Letter dated 19 June 2020 from the Permanent Representative of Egypt to the United Nations addressed to the President of the Security Council

Upon instructions from my Government, I have the honour to transmit herewith a letter dated 19 June 2020 from the Minister for Foreign Affairs of the Arab Republic of Egypt, Sameh Shoukry, addressed to the President of the Security Council, drawing the attention of the Council to recent developments related to the Grand Ethiopian Renaissance Dam (see annex)*. The situation poses an imminent threat to international peace and security and requires the immediate consideration of the Council.

I would be grateful if you could kindly circulate the present letter and its annex as a document of the Security Council.

(Signed) Mohamed Edrees
Permanent Representative of Egypt to the United Nations

* Circulated in the language of submission only.
Annex to the letter dated 19 June 2020 from the Permanent Representative of Egypt to the United Nations addressed to the President of the Security Council

MINISTER
OF FOREIGN AFFAIRS

 Cairo, June 19, 2020

Excellency,

I am writing to Your Excellency, once again, in relation to the Grand Ethiopian Renaissance Dam (GERD), which, as I noted in my letter of May 1, 2020, is a matter of the greatest consequence for Egypt, and which continues to gain urgency as Ethiopia remains insistent, as evidenced by public pronouncements, including by H.E. the Prime Minister of Ethiopia on June 8, 2020, on unilaterally commencing the filling of the GERD during the rainy season in the upcoming month of July in contravention of its international legal obligations.

Given the gravity of the situation, and in light of Ethiopia’s continued intransigence, which potentially constitutes a threat to international peace and security, I am writing to Your Excellency to request that the U.N. Security Council address this matter urgently. Egypt has elected to bring this matter to the attention of the U.N. Security Council after having explored and exhausted every avenue of reaching an amicable solution to this situation by concluding an agreement on the GERD that preserves and promotes the rights and interests of the three riparian states of the Blue Nile.

Contrary to the assertions included in the letter directed to Your Excellency by H.E. the Minister of Foreign Affairs of the Federal Democratic Republic of Ethiopia on May 14, 2020, the failure of negotiations on the GERD is due to Ethiopia’s persistent policy of obstructionism and prevarication.

I will not, in this letter, engage in a detailed refutation of the misrepresentations and distortions of fact included in the letter of Ethiopia’s Minister of Foreign Affairs; that is the purpose of the memorandum attached herewith (Annex I). Rather, I wish to highlight the reality that Egypt has engaged, in a spirit of good faith, for almost a decade, in innumerable rounds of negotiations on the GERD. These efforts, however, have not led to fruition due to Ethiopia’s unilateralism and its desire to establish a fait accompli on its downstream co-riparians.

Throughout this process, we sought a win-win solution that preserves and promotes the rights and interests of the three riparian states of the Blue Nile. We worked tirelessly to reach an agreement that fulfills Ethiopia’s developmental goals while minimizing the adverse effects of this mega-dam on downstream riparian states. In a further demonstration of its genuine political will to reach a mutually beneficial agreement, Egypt invited neutral third parties to participate in the negotiations and expressed its readiness to accept any compromise formulas or agreements proposed by those impartial parties. Indeed, in keeping with its good will, Egypt accepted and initialed, on February 28, 2020, an agreement on the filling and operation of the GERD, which was prepared under the auspices of the United States of America, and with the participation of the World Bank (Annex II).
Regrettably, however, Ethiopia undermined these efforts to reach a mutually beneficial agreement on the GERD. Instead, Ethiopia continues to insist on unilaterally commencing the impoundment of waters in the GERD reservoir. This would be deeply disconcerting politically, as it would represent an alarming attempt by Ethiopia to establish and exercise unfettered control over a vital transboundary river. Moreover, this would constitute a material breach of the Agreement on Declaration of Principles on the GERD that was concluded between our three countries on March 23, 2015, which stipulates that the filling and operation of the GERD must be undertaken pursuant to the guidelines and rules to be agreed between Egypt, Ethiopia, and the Sudan (Annex III).

Ethiopia’s equivocation and implacable posture also led to the failure of the latest rounds of negotiations that were held upon the initiative of the Republic of the Sudan, and which lasted for several weeks. While Egypt reengaged in these talks to, once again, demonstrate its genuine commitment to reach an agreement on the GERD, Ethiopia adopted a legally unpalatable and technically unconstructive attitude throughout these negotiations. It refused to conclude an agreement that would be binding under international law, and proposed to adopt guidelines and rules the content of which it would be entitled to adjust at its discretion. It stated that any document agreed upon between the three countries would not define the threshold of significant harm, thereby effectively relieving itself from any obligations towards its downstream co-riparians, which are protected, under international law, against significant harm inflicted upon them by upstream riparians. Ethiopia also opposed the application of effective mitigation measures to address the impacts of droughts and prolonged droughts on downstream communities, which exposes Egypt and Sudan to the ravaging socio-economic effects of these severe hydrological conditions. These discussions, during which Ethiopia’s positions and proposals were expressed and presented, were conducted in the presence of impartial observers who attended these deliberations. (Ethiopia’s proposed texts are attached herewith – Annex IV).

This Ethiopian position reflects its desire to fill and operate the GERD without any meaningful protections that would minimize the adverse effects of this dam on downstream states, and to consecrate an unregulated and unrestrained right to construct future projects upstream of the GERD and to unilaterally utilize the waters of the Blue Nile, even if to the detriment of the rights of downstream riparian states.

For Egypt, a country of more than a 100 million souls that is entirely dependent on the Nile River for its existence, such a situation would be intolerable. Moreover, it is deeply troubling that the GERD is being constructed without having completed the requisite studies on the hydrological and environmental impacts of this dam, and without the necessary guarantees to ensure its structural safety, which threatens over 150 million Sudanese and Egyptian citizens. The use of the resources of the Nile River ought to be governed by the applicable rules of international law and pursuant to agreements that preserve and promote the rights and interests of all riparian states, and must not be subjected to the unilateral control of Ethiopia.
MINISTER
OF FOREIGN AFFAIRS

Excellency,

While Egypt remains committed to exerting every effort to reach a fair and balanced agreement on the GERD, I must emphasize that the U.N. Charter entitles U.N. Member States to protect their vital national interests and ensure their survival. Filling and operating such a mega project as GERD without an agreement and in the absence of any mutually agreed safeguards that protect downstream riparians against the potentially significant harm that may be inflicted upon them constitutes a clear and present danger to Egypt, which could have serious repercussions that threaten international peace and security.

Accordingly, I am writing to Your Excellency pursuant to article 35 of the U.N. Charter which entitles U.N. Member States to alert the Security Council to any situation that might lead to international friction or that is likely to endanger the maintenance of international peace and security. I am also requesting that the U.N. Security Council urgently consider this matter at the earliest possible opportunity under the agenda item titled Peace and Security in Africa. Egypt is keen to be invited, pursuant to Rule 37 of the Provisional Rules of Procedure of the Security Council, to participate in the meeting of the U.N. Security Council which shall discuss this matter.

It is incumbent on the U.N. Security Council, and the international community, to urge Ethiopia to act as a responsible stakeholder, by concluding a fair and balanced agreement on the GERD and by not undertaking unilateral measures in relation to this dam, and to abide by its international legal obligations and the principles and rules of international law.

Please accept, Excellency, the assurances of my highest consideration.

Sincerely,

Sameh Shoukry
Minister of Foreign Affairs
Arab Republic of Egypt

H.E. Ambassador Nicolas de Rivière
Permanent Representative of France to the United Nations
ANNEXES
ANNEX I
The Grand Ethiopian Renaissance Dam
Setting the Record Straight
The Grand Ethiopian Renaissance Dam
Setting the Record Straight

This memorandum rebuts some of the distortions of fact, misrepresentations of reality, and untruths that strain credulity that are included in the Aide Memoire circulated by the Ministry of Foreign Affairs of the Federal Democratic Republic of Ethiopia regarding the Grand Ethiopian Renaissance Dam (GERD).

Unilateral Filling of the GERD and Sovereignty over the Blue Nile

**Ethiopian claim:** “Ethiopia does not have a legal obligation to seek approval of Egypt to fill the Dam”, “the DoP states that the first filling of the Dam will be carried out in parallel with the construction”, “the filling of the Dam is part of the construction”, and “Ethiopia has made it clear from the very beginning that construction of the GERD is based on its sovereign and legitimate right to use the Nile waters”.

**Fact:** The construction and the filling are two entirely different processes, and Ethiopia is duty-bound under article 5 of the DoP and under general international law to reach an agreement with its downstream co-riparians on the rules governing the filling and operation of the GERD before the commencement of the filling.

1. The 2015 Agreement on Declaration of Principles (DoP) is abundantly clear. It distinguishes between the construction of the GERD and the filling of its reservoir. Ethiopia is allowed to proceed with the construction of the GERD while the three states party are negotiating on the rules governing the filling and operation of the GERD.

