARENH volumes to 120TWh in 2022 was challenged by unions. I was wondering if you could provide an update on that process, if you see any chance of that leading to a positive outcome for EDF and when we could hear some news on that.

The second question is actually on the visibility for the price of the existing nuclear fleet. You touched as well on another topic maybe somehow related which is the European power market design. I was wondering if you believe that solving the question of the European market design comes as a priority to the French government before looking into anything at the ARENH level or if the two projects can make progress simultaneously. That would be helpful, thank you.

**Xavier Girre:** Thank you for your question. As regards the additional volume that has been set as ARENH for 2022 there are different types of possible claims of this decision. One type of challenge is to challenge the decision itself and this can be done through an appeal to the state council, the ‘Conseil d’Etat’, on the grounds of an abuse of authority against the ruling modifying the volume and price of the ARENH. The second legal possibility is a request for compensation for the damage suffered by EDF based on the state’s liability without fault. On 1st April the unions and directors elected by the employees have announced their appeal to the state council to challenge the decree issued by the government which obliges EDF to increase the volumes of electricity sold at low prices to other electricity suppliers. We will of course see what the result of this process is.

As regards your second question, it is difficult to answer your question about what the priority is because the market design reform and the regulation of the existing assets are not exactly on the same level. The market design reform requires clearly an agreement at the European level. I think it is important to get such a reform in order to limit the link between the gas price and the electricity price. You see in particular for a country like France in which the electricity generated on the basis of thermal source of energy is also limited. However, of course this requires an agreement at the European level.

As regards the regulation of the existing fleet, as I said, it is important to get visibility and also to get sustainability. Today as we see, we have neither the first one nor the second one with a low visibility and a low sustainability, both of them are hampered by the volatility. It is important to have also a framework that gives both to investors and to customers a clear visibility and sustainability. As you see, the two questions are not in the same legal framework so we will see. However, there is no direct immediate legal link between them both.
Arthur Sitbon: Thank you.

Peter Bisztyga (Bank of America): Good morning, two questions from me. Firstly, just going back to this stress corrosion issue. Looking at the first five reactors where you identified the indication, the Civaux, Chooz and Penly. Looking at the outages for those, they seem to vary anywhere between five months for Civaux 1 to over a year for the others. I was wondering if you could elaborate why the length of the outages differs between the plants and which ones we could use as a benchmark for what outages might look like at the other reactors where you are doing these investigations at the moment. Then a question on the Hinkley Point C – and apologies if you mentioned this at the beginning because I missed the very start of the call. When can we expect an update on the timeline and the cost of that project? I was wondering if you could say anything today about your experience of supply chain issues and raw material cost inflation. Have you locked in a significant number of the components or any kind of flavour you could give us would be useful?

Regis Clement: Yes, at this time one aspect of the industrial programme is there is no standard timing for compliance restoration work. It will really depend on each reactor situation. Regarding the situation of Civaux 1 and Chooz 1 for example, we are facing some differences in between the situation of the reactors. It will be the same situation for all the reactors at this time which are facing stress corrosion issues. There is no standard timing approach and it will really depend on the technical solutions that are implemented in each individual case. It is not a generic approach to our fleet, and as you have mentioned the situation is quite different between each reactor.

Xavier Girre: Thank you, Regis. As regards HPC, we had indicated earlier this year that a review is currently underway. We give also some elements on one of our slides on page eight on which we highlight the fact that the risks on the schedule and cost at completion have increased since the date that we had announced in January last year due to the impact of Covid, the impact of Brexit, the impact of lower civil productivity on the ground and of course the impact of the Ukrainian conflict and some supply chain disruption, for HPC and for the suppliers of course of HPC. On top of that the project is impacted by materials shortages and inflation. That is why the comprehensive review is currently underway about schedule and cost. It is expected to be completed in this quarter, the second quarter of 2022, and expected to be finalised in the next weeks.

Peter Bisztyga: That is very clear, thank you.

Sam Arie (UBS): Hi, good morning, everybody and thanks as always for this presentation. I have a few questions but they are all quite short answers so I hope you do not mind if I just run through a couple of things. Firstly, on the reactors and the inspections, you said you have three reactors where issues were confirmed and nine inspections in progress. Can you just remind me how many reactors have completed an inspection since you first found this issue in December but the inspection was completed and you found no issue at all? How many reactors have had a clean bill of health at this point?
Then secondly on guidance, obviously you have put out your production guidance in February for this year and next year and I think everyone understood that was a best estimate with quite uncertain information at the time. Just taking everything in the round it is now May and my question is over the last 2-3 months do you feel more or less confident in your initial production estimates based on what you have learned in the last couple of months?