2. The filling of the GERD has been subject to intensive negotiations between the three riparian states. It strains credulity to assume that Ethiopia has, for several years, been discussing the filling plan of the GERD, and the drought mitigation measures that must be applied during the filling, merely out of neighborly generosity. The three parties are engaged in negotiations on the filling because it is a legal obligation under international law. That fact alone refutes the illogical assertion by Ethiopia that the filling is part of the construction.

3. Egypt never contested Ethiopia’s right to utilize the Nile River in accordance with the applicable principles of international law. However, it is disappointing and disheartening that Ethiopia has, repeatedly, raised the banner of sovereignty in discussion on the GERD as though it were a wholly internal river. International watercourses are not subject to the sovereignty and exclusive control of a single riparian and Ethiopia is obliged not to use the Nile water in a manner that causes significant harm to the downstream states.
Ethiopia’s Proposal on the First Stage Filling of the GERD

**Ethiopian claim:** “Ethiopia on 10 April 2020 made an offer for Egypt and the Sudan to agree on first stage filling of the GERD (up to 595 meters above sea level). This proposal was made in line with the understanding reached with Egypt and the Sudan”.

**Fact:** Ethiopia’s letter of April 10, 2020 did not provide a reasonable solution.

1. The facts speak for themselves. The following is an excerpt from a letter addressed to the President of Egypt and the Prime Minister of Sudan from the Prime Minister of Ethiopia:

   “Accordingly, I propose the signing of the Guidelines and rules for the first filling of the GERD up to 595 meters above sea level based on the outcomes of our negotiations over the years … We will communicate the text of the Guidelines and Rules on the first stage filling as soon as I receive your Excellencies agreement with my proposal”

2. Essentially, this letter suggested that both countries accept a proposal the content of which would be communicated to them only after they had accepted it as a matter of principle. This proposal covers only the initial stage of the filling. Not only is this inconsistent with the DoP that requires the three states to reach an agreement on both the filling and the operation of the GERD, it would also leave the two downstream states beholden to Ethiopia’s goodwill on whether or not to reach an agreement on the subsequent stages of the filling and on the operation. Moreover, it is not clear whether Ethiopia’s proposal included other essential elements of an agreement on the GERD, including a technical coordination mechanism to ensure accurate data sharing or a dispute resolution mechanism.

3. In short, Ethiopia proposed that Egypt blindly accept a technically deficient partial proposal that ensures Ethiopia the political benefits and accolades of an agreement without providing Egypt any protection against significant harm.

**Historic Rights, Existing Uses, and ‘Colonial’ Treaties**

**Ethiopian claim:** “Egypt seeks to impose, directly or indirectly, its self-claimed ‘historic right and current use’ on the Nile riparian countries”, and “Egypt’s past and present-day water use is an outcome of colonial based water treaties to which Ethiopia is not a party”.

**Fact:** Egypt was never a colony, and all of the Nile waters agreements to which Ethiopia is bound were concluded when it was an independent, sovereign state. The GERD must be governed, as stipulated in the 2015 DoP, by the applicable principles of international law, which require preventing the causing of significant harm to existing water uses.

1. All treaties that are in force between Egypt and Ethiopia were signed by Ethiopia as an independent, sovereign state, some of which were cited by Ethiopia in recent litigation in other regional contexts. These include the 1902 treaty signed by Emperor Menelek II, in which
Ethiopia committed “not to construct, or allow to be constructed, any works across the Blue Nile that would arrest the flow of their waters into the Nile”, which Ethiopia continues to contravene. Ethiopia is also bound by recent treaties such as the 1993 Framework for General Cooperation between Egypt and Ethiopia and the 2015 Declaration of Principles on GERD (Attached).

2. Ethiopia is also bound to uphold the customary rules of international law, including the obligation not to cause significant harm and the principle of equitable and reasonable utilization. The obligation not to cause harm is designed to minimize the adverse effects of new projects, such as the GERD, on current and existing water uses. Also, existing uses are one of the factors that are used as the baseline to determine whether a new or planned water project is reasonable and equitable. Ignoring existing and current uses is technically impracticable, inconsistent with international law, and politically untenable.

3. The negotiations on the GERD relate to a single project on a single tributary of the Nile River. Water sharing and water apportionment are simply inapposite in these negotiations. Rather, these negotiations are intended to fill and operate the GERD in a manner that provides Ethiopia with the equitable benefits of this project without inflicting significant harm on downstream states. Bringing up issues relating to so-called ‘colonial’ treaties is a political ruse designed to distort facts and deflect attention from the real issue, which is the need to reach a balanced agreement that preserves the interests of all three riparian states.

The Comprehensive Framework Agreement (CFA)

**Ethiopian claim:** “The problem may only be solved if all riparian states are committed to reach a just deal based on accepted principles on the use of transboundary watercourses as clearly enshrined under the CFA,” and “Egypt should also reconcile with the new realities and ratify the CFA”.

**Fact:** The CFA is simply irrelevant to the GERD negotiations.

1. None of the downstream riparian states that share international watercourses with Ethiopia (South Sudan, Sudan, and Egypt) are either signatories to or parties of the CFA. As such, the CFA is entirely extraneous to the GERD negotiations. Moreover, the GERD negotiations relate to a single project on the Blue Nile, which means that the White Nile and its riparian states are not affected by this dam. This further confirms the irrelevance the CFA in this context.

2. Ethiopia’s incessant inclusion of the CFA in conversations on the GERD demonstrates its desire to impose a fait accompli on its downstream co-riparian states that have not acceded to this divisive agreement that, even after ten years since it was opened for signature, has not entered into force. Moreover, it is noteworthy that Ethiopia, which claims to believe in multilateralism and regional cooperation, never brought the GERD under the umbrella of the Nile Basin Initiative (NBI). Invoking the CFA and referring to the NBI is a diversionary tactic that seeks to distract negotiations by raising irrelevant and conflictual matters.
The Washington Agreement

**Ethiopian claim:** The agreement reached in Washington D.C. is “severely limiting the capacity of the dam to generate electricity,” “forming rules that are impractical for dam filling and operation,” “inhibiting the rights of present and future generations by curtailing upstream development,” “undermining Ethiopia’s sovereign right to operate its own Dam,” and “proffering water sharing agreement sidelining the CFA”

**Fact:** These Ethiopian assertions relating to the Washington Agreement that was prepared by impartial parties, namely the United States and the World Bank, are fanciful.

1. The agreement reached in Washington D.C., which was initialed by Egypt on February 28, 2020, guarantees that Ethiopia will expeditiously fill the GERD, in accordance with a filling plan proposed by Ethiopia and generate hydropower sustainably in all hydrological conditions. Even in the worst prolonged droughts, Ethiopia is guaranteed that it will produce no less than 75-80% of the hydropower production capacity of the GERD.

2. The operational rules in the Washington Agreement are virtually those proposed by Ethiopia. These rules ensure that the GERD will remain at its optimal operational level at which it will retain around 50 billion cubic meters of water in its reservoir. These rules also include drought mitigation measures that ensure the sustainable generation of hydropower from the GERD while assisting downstream states to minimize the ravaging effects of droughts.

3. The Washington Agreement recognizes Ethiopia’s right to undertake water projects upstream of the GERD in accordance with the applicable rules of international law. The fact that Ethiopia considers this provision problematic is revelatory of its true intentions, which are to codify an unregulated and unrestrained right to exploit the riches of the Nile River without the slightest consideration for the impact this might have on downstream riparians.

4. Unless Ethiopia believes that effective coordination and streamlined data sharing that ensures transparency and promotes cooperation would undermine its “right to operate its own Dam,” the Washington Agreement enables Ethiopia to operate the GERD and reap the benefits of this project while protecting downstream states against significant harm.

5. The Washington Agreement explicitly states that it is not a water sharing agreement among the riparian states of the Blue Nile. Therefore, the Ethiopian claim that the Washington Agreement is a water sharing arrangement is fanciful and unsupported by the plain text of the agreement.
The Socio-Economic Studies and Environmental Impact Assessment of the GERD

**Ethiopian claim:** Ethiopia has “implemented the recommendations of the IPoE” and Egypt delayed the process of conducting studies on the impact of the GERD “by over two years by blocking transmission of the comments of the three countries to the consultant.”

**Fact:** Again, these Ethiopian claims are entirely untrue.

1. It is a deeply troubling fact that a mega-dam such as the GERD is being built without any studies on its socio-economic effects and without the environmental impact assessments. A state constructing a mega project such as the GERD is duty bound under international law to undertake these studies. However, Ethiopia commenced construction without evaluating the transboundary effects of this dam and, in the subsequent years, effectively torpedoed every attempt to jointly conduct these studies with its downstream riparians, thereby violating the recommendations of the IPoE.

2. In the absence of these studies there is no scientific evidence to define significant harm. Preventing harm is impossible without employing existing uses as a baseline to measure the impact of a dam and quantify its harmful effects. It is implausible for Ethiopia to assert that its filling and operation plan will not cause significant harm to Egypt. This determination cannot be made unilaterally and without conducting the studies or reaching an agreement on the rules of the filling and operation of GERD. Making such a unilateral determination defeats the purpose of the studies and therefore the DoP as a whole. It is also not in line with international precedents regarding projects with transboundary impacts such as the GERD.

3. Ethiopia undermined the process of conducting the studies on the effects of the GERD. It did not accept the inception report prepared by an international consultant, the French firm BRLi, that was appointed jointly by the three countries due to its rejection of the baseline scenario in that report. This inception report righteously defined the baseline for measuring the impact of the GERD as “the existing Eastern Nile system (without GERDP) down to and including the Old Aswan Dam, using existing operation rules”. This text does not envision multiple baseline scenarios and does not envision including the GERDP in the baseline scenario.

4. The studies on the impact of the GERD were not conducted for one simple reason: Ethiopia, which at the time held the chairmanship of the Tripartite National Committee, refrained from sending the comments and remarks of the three states to the consultant. During the Nine-party Meeting in Addis Ababa on May 15, 2018, it was agreed to forward “a compilation of queries and observations concerning the Draft Inception Report, which has not gained consensus within the TNC, and do not constitute any instructions to the Consultant, and are for the provision of reply from the Consultant”. Ethiopia, as TNC Chair, was supposed to send an email drafted by the three countries containing these queries and observations. To date, Ethiopia has failed to do so. It is very unfortunate
that two years have elapsed since then, and we call upon Ethiopia to fulfil this obligation immediately. (Copies of several letters sent by Egypt to Ethiopia in this regard are attached)

**Ethiopian Water Resources and Water Scarcity in the Nile Basin**

**Ethiopian claim:** “Ethiopia is more prone to critical water scarcity and stress than Egypt”

**Fact:** Ethiopia is a water rich country that mismanages its water resources, while Egypt is a water scarce country that is entirely dependent on a single source of water that it uses with very high systemic efficiency.

1. Ethiopia has 12 major basins, 12 large lakes, and differently sized water bodies. It has a surface water potential that was identified and estimated in different integrated river basin master plans as amounting to 124.4 billion cubic meter (BCM). Moreover, Ethiopia receives over 936 BCM of annual rainfall. Ethiopia’s mismanagement and inability to harness these abundant resources has led to tragic human suffering.

2. Egypt is entirely supportive of the right of Ethiopia, and other Nile riparian states, to development and to enjoy the benefits of the Nile River. Egypt, however, believes that such a right must be exercised equitably and reasonably and in accordance with the applicable rules of international law that, *inter alia*, protect downstream riparians against significant harm. This is especially necessary given the fact that Egypt is a country of over 100 million souls that live on approximately 4% of its territory and that suffers from acute water scarcity and is entirely dependent since time immemorial on the Nile for its livelihood and survival.
3 - TREATIES BETWEEN GREAT BRITAIN AND ETHIOPIA AND BETWEEN GREAT BRITAIN, ITALY AND ETHIOPIA ON THE FRONTIERS BETWEEN ANGLO-EGYPTIAN SUDAN, ETHIOPIA AND ERITREA,

(Signed in Addis Ababa on 15 May 1902).

***

3-A - TREATY BETWEEN ETHIOPIA AND GREAT BRITAIN ON THE DELIMITATION OF THE FRONTIER BETWEEN ETHIOPIA AND SUDAN.

(Signed in Addis Ababa on 15 May 1902)

(Ratifications exchanged in Addis Ababa on 28 October 1902)

His Majesty King Edward the VII by the grace of God, King of the United Kingdom and Ireland and British Overseas Dominions, Emperor of the Indies, and His Majesty Menelik II, by the grace of God, King of Kings of Ethiopia, encouraged by the desire to confirm friendly relations which exist between the two Powers and to establish the frontier between Sudan and Ethiopia, and His Majesty King Edward having appointed Lt. col. John Lane Harrington, Commander of the Royal Order of Victoria Agent Plenipotentiary to His Majesty King Menelik II, King of Kings of Ethiopia, vested with full powers in due form, and His Majesty Emperor Menelik, negotiating in his own capacity as King of Kings of Ethiopia hereby agree and accept that the following articles link them, their heirs, and their successors:

ARTICLE I

The frontier between Sudan and Ethiopia, accepted by the two Governments shall be as follows: the line drawn in red ink on the map attached in duplicate to this Treaty extending from Kher Um Hagar in Gallabat, to the Blue Nile and
the Baro, Pibor, and Akobo in Melile, and thence to the intersection of latitude 6° North with longitude 35° east (Greenwich Meridian).

ARTICLE II

The frontier as defined in article 1 shall be delimited and marked on the ground by a Joint Frontier Commission which shall be appointed by the two high contracting parties which shall provide information to their subjects after the delimitation.

ARTICLE III

His Majesty Emperor Menelik, King of Kings of Ethiopia, shall undertake, before the Government of Her British Majesty, not to construct and authorize the construction of any structures on the Blue Nile, Lake Tana or Sobat which would have the effect of obstructing the flow of their waters into the Nile, except in agreement with the Government of Her British Majesty and the Government of Sudan.

ARTICLE IV

His Majesty Emperor Menelik II, King of Kings of Ethiopia shall undertake to grant to the Government of Her British Majesty and the Government of Sudan, the authorization to choose, close to Itang on the Baro, a portion of territory with not more than 2,000 metres along the river and an area not exceeding 400 hectares, which shall be given to the Government of Sudan in order that the latter may administer and occupy it as a commercial station as long as Sudan remains governed by the Anglo-Egyptian Government: It shall be understood between the two high contracting Parties that this territory thus granted, shall not be used for political or military purposes.

ARTICLE V

His Majesty Emperor Menelik II, King of Kings of Ethiopia, shall grant to the Government of Her British Majesty and to the Government of Sudan, the right to construct a railway line across the Abyssinian territory linking Sudan to Uganda.

The layout of the railway shall be established by a reciprocal agreement between the two high contracting.

The present treaty shall come into force as soon its ratification, by Her British Majesty shall have been communicated to the Emperor of Ethiopia.
In faith where of, His Majesty Menelik II, King of Kings of Ethiopia, on his own behalf, and Lieutenant-Colonel John Lane Harrington on behalf of his Majesty King Edward VII, King of the United Kingdom of Great Britain and Ireland and British Overseas Territories, Emperor of the Indies, have signed the present Treaty, drawn up in the English and Amharic languages in duplicate, both texts equally authentic and official, and have appended thier seals to them.

Done in Addis Ababa, on 15 May, 1902

JOHN LANE HARREINGTON LT. COLONEL
Saal of His Majesty Emperor

MENELIK II

3. TREATY BETWEEN ETHIOPIA, GREAT BRITAIN AND ITALY ON THE DELIMITATION OF THE FRONTIERS BETWEEN ETHIOPIA; ERITREA AND SUDAN

(Signed in Addis Ababa on 15 May 1902)

His Majesty Emperor of Ethiopia, Menelik II, Commander Ciccodicola, the Italian Minisater in Ethiopia and Lt. Colonel Harrington, Officer of His British Majesty in Ethiopia have agreed that:

ARTICLE I

The treaty establishing the frontier between Ethiopia and Eritrea, which was formerly determined by the Tomat-Todloc line is, by joint agreement, modified as follows:

Extending from the confluence of Kher-Um-Hagar with the Setit, the new frontier shall follow this river as far as to its confluence with the Maieteb, then it shall follow the course of the latter up to Mount Ala Tacura where it shall branch off in order to joint the Marels at its confluence with the Mai Anbeassa.

The line between the confluence of the Setit and the Maieteb, and the confluence of the Marels and the Mai Ambessa shall be delimited on land by Italian and Ethiopia delegates in such a manner that the tribe of Cunama shall revert to Eritrea.
FRAMEWORK FOR GENERAL CO-OPERATION
BETWEEN
THE ARAB REPUBLIC OF EGYPT
AND
ETHIOPIA

THE ARAB REPUBLIC OF EGYPT AND ETHIOPIA,

DETERMINED TO CONSOLIDATE THE TIES OF FRIENDSHIP, TO
ENHANCE COOPERATION BETWEEN THE TWO COUNTRIES AND TO
ESTABLISH A BROAD BASE OF COMMON INTERESTS,

DESIRING OF THE REALIZATION OF THEIR FULL ECONOMIC AND
RESOURCE POTENTIALS,

RECOGNIZING THE IMPORTANCE OF THE TRADITIONAL TIES
EXISTING BETWEEN THE TWO COUNTRIES THAT HAVE BEEN
CONSOLIDATED DURING THEIR LONG HISTORY OF CLOSE RELATIONS
AND LINKED BY THE NILE RIVER WITH ITS BASIN AS A CENTER OF
MUTUAL INTEREST,

REAFFIRMING THEIR COMMITMENT TO THE UN AND OAU
CHARTERS, PRINCIPLES OF INTERNATIONAL LAW, AS WELL AS THE
LAGOS PLAN OF ACTION,

HEREBY AGREE ON THE FOLLOWING FRAMEWORK FOR
COOPERATION:
ARTICLE 1

The two parties reaffirm their commitment to the principles of good neighbourliness, peaceful settlement of disputes, and non-interference in the internal affairs of states.

ARTICLE 2

The two parties are committed to the consolidation of mutual trust and understanding between the two countries.