Number three is quickly on hedges, if you could tell us how much French power you have sold forward for next year. The reason to ask is just so we understand if there is any headroom at all to allow for any negatives on production versus guidance now or would you have to go back into buybacks if there was any downgrade to next year's guidance?

Lastly on financing looking at your page 16 today and your current EBITDA scenario for 2022, are you happy now with what you have with the rights issue done and the loans and credit facility set up? If we were in the scenario on page 16 would you need any more financing arrangements? Thank you. Sorry it is quite a few different things but hopefully it is clear.

**Regis Clement:** The examination process is still in progress. It means that even on the three reactors on which we have already confirmed the presence of stress corrosion in a section of piping, we still continue to examine Civaux 1, for instance, Chooz 1 and even Penly 1. It will continue in the related root cause analysis programme but it has been taken at this time so I can confirm that we are close to the end of understanding the situation of stress corrosion. It means that for Civaux 1, Chooz 1 and Penly 1, most of the examination programme has been already carried out. We are going from complementary examination but not that much at this time. For the other nine reactors it is at this time to-date for Chinon B3 for example these days we are making examination. Bugey 3 and Bugey 4 it will start in the next few days. Flamanville 1 and 2 are undertaken at this time. Golfech 1 is already carrying out so it is a progressing process of examination and we are not yet at the end.

**Sam Arie:** Can I just jump in there? That is so helpful but can I confirm there are no reactors where you have finished an inspection and found no problem at all?

**Regis Clement:** I confirm that at this time we have not yet finished any inspection programme, even if we are very close to the end in terms of Civaux 1, Chooz 1 and Penly 1.

**Sam Arie:** Okay, very clear. Thank you on that first one.

**Xavier Girre:** As regards your second question about nuclear generation guidance, our guidance for nuclear generation is 295-315TWh for 2022 and 300-330TWh for 2023. I fully confirm these goals and with the same caveat or prudence that we already highlighted, which is that we are still, as Regis Clement explained, in an early phase in the assessment of our stress corrosion situation. We are still waiting for ASN’s decision also about this programme. I am neither less confident nor more confident than what I was in February but at this stage and on the basis of all the information we have I fully confirm these goals, these hypotheses that we have integrated into our communication.

As regards 2023 you ask me about what are our hypotheses for EBITDA in 2023. Of course, as I already highlighted the first key hypothesis is this nuclear generation range of 300-330TWh, which is circa 10TWh more than in 2022 if we take the middle of both ranges. There would be therefore less volumes to be bought back on the market for 2023 and at the significantly lower price than for 2022. Also we expect a further increase of the regulated
tariffs that we consider could be capped at 4% for 2023 by the government, like it did for 2022. It is just a hypothesis in our model, not anything more than that. It is just a hypothesis but on the other hand market offers and contracts should keep on increasing as forward prices for 2023 are currently on average at a higher level than the ones for 2022. These are the hypotheses that we have cooked into our guidance for 2023.

I want also to highlight that we have taken the hypothesis that the level of ARENH for 2023 will remain at 100TWh without any government new measures on ARENH and that the level of 2023 nuclear output will be once more in the range of 300-330TWh. These are the key hypotheses that we have taken in our 2023 guidance.

As regards liquidity we have as you know set and organised immediately the rights issue for €3.15 billion. We have also negotiated term loans for circa €12 billion. As a whole even if liquidity requirements have significantly increased due to the current extreme volatility on the commodities market which is affecting all market participants, we are clearly managing the situation through the two elements that I referred to, the rights issue and term loans. We are also managing the situation through letters of credit, parent company guarantees, intra-group financing provided to EDF Trading. You will remember also that EDF had a €22.6 billion liquidity position at the end of 2021, to which you can add around €13 billion in undrawn credit facilities also at the end of 2021. If you consider that plus all that we have done since the beginning of this year clearly, we have today a solid liquidity position. I think this answers all your questions.

**Sam Arie:** I think it does. Thank you very much.

**Xavier Girre:** Thank you very much for all your questions. Thank you for your presence and I wish you a very nice day. See you soon, bye, bye.