ARTICLE 3

The two parties recognize the importance of their cooperation as an essential means to promote their economic and political interests as well as stability of the region.

ARTICLE 4

The two parties agree that the issue of the use of the Nile waters shall be worked out in detail through discussions by experts from both sides, on the basis of the rules and principles of international law.
ARTICLE 5

EACH PARTY SHALL REFRAIN FROM ENGAGING IN ANY ACTIVITY RELATED TO THE NILE WATERS THAT MAY CAUSE APPRECIABLE HARM TO THE INTERESTS OF THE OTHER PARTY.

ARTICLE 6

THE TWO PARTIES AGREE ON THE NECESSITY OF THE CONSERVATION AND PROTECTION OF THE NILE WATERS. IN THIS REGARD, THEY UNDERTAKE TO CONSULT AND COOPERATE IN PROJECTS THAT ARE MUTUALLY ADVANTAGEOUS, SUCH AS PROJECTS THAT WOULD ENHANCE THE VOLUME OF FLOW AND REDUCE THE LOSS OF NILE WATERS THROUGH COMPREHENSIVE AND INTEGRATED DEVELOPMENT SCHEMES.

ARTICLE 7

THE TWO PARTIES WILL CREATE APPROPRIATE MECHANISMS FOR PERIODIC CONSULTATIONS ON MATTERS OF MUTUAL CONCERN, INCLUDING THE NILE WATERS, IN A MANNER THAT WOULD ENABLE THEM TO WORK TOGETHER FOR PEACE AND STABILITY IN THE REGION.

ARTICLE 8

THE TWO PARTIES SHALL ENDEAVOUR TOWARDS A FRAMEWORK FOR EFFECTIVE COOPERATION AMONG COUNTRIES OF THE NILE BASIN FOR THE PROMOTION OF COMMON INTEREST IN THE DEVELOPMENT OF THE BASIN.
THIS FRAMEWORK FOR COOPERATION IS MADE IN TWO ORIGINALS IN THE ARABIC AND ENGLISH LANGUAGES, BOTH TEXTS BEING EQUALLY AUTHENTIC.

DONE AT CAIRO THIS 1st DAY OF THE MONTH OF JULY 1993.

FOR THE
ARAB REPUBLIC OF EGYPT

FOR
ETHIOPIA

HOSNI MOUBARAK
PRESIDENT OF THE REPUBLIC

MELES ZENAWI
PRESIDENT OF THE TRANSITIONAL GOVERNMENT
ANNEX II

Agreement on Guidelines and Rules for the Filling and Operation of the Grand Ethiopian Renaissance Dam

Initialed by the Arab Republic of Egypt on February 28, 2020
Washington D.C.
Agreement on Guidelines and Rules for the Filling and Operation of the Grand Ethiopian Renaissance Dam

The governments of The Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia, and The Republic of the Sudan (each referred to as a “Party” and collectively as “Parties”),

Reaffirming the Agreement on Declaration of Principles between The Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia, and The Republic of the Sudan On the Grand Ethiopian Renaissance Dam Project of 23 March 2015, the object and purpose of which was to provide general principles to guide and facilitate the process of concluding the present Agreement on Guidelines and Rules for the Filling and Operation of the Grand Ethiopian Renaissance Dam (the “Agreement”),

Have concluded this Agreement, which consists of the following Articles and Annexes and associated Exhibits which constitute an integral part thereof:

Article 1
Scope and Objective

This Agreement establishes the guidelines and rules governing the filling and operation of the Grand Ethiopian Renaissance Dam in an adaptive and cooperative manner.

Article 2
Definitions

For the purposes of this Agreement,

(a) “BCM” means billion cubic meters.

(b) “Dam Safety Measures” mean the appropriate measures and instruments developed for the safety of GERD operations including: (a) operations and maintenance manuals; (b) risk evaluation and management analysis; (c) surveillance and monitoring plans; (d) emergency preparedness plans; and (e) periodic dam safety reviews by a panel of experts.

(c) “Emergency” means a situation that causes, or poses an imminent threat of causing, serious harm to any of the Parties and that results suddenly from natural causes or human conduct.

(d) “Flow” means the total volume of water entering the GERD reservoir in any given Hydrological Year.

(e) “GERD Level” means the level of the GERD reservoir at the beginning of any given Hydrological Year.

(f) “Grand Ethiopian Renaissance Dam” or “GERD” means the roller-compacted concrete gravity dam on the Blue Nile in Ethiopia and auxiliary structures including the saddle dam located at the GERD site.

(g) “Hydrological Year” means the period from July 1 to June 30.
(h) “Minimum Environmental Release” means release from the GERD required to sustain freshwater and estuarine ecosystems and the livelihoods that depend on these ecosystems.

(i) “Mitigation Release Year” means the period from November 1 to October 31.

(j) “m.a.s.l.” means meters above mean sea level.

(k) “Roseires Dam” means the concrete and earth dams and other auxiliaries at the Roseires Dam site in Sudan.

Article 3
Filling

3.1 Filling of the GERD shall be carried out in stages and in accordance with the rules in Annex A, Section I and the filling schedules set out in Annex B and Annex C.

3.2. Filling of the GERD shall be carried out during the wet season generally from July to August, and may continue in September if the Flow in September is above the historical average.

3.3 Filling may be accelerated or decelerated according to the Release During Filling matrix in Annex C, Table 2.

3.4. Filling shall be completed if the GERD Level would reach 625 m.a.s.l. at the end of any given Hydrological Year pursuant to the Release During Filling Matrix in Table 2 of Annex C.

Article 4
Normal Operation and Refilling

4.1 In normal hydrological conditions the GERD will operate mainly between 625 m.a.s.l. and 640 m.a.s.l.

4.2 Annual filling during operation of the GERD will be carried out from July and August and may continue in September if the Flow in September is above the historical average.

4.3 After initial filling, the operation of the GERD will take place pursuant to the rules set out in Annex A, Section II, and the Release Under Normal Operations and Refilling Matrix in Annex D.

4.4 The GERD will operate with an initial Minimum Environmental Release of 500 m³/s, which may be adjusted by the Technical Coordination Committee (TCC).

4.5 If, due to hydrological conditions or considerations relating to hydropower production and demand, Ethiopia deems it necessary to undertake minor adjustments in the rules or values set out in Annexes A and D, Ethiopia shall request an urgent meeting of the TCC, which shall consider and approve the proposed adjustments.
Article 5
Coordination Mechanism

5.1 The three countries shall establish a coordination mechanism composed of a Ministerial Committee (MC) and a TCC.

5.2 The MC shall be comprised of each Party’s Minister in charge of water affairs. The TCC shall be comprised of three representatives from each Party assigned by each respective Party’s Minister in charge of water affairs. The MC and TCC may invite additional participants on a meeting-by-meeting basis in accordance with their rules of procedure.

5.3 The MC shall:

(a) provide strategic guidance and promote cooperation and coordination on matters related to implementation of this Agreement;

(b) resolve issues that may arise in the interpretation, application, and implementation of this Agreement in accordance with Article 9; and

(c) make its decisions by consensus.

5.4 The TCC shall:

(a) facilitate cooperation and coordination on issues related to the implementation of this Agreement;

(b) resolve issues that may arise in the interpretation, application, and implementation of this Agreement in accordance with Article 9;

(c) make its decisions by consensus;

(d) facilitate the exchange of data and information as provided for under this Agreement;

(e) develop and implement a system for the validation of such data, relying wherever possible and appropriate, on information technology, collection and monitoring systems agreed by the Parties;

(f) monitor and verify the implementation of the rules governing the filling and operation of the GERD;

(g) undertake any coordination of the forecasting of hydrological conditions by each of the Parties as may be agreed, and

(h) undertake such other activities as may be agreed upon by the MC.

5.5 The TCC shall:

(a) hold its first meeting in Addis Ababa, not later than 45 days following the entry into force of this Agreement during which it shall prepare its rules of procedure for approval by the MC,

(b) hold subsequent meetings on a rotational basis; and
(c) meet every year on quarterly basis, at the beginning of June, during the final week of September, at the beginning of the calendar year, and during the final week of March of every year, and as otherwise agreed by the TCC in accordance with its rule and procedures.

Article 6
Data Exchange

6.1 The Parties agree the following data will be exchanged:

(a) Monthly time step data on the following:
   i. Flow,
   ii. water quality in the GERD reservoir, and
   iii. meteorological data at the GERD reservoir.

(b) Daily time step data on the following:
   i. water level at the GERD reservoir, and
   ii. water release from the GERD reservoir.

(c) Daily time step data on the following, to be exchanged reciprocally between Ethiopia and Sudan:
   i. water level at the GERD reservoir and the Roseires reservoir, and
   ii. water release from the GERD reservoir and the Roseires reservoir.

6.2 The data referred to in Article 6 shall be transmitted on a monthly basis by the relevant Party to the other Parties, through the TCC, except that the data referred to in Article 6.1(c) shall be transmitted on a daily basis.

6.3 Each Party’s Minister in charge of water affairs will designate focal points for the transmission and receipt of data as provided above.

Article 7
Dam Safety and Emergency Situations

7.1 Ethiopia shall ensure that Dam Safety Measures are kept up to date and shared with and discussed by the TCC.

7.2 Ethiopia shall share with the other Parties information and documents necessary for the safety of downstream communities and reservoirs.

7.3 Ethiopia shall complete vegetation clearance in accordance with the stages of reservoir filling and the applicable environmental management plans.

7.4 Whenever a Party becomes aware of any water quantity or quality problems they believe to be arising from the GERD and constituting an Emergency that requires an immediate response, it shall notify
the other Parties and the MC shall convene without delay in order to discuss and put in place appropriate remedial action.

7.5 Nothing in the preceding paragraph shall be deemed to delay the obligation of a Party within whose territory an Emergency arising from the GERD occurs or on whose territory the impact of the Emergency occurs or is anticipated to occur to immediately take all practicable measures to prevent, mitigate, and eliminate the harmful effects of the Emergency.

7.7 To provide for the safety of the Roseires Dam the daily change in the release from the GERD should be less than 200 Mm³/day.

Article 8
Environmental and Social Impact Assessments

The Parties shall carry out the relevant transboundary environmental and social impact assessments, and address the recommendations of these studies following their approval by the MC.

Article 9
Dispute Settlement

9.1 In the event of a dispute concerning the interpretation, application, or implementation of the Agreement, any of the Parties may request the holding of negotiations through the TCC to settle the dispute. The TCC may rely upon the advice and support of technical experts as appropriate to support its negotiations.

9.2 If, after 30 days of a request to negotiate by any of the Parties, the TCC is unable to resolve the dispute, any of the Parties may refer the dispute to the MC, which may rely upon the advice and support of technical experts as appropriate to support its consideration of the dispute. If after 30 days of the referral of the dispute to the MC, the dispute is not settled, any of the Parties may refer the dispute to arbitration.

9.3 The arbitral tribunal shall be composed of five members. Within 30 days of notification of referral of the dispute by any of the Parties to arbitration, each Party shall appoint one member to the arbitral tribunal. The Secretary General of the Permanent Court of Arbitration shall appoint the remaining two members, both of whom shall not be nationals of any of the Parties, and shall designate the Chairperson of the arbitral tribunal from those two members. If any of the Parties do not appoint a member to the arbitral tribunal, the Secretary General of the Permanent Court of Arbitration shall, within two weeks, appoint the requisite number of members, who shall be non-nationals of the Parties, to complete the composition of the arbitral tribunal.

9.4 The arbitral tribunal shall adopt its own rules of procedure by simple majority. If within four weeks of the establishment of the arbitral tribunal, the panel is unable to adopt the rules of procedure, the applicable rules of procedure shall be the 2012 Arbitration Rules of the Permanent Court of Arbitration, except in matters governed by this Agreement.

9.5 The arbitral tribunal shall adopt, by simple majority, its award within ninety days of the appointment of the Chairperson. The award shall include findings regarding the facts of the dispute and conclusions regarding the means of settling the dispute, including, if necessary, conclusions on adequate reparations. The award of the arbitral tribunal shall be final and binding.
9.6 The Secretary General of the Permanent Court of Arbitration shall, in consultation with the TCC, maintain a roster of non-nationals of the parties and who may be appointed to the arbitral tribunal pursuant to Article 9.3.

9.7 The Parties involved shall bear the costs of the dispute resolution process equally, unless the arbitral tribunal allocates costs differently under the award.

**Article 10**
**General Provisions**

10.1 This Agreement is not intended to be and shall not be interpreted or applied as an allocation of the waters of the Blue Nile among the Parties.

10.2 Future developments upstream of the GERD may be undertaken without prejudice to this Agreement and in accordance with the applicable principles of international law, including the principles of equitable and reasonable utilization, of not causing significant harm, and of cooperation.

**Article 11**
**Signature and Entry into Force**

11.1 The Ministers in charge of water affairs of the three states, being duly authorized by their respective governments, have affixed their signatures onto and concluded this Agreement.

11.2 This Agreement shall enter into force upon the exchange of the last instrument among the Parties noting the completion of their constitutional procedures and expressing their approval of and evidencing their consent to be bound by this Agreement, which shall be communicated through diplomatic channels.

11.3 The Parties undertake to complete their constitutional procedures and exchange instruments expressing their approval of and evidencing their consent to be bound by this Agreement within three months of the signature of this Agreement.

**Article 12**
**Provisional Application**

This Agreement shall be applied provisionally upon signature until its entry into force.

**Article 13**
**Review and Amendment**

12.1 This Agreement shall be reviewed by the Parties every 10 years after the entry into force of the Agreement.

12.2 The quantiles included in Annexes A and D shall be reviewed and may be amended by the Parties on the basis of the updated historical data of the hydrological conditions of the Blue Nile at the GERD site every 10 years after the entry into force of the Agreement.

12.3 Any of the Parties may propose amendments to the Agreement, which shall be submitted to and may be agreed upon by the Parties.
12.4 Amendments to the Agreement shall enter into force in accordance with same procedures set out in Article 11.2.

Article 14
Reservations

13.1 This Agreement does not lend itself to partial application, therefore reservations to this Agreement shall not be made.

Article 15
Termination

14.1 This Agreement shall only be terminated upon the entry into force of a subsequent agreement among the Parties that provides for termination of this Agreement.

Done in [place] on [date] in one original in the English language.
Annex A

Grand Ethiopian Renaissance Dam

Mitigation Mechanisms for Drought, Prolonged Drought, and Prolonged Periods of Dry Years

I. Filling Period of the GERD

A. Drought

If the Flow at the GERD is <37 BCM in any Hydrological Year, the release from the GERD will be according to the Drought Conditions Release Matrix (Exhibit A)

B. Prolonged Drought*

If the average release from the GERD over the preceding 4 Hydrological Years is <37 BCM, the GERD will release a total of 62.5% of the storage above 603 meters ("Filling Prolonged Drought Total Release") over the following 4 Mitigation Release Years.

The timing of the release of the Filling Prolonged Drought Total Release over the 4 Mitigation Release Year period shall be at the discretion of Ethiopia subject to a minimum annual release that is ½ of the Filling Prolonged Drought Total Release/4.

The release of the Filling Prolonged Drought Total Release from storage over the following 4 Mitigation Release Years is not dependent upon the hydrological conditions of the Blue Nile in future Hydrological Years.

C. Prolonged Period of Dry Years*

If the average release from the GERD over the preceding 4 Hydrological Years is <40 BCM, the GERD will release a total of 50% of storage above 603 meters (the “Filling Prolonged Period of Dry Years Total Release”) over the following 4 Mitigation Release Years.

The timing of the Filling Prolonged Period of Dry Years Total Release over the 4 Mitigation Release Year period shall be at the discretion of Ethiopia subject to a minimum annual release that is ½ of Filling Prolonged Period of Dry Years Total Release/4.

The release of the Filling Prolonged Period of Dry Years Total Release from storage over the following 4 Mitigation Release Years is not dependent upon the hydrological conditions of the Blue Nile in future Hydrological Years.

II. Long Term Operation of the GERD

A. Drought

If the Flow at the GERD is <37 BCM (Q91)** in any Hydrological Year, the release from the GERD will be according to the Drought Conditions Release Matrix (Exhibit A).
B. Prolonged Drought*

If the average release from the GERD over the preceding 4 Hydrological Years is \(< 39\) BCM (Q85)**, the GERD will release a total of \(100\%\) of the storage above 603 meters (the “Operational Prolonged Drought Total Release”) over the following 4 Mitigation Release Years.

The timing of the release of the Operational Prolonged Drought Total Release over the 4 Mitigation Release Year period shall be at the discretion of Ethiopia subject to a minimum annual release that is \(1/4\) of the Operational Prolonged Drought Total Release/4.

The release of the Operational Prolonged Drought Total Release from storage over the following 4 Mitigation Release Years is not dependent upon the hydrological conditions of the Blue Nile in future Hydrological Years.

C. Prolonged Period of Dry Years*

If the average release from the GERD over the preceding 5 Hydrological Years is \(< 40\) BCM (Q85)**, the GERD will release a total of \(100\%\) of storage above 603 meters (the “Operational Prolonged Period of Dry Years Total Release”) over the following 5 Mitigation Release Years.

The timing of the release of the Operational Prolonged Period of Dry Years Total Release over the 5 Mitigation Release Year period shall be at the discretion of Ethiopia subject to a minimum annual release that is \(1/4\) of Operational Prolonged Period of Dry Years Total Release/5.

The total release of the Operational Prolonged Period of Dry Years Total Release from storage over the following 5 Mitigation Release Years is not dependent upon the hydrological conditions of the Blue Nile in future Hydrological Years.

*Exhibit B details the operation of the mitigation mechanisms for Drought, Prolonged Drought, and Prolonged Period of Dry Years.

**Pursuant to Article 12, the numeric values of the quantiles will be adjusted based upon updated historical data of the hydrological conditions of the Blue Nile at the GERD site every ten years.
# Exhibit A

## Drought Conditions Release Matrix
(Release in BCM)

## Flow of River

<table>
<thead>
<tr>
<th>GERD Level</th>
<th>37</th>
<th>36</th>
<th>35</th>
<th>34</th>
<th>33</th>
<th>32</th>
<th>31</th>
<th>30</th>
<th>29</th>
<th>28</th>
<th>27</th>
<th>26</th>
<th>25</th>
<th>24</th>
<th>23</th>
<th>22</th>
<th>21</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCM</td>
<td>m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49.3 BCM</td>
<td>625</td>
<td>36.25</td>
<td>36.25</td>
<td>36.25</td>
<td>36.25</td>
<td>36.25</td>
<td>36.07</td>
<td>35.97</td>
<td>35.85</td>
<td>35.71</td>
<td>35.55</td>
<td>35.37</td>
<td>35.17</td>
<td>34.95</td>
<td>34.71</td>
<td>34.45</td>
<td>34.17</td>
<td>34.04</td>
</tr>
<tr>
<td>46.2 BCM</td>
<td>623</td>
<td>36.30</td>
<td>36.20</td>
<td>36.10</td>
<td>36.00</td>
<td>35.86</td>
<td>35.70</td>
<td>35.52</td>
<td>35.32</td>
<td>35.10</td>
<td>34.86</td>
<td>34.60</td>
<td>34.32</td>
<td>34.02</td>
<td>33.70</td>
<td>33.36</td>
<td>33.00</td>
<td>32.62</td>
</tr>
<tr>
<td>43.1 BCM</td>
<td>620</td>
<td>36.35</td>
<td>36.15</td>
<td>35.95</td>
<td>35.75</td>
<td>35.51</td>
<td>35.25</td>
<td>34.97</td>
<td>34.67</td>
<td>34.35</td>
<td>34.01</td>
<td>33.65</td>
<td>33.27</td>
<td>32.87</td>
<td>32.45</td>
<td>32.01</td>
<td>31.55</td>
<td>31.07</td>
</tr>
<tr>
<td>40.1 BCM</td>
<td>618</td>
<td>36.38</td>
<td>36.08</td>
<td>35.78</td>
<td>35.48</td>
<td>35.14</td>
<td>34.78</td>
<td>34.40</td>
<td>34.00</td>
<td>33.58</td>
<td>33.14</td>
<td>32.68</td>
<td>32.20</td>
<td>31.70</td>
<td>31.18</td>
<td>30.64</td>
<td>30.08</td>
<td>29.50</td>
</tr>
<tr>
<td>37 BCM</td>
<td>615</td>
<td>36.41</td>
<td>36.01</td>
<td>35.61</td>
<td>35.21</td>
<td>34.77</td>
<td>34.31</td>
<td>33.83</td>
<td>33.33</td>
<td>32.81</td>
<td>32.27</td>
<td>31.71</td>
<td>31.13</td>
<td>30.53</td>
<td>29.91</td>
<td>29.27</td>
<td>28.61</td>
<td>27.93</td>
</tr>
<tr>
<td>33.9 BCM</td>
<td>613</td>
<td>36.43</td>
<td>35.93</td>
<td>35.43</td>
<td>34.93</td>
<td>34.39</td>
<td>33.83</td>
<td>33.25</td>
<td>32.65</td>
<td>32.03</td>
<td>31.39</td>
<td>30.73</td>
<td>30.05</td>
<td>29.35</td>
<td>28.63</td>
<td>27.89</td>
<td>27.13</td>
<td>26.35</td>
</tr>
<tr>
<td>30.8 BCM</td>
<td>610</td>
<td>36.46</td>
<td>35.86</td>
<td>35.26</td>
<td>34.66</td>
<td>34.02</td>
<td>33.36</td>
<td>32.68</td>
<td>31.98</td>
<td>31.26</td>
<td>30.52</td>
<td>29.76</td>
<td>28.98</td>
<td>28.18</td>
<td>27.36</td>
<td>26.52</td>
<td>25.66</td>
<td>24.78</td>
</tr>
<tr>
<td>27.7 BCM</td>
<td>607</td>
<td>36.50</td>
<td>35.80</td>
<td>35.10</td>
<td>34.40</td>
<td>33.66</td>
<td>32.90</td>
<td>32.12</td>
<td>31.32</td>
<td>30.50</td>
<td>29.66</td>
<td>28.80</td>
<td>27.92</td>
<td>27.02</td>
<td>26.10</td>
<td>25.16</td>
<td>24.20</td>
<td>23.22</td>
</tr>
</tbody>
</table>
Operation of Mitigation Mechanisms in Annex A

I. Mitigation Measures for Overlapping Periods of Prolonged Drought and/or Prolonged Period of Dry Years

The application of the mitigation measures when periods of Prolonged Drought and/or Prolonged Period of Dry Years overlap should ensure that there is no multiple accounting for the same drought/dry years in the determination of release values.

If both conditions of Prolonged Drought and of Prolonged Period of Dry Years are triggered in the same year, the higher release value of the two measures will be applied.

If mitigation measures for periods of Prolonged Drought and/or for Prolonged Period of Dry Years overlap in a given year, the higher value of the measures for the year will be applied. An example of the calculation of release during overlapping periods of Prolonged Drought and/or Prolonged Period of Dry Years is attached as Table I.

II. Impact of Previous Period Mitigation Measures on GERD Retention in Subsequent Years

A release obligation arising from Prolonged Drought or from a Prolonged Period of Dry Years reduces the amount of water retained by the GERD in a Hydrological Year that would otherwise occur pursuant to other rules in this Agreement.

Example:
Mitigation mechanism obligation to release in a particular Mitigation Release Year based upon past Period of Prolonged Drought/Prolonged Period of Dry Years: 2 BCM
Retention Value based upon the Filling Plan (Annex C Table 1) and the Release During Filling matrix (Annex C Table 2) or the Release Under Normal Operations and Refilling matrix (Annex D): 10 BCM
Net Retention by GERD: 8 BCM (10 – 2)

III. Application of Drought Conditions Release Matrix During Periods Where Release Due to Prolonged Drought and/or Prolonged Period of Dry Years is in Effect

For avoidance of doubt, releases from the Drought Conditions Release Matrix (Exhibit A of Annex A) shall take place during periods where releases are taking place pursuant to Prolonged Drought and/or Prolonged Period of Dry Years, subject to Section IV below. Releases from the Drought Conditions Release Matrix shall be in addition to these other releases.

IV. Reference Levels of GERD and Storage of GERD to Include Commitments to Release Water under Drought Conditions, Prolonged Drought and Prolonged Period of Dry Years Mitigation Mechanisms
Releases from the Drought Conditions Release Matrix (Exhibit A of Annex A) triggered in a given year will be deducted from the storage above 603 meters in the Prolonged Drought and Prolonged Period of Dry Years mitigation mechanisms in Annex A to determine the release amounts under those mechanisms in that year.

The total amount of water committed to be released pursuant to the mitigation mechanisms arising from Prolonged Drought and Prolonged Period of Dry Years will be deducted from:

1. the reference levels of the GERD in the Drought Conditions Release Matrix (Exhibit A of Annex A) for the purpose of determining releases due to drought conditions; and

2. the storage above 603 meters in the Prolonged Drought and Prolonged Period of Dry Years mitigation mechanisms in Annex A to determine the release amounts under those mechanisms.
### Exhibit B
#### Table 1

**Overlapping Periods of Prolonged Drought/Prolonged Period of Dry Years Mitigation Measures**

*Example: Filling Period*

<table>
<thead>
<tr>
<th>Year</th>
<th>Release excluding Mitigation Measures</th>
<th>Drought Conditions Release</th>
<th>4 Year Moving Average Release</th>
<th>Reference Excess Storage above 603 m</th>
<th>Prolonged Mitigation Release due to Period Years 1-4 Prolonged Dry Year 50%</th>
<th>Prolonged Mitigation Release due to Period Years 2-5 Prolonged Drought 62.5%</th>
<th>Prolonged Mitigation Release due to Period Years 3-6 Prolonged Drought 62.5%</th>
<th>Total Additional Release from Prolonged Drought/Dry Period Mitigation Measures</th>
<th>Total Additional Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>41 BCM</td>
<td>0 BCM</td>
<td>na</td>
<td>na</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
</tr>
<tr>
<td>2</td>
<td>38 BCM</td>
<td>0 BCM</td>
<td>na</td>
<td>na</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
</tr>
<tr>
<td>3</td>
<td>39 BCM</td>
<td>0 BCM</td>
<td>na</td>
<td>na</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
</tr>
<tr>
<td>4</td>
<td>37 BCM</td>
<td>0 BCM</td>
<td>38.75 BCM</td>
<td>20 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
</tr>
<tr>
<td>5</td>
<td>33 BCM</td>
<td>1.5 BCM</td>
<td>38.75 BCM</td>
<td>8.5 BCM</td>
<td>2.5 BCM</td>
<td>0 BCM</td>
<td>0 BCM</td>
<td>2.5 BCM</td>
<td>4.0 BCM</td>
</tr>
<tr>
<td>6</td>
<td>37 BCM</td>
<td>0 BCM</td>
<td>36.50 BCM</td>
<td>7.17 BCM</td>
<td>2.5 BCM</td>
<td>1.33 BCM</td>
<td>0 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
</tr>
<tr>
<td>7</td>
<td>60.5 BCM</td>
<td>2.5 BCM</td>
<td>1.33 BCM</td>
<td>1.22 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
</tr>
<tr>
<td>8</td>
<td>2.5 BCM</td>
<td>1.22 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
</tr>
<tr>
<td>9</td>
<td>1.33 BCM</td>
<td>1.22 BCM</td>
<td>1.33 BCM</td>
<td>1.33 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
<td>2.5 BCM</td>
</tr>
<tr>
<td>10</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
<td>1.12 BCM</td>
</tr>
</tbody>
</table>

*Note: Mitigation releases are determined by conditions in the Hydrological Year, and released in the Mitigation Release Year.*
### Grand Ethiopian Renaissance Dam

#### Stage I Filling

<table>
<thead>
<tr>
<th>Stage I Filling (to 595 m asl, level of GERD)</th>
<th>Hydrological Year 1</th>
<th>Incremental Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower of 15.5 BCM or Flow</td>
<td>4.9 BCM total</td>
<td>4.9 BCM (18.4 BCM total)</td>
</tr>
</tbody>
</table>

- **Definition of Drought:**
- **Release Rule:**
- **Postponement of Stage I:**
  - If Flow is less than 31 BCM, Stage I will be postponed
### Table 1

<table>
<thead>
<tr>
<th>Stage</th>
<th>Target Levels of Stages (m)</th>
<th>Incremental Retained Water at the End of June (BCM)</th>
<th>Cumulative Retained Water at the End of June (BCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>565</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>2</td>
<td>605</td>
<td>13.5</td>
<td>18.4</td>
</tr>
<tr>
<td>3</td>
<td>628</td>
<td>10.5</td>
<td>28.9</td>
</tr>
<tr>
<td>4</td>
<td>617</td>
<td>10.4</td>
<td>39.3</td>
</tr>
<tr>
<td>5</td>
<td>625</td>
<td>10.0</td>
<td>49.3</td>
</tr>
<tr>
<td>Flow of River</td>
<td>2020.08835</td>
<td>2021.062</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>62.70</td>
<td>45.0</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>62.95</td>
<td>45.1</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>63.01</td>
<td>45.2</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>63.66</td>
<td>45.3</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>63.66</td>
<td>45.4</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>63.66</td>
<td>45.5</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>63.66</td>
<td>45.6</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>63.66</td>
<td>45.7</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>63.66</td>
<td>45.8</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>63.66</td>
<td>45.9</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>63.66</td>
<td>46.0</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>63.66</td>
<td>46.1</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>63.66</td>
<td>46.2</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>63.66</td>
<td>46.3</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>63.66</td>
<td>46.4</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>63.66</td>
<td>46.5</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>63.66</td>
<td>46.6</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>63.66</td>
<td>46.7</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>63.66</td>
<td>46.8</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>63.66</td>
<td>46.9</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>63.66</td>
<td>47.0</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>63.66</td>
<td>47.1</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>63.66</td>
<td>47.2</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>63.66</td>
<td>47.3</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>63.66</td>
<td>47.4</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>63.66</td>
<td>47.5</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>63.66</td>
<td>47.6</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>63.66</td>
<td>47.7</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>63.66</td>
<td>47.8</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>63.66</td>
<td>47.9</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>63.66</td>
<td>48.0</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>63.66</td>
<td>48.1</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>63.66</td>
<td>48.2</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>63.66</td>
<td>48.3</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>63.66</td>
<td>48.4</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>63.66</td>
<td>48.5</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>63.66</td>
<td>48.6</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>63.66</td>
<td>48.7</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>63.66</td>
<td>48.8</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>63.66</td>
<td>48.9</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>63.66</td>
<td>49.0</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>63.66</td>
<td>49.1</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>63.66</td>
<td>49.2</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>63.66</td>
<td>49.3</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>63.66</td>
<td>49.4</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>63.66</td>
<td>49.5</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>63.66</td>
<td>49.6</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>63.66</td>
<td>49.7</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>63.66</td>
<td>49.8</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>63.66</td>
<td>49.9</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>63.66</td>
<td>50.0</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX III
Agreement on Declaration of Principles between
The Arab Republic of Egypt,
The Federal Democratic Republic of Ethiopia
The Republic of the Sudan
on the
Grand Ethiopian Renaissance Dam Project

Concluded on 23 March 2015
Khartoum, Sudan
Agreement on Declaration of Principles between
The Arab Republic of Egypt,
The Federal Democratic Republic of Ethiopia
And
The Republic of the Sudan
On The Grand Ethiopian Renaissance Dam Project (GERDP)

Preamble

Mindful of the rising demand of the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of Sudan on their transboundary water resources, and cognizant of the significance of the River Nile as the source of livelihood and the significant resource to the development of the people of Egypt, Ethiopia and Sudan, the three countries have committed to the following principles on the GERD:

I. Principle of Cooperation

- To cooperate based on common understanding, mutual benefit, good faith, win-win, and principles of international law.

- To cooperate in understanding upstream and downstream water needs in its various aspects.
II. Principle of Development, Regional Integration and Sustainability

The purpose of GERD is for power generation, to contribute to economic development, promotion of transboundary cooperation and regional integration through generation of sustainable and reliable clean energy supply.

III. Principle Not to Cause Significant Harm

- The three countries shall take all appropriate measures to prevent the causing of significant harm in utilizing the Blue/Main Nile.
- Where significant harm nevertheless is caused to one of the countries, the state whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures in consultations with the affected state to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

IV. Principle of Equitable and Reasonable Utilization

- The three countries shall utilize their shared water resources in their respective territories in an equitable and reasonable manner.
- In ensuring their equitable and reasonable utilization, the three countries will take into account all the relevant guiding factors listed below, but not limited to the following outlined:
  a. Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character:
b. The social and economic needs of the Basin States concerned;
c. The population dependent on the water resources in each Basin State;
d. The effects of the use or uses of the water resources in one Basin State on other Basin States;
e. Existing and potential uses of the water resources;
f. Conservation, protection, development and economy of use of the water resources and the costs of measures taken to that effect;
g. The availability of alternatives, of comparable value, to a particular planned or existing use;
h. The contribution of each Basin State to the waters of the Nile River system;
i. The extent and proportion of the drainage area in the territory of each Basin State.

V. Principle to Cooperate on the First Filling and Operation of the Dam

- To implement the recommendations of the International Panel of Experts (IPOE), respect the final outcomes of the Tripartite National Committee (TNC) Final Report on the joint studies recommended in the IPOE Final Report throughout the different phases of the project.
- The three countries, in the spirit of cooperation, will utilize the final outcomes of the joint studies, to be conducted as per the recommendations of the IPoE Report and agreed upon by the TNC, to:
  a) Agree on guidelines and rules on the first filling of GERD which shall cover all different scenarios, in parallel with the construction of GERD.
b) Agree on guidelines and rules for the annual operation of GERD, which the owner of the dam may adjust from time to time.

c) Inform the downstream countries of any unforeseen or urgent circumstances requiring adjustments in the operation of GERD.

- To sustain cooperation and coordination on the annual operation of GERD with downstream reservoirs, the three countries, through the line ministries responsible for water, shall set up an appropriate coordination mechanism among them.
- The time line for conducting the above mentioned process shall be 15 months from the inception of the two studies recommended by the IPoE.

VI. Principle of Confidence Building

- Priority will be given to downstream countries to purchase power generated from GERD.

VII. Principle of Exchange of Information and Data

Egypt, Ethiopia, and Sudan shall provide data and information needed for the conduct of the TNC joint studies in good faith and in a timely manner.

VIII. Principle of Dam Safety

- The three countries appreciate the efforts undertaken thus far by Ethiopia in implementing the IPoE recommendations pertinent to the GERD safety.
- Ethiopia shall in good faith continue the full implementation of the Dam safety recommendations as per the IPoE report.
IX. Principle of Sovereignty and Territorial Integrity

The three countries shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of the River.

X. Principle of Peaceful Settlement of Disputes

- The Three countries will settle disputes, arising out of the interpretation or implementation of this agreement, amicably through consultation or negotiation in accordance with the principle of good faith. If the Parties are unable to resolve the dispute through consultation or negotiation, they may jointly request for conciliation, mediation or refer the matter for the consideration of the Heads of State/Head of Government.

This agreement on Declaration of Principles is signed in Khartoum, Sudan, on Monday the 23rd of March 2015, by the Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia, and the Republic of Sudan.

For the Arab Republic of Egypt:

Abdel Fattah El Sisi
President of the Republic.

For the Federal Democratic Republic of Ethiopia:

Hailemariam Desalegn
Prime Minister of the Republic.

For the Republic of the Sudan:

Omer Hassan A. Elb
ANNEX IV

Documents Prepared by The Federal Democratic Republic of Ethiopia
titled Guidelines and Rules for the First Filling and Annual Operation of the Grand Ethiopian Renaissance Dam

Presented to Egypt and Sudan on
June 10, 2020
June 16, 2020
Guidelines and Rules for the First Filling and Annual Operation of the Grand Ethiopian Renaissance Dam

The governments of the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia, and the Republic of the Sudan (hereinafter jointly referred to as "the Parties" and separately as "the Party"),

Reaffirming the Agreement on Declaration of Principles (hereinafter DoP) between The Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia, and The Republic of the Sudan on the Grand Ethiopian Renaissance Dam project signed on 23 March 2015 which provides for the general principles that guide and facilitate the process of concluding the present Guidelines and Rules for the first filling and annual operation of the Grand Ethiopian Renaissance Dam (hereinafter referred to as the "Guidelines and Rules"),

Have agreed as follows.

Article 1

Definitions

Unless the context provides otherwise, the following terms shall, for purposes of this Guidelines and Rules, retain the definitions ascribed to them hereunder.

2.1. "Annual Operation" means operation of the Grand Ethiopian Renaissance Dam (hereinafter referred to as "GERD") after the completion of the First Filling specified in this Agreement;

2.2. "BCM" means Billion Cubic Meters;

2.3. "Dam owner" means the Federal Democratic Republic of Ethiopia

2.4. "Emergency" means a situation that causes, or poses an imminent threat of causing, serious harm to any of the Parties that result suddenly from natural causes or human conduct.

2.5. "First Filling" means the initial impoundment of water by GERD in various stages until the level reaches 625 m.a.s.l by the end of a hydrological year;

2.6. "Grand Ethiopian Renaissance Dam" or "GERD" means the roller-compacted concrete gravity dam, the concrete faced rock fill saddle dam with gated spillway and other appurtenance structures on the Blue Nile River in Ethiopia;

2.7. "GERD Level" means the level of the GERD reservoir at the end of any given Hydrological Year.

2.8. "Hydrological Year" the period from July 01 to June 30;

2.9. "Flow" means the quantity of water entering the GERD Reservoir in a given hydrological year;

2.10. "m.a.s.l." means meters above mean sea level;
2.11. “Quantile” means the probability of annual Flow at GERD as ranked from the largest to the smallest value - wherein each corresponding annual Flow value is equaled or exceeded.

Article 2

General Principles

The application of this Guidelines and Rules shall be governed by the principles of equitable and reasonable utilization of transboundary watercourses and the obligation not to cause significant harm and cooperation.

Article 3

Objective

The objective of this Guidelines and Rules is to establish the guidelines and rules for the first filling and annual operation of the GERD within the framework of the DoP.

Article 4

Scope of the Guidelines and Rules

3.1. The scope of this Guidelines and Rules shall be limited only to establishing procedures governing the filling and annual operation of the GERD which the dam owner implements -subject to the right of making necessary adjustments and without prejudice to existing and future developments which may be undertaken upstream of GERD.

3.2. This Guidelines and Rules shall not be taken or interpreted as in any form establishing the allocation of waters of the Blue Nile among the Parties or as determination of the threshold of significant harm.

3.3. This Guidelines and Rules shall not be taken as recognition by Ethiopia of any pre-existing water allocation arrangement between Egypt and Sudan.

Article 5

First Filling of the GERD

4.1. General Rules on First Filling

4.1.1. First Filling of the GERD, shall be carried out in stages as provided under Annex 1.

4.1.2. Guidelines and rules on First Filling of the GERD may be adjusted by the dam owner taking into account water levels and Flow at the GERD during the hydrological year.

4.1.3. Filling of the GERD shall be carried out during the wet season generally from July to August and may continue in September depending on hydrological conditions.

4.2. First Stage Filling of the GERD (up to 595 m.a.s.l)

4.2.1. First Stage Filling of the GERD will be carried out in two phases – retaining a total volume of 18.4 BCM.
4.2.2. 4.9 BCM will be retained during the first phase and 13.5 BCM will be retained during the second phase.

4.2.3. If Flow is less than 31 BCM, second phase of first stage filling will be postponed to the following hydrological year.

4.3. Subsequent Stages of filling of the GERD (from 595 m.a.s.l to 625 m.a.s.l)

4.3.1. During the subsequent stages of filling, the GERD will retain a total volume of 49.3 BCM of water by the end of the last hydrological year.

4.3.2. During the subsequent stages of filling, the filling will accelerate or decelerate according to Flow conditions.

4.3.3. Where the annual Flow is below Q95 (35 BCM), filling of the GERD will be postponed to the following hydrological year.

4.3.4. If the Flow at the GERD is < Q95 (35 BCM) while the GERD is at 615 m.a.s.l level, the release from the GERD will be according to the Drought Conditions Release Matrix (Annex II)

Article 5

Rules for annual operation of the GERD

5.1. Rules of operation

5.1.1. The annual operation rule for any hydrological year will be determined based on the Flow at GERD, water level, optimal operation of the dam for target energy generation and minor water use requirement.

5.1.2. At the beginning of the hydrological year, Ethiopia will prepare details of the annual operation rule of the GERD and communicate the same through the coordination mechanism established under this Guidelines and Rules.

5.1.3. In normal hydrological conditions the GERD will operate mainly between 625 m.a.s.l and 640 m.a.s.l.

5.1.4. As dam owner, Ethiopia maintains the right to make necessary adjustments on the Operation of the GERD.

5.1.5. Ethiopia will inform Sudan and Egypt of the adjustments on the Annual Operation of the GERD.

5.1.6. The minimum environmental flow from the GERD to sustain freshwater ecosystems and the livelihoods that depend on these ecosystems shall be 300 m³/s.

5.1.7. The Dam Owner shall be compensated for any financial or economic loss incurred due to filling or operation of the GERD based on rules other than the ones provided under this Guidelines and Rules.

5.2. Rules of operation during drought

5.2.1. In any hydrological years, if the Flow at the GERD is less than Q92 (presently 37 BCM) the minimum release from the GERD will take place pursuant to the rules set out in ANNEX-III.
Ethiopia Draft
Confidential (10 June 2020)

5.2.2. At the beginning of the Hydrologic year the preliminary rule for release shall be determined and communicated to the countries. By the end of rainy season (Oct) the release may be adjusted based on Flow at GERD.

5.2.3. In case of consecutive drought conditions, in addition to the annual release indicated in ANNEX-III, the TCC will deliberate on shared management of drought.

5.3. The numerical values and quantiles under the foregoing sub-articles are provisional for duration of this first agreement and shall be revised taking the future changing conditions into consideration.

5.4. Ethiopia will inform Sudan and Egypt of any unforeseen and urgent circumstance that entails the adjustment of the Annual Operation of the GERD.

Article 6
Coordination Mechanism

6.1. The Parties shall establish a coordination mechanism composed of a Ministerial Committee (hereinafter referred to as “the MC”) and a Technical Coordination Committee (hereinafter referred to as “the TCC”).

6.2. The MC shall be comprised of each Party’s Minister in charge of water affairs; the TCC shall be comprised of representatives assigned by ministries in charge of water affairs of the Parties.

6.3. The MC will:

6.3.1. provide guidance and facilitate cooperation and coordination on matters related to implementation of these Guidelines and Rules;

6.3.2. develop its own rules of procedure.

6.4. The TCC will be responsible for:

6.4.1. facilitating cooperation on issues related to implementation of the Guidelines and Rules;

6.4.2. resolving issues of technical nature that may arise in the implementation of this Guidelines and Rules in accordance with Article 10;

6.4.3. facilitating the reciprocal exchange of data as provided under this Guidelines and Rules are resolving issues encountered in data exchange;

6.4.4. undertaking any other activities as may be agreed upon by the MC, and,

6.4.5. developing its rules of procedure for approval by the MC;

6.5. The Parties will discuss and adopt rules and procedures governing the meetings of the MC and the TCC. The MC and TCC shall make their decisions by consensus.

6.6. The TCC shall:
6.6.1. hold its first meeting in Addis Ababa not later than 45 days following the entry into force of this Guidelines and Rules during which it shall prepare its rules of procedure for approval by the MC;

6.6.2. hold its subsequent meetings on a rotational basis;

6.6.3. meet every year on a quarterly basis, at the beginning of the hydrological year, during the final week of September, at the beginning of the calendar year, and during the final week of March of every year, and as otherwise agreed by the TCC in accordance with its rule and procedures.

Article 7

Data Exchange

7.1. The Parties will reciprocally exchange aggregated monthly data on:

7.1.1. Flow into the GERD and downstream reservoirs;

7.1.2. water level at the GERD and downstream reservoirs;

7.1.3. water release from the GERD and downstream reservoirs;

7.1.4. meteorological data at GERD and downstream reservoirs

7.2. The Water Ministers will designate focal points, who are also members of the TCC, that exchange data in accordance with the procedures provided herein.

7.3. Daily time step data on the following shall be exchanged reciprocally between Ethiopia and Sudan:

7.3.1. Water level at the GERD reservoir and the Roseires reservoir;

7.3.2. Water release from the GERD reservoir and the Roseires reservoir.

Article 8

Dam Safety and Emergency Situations

8.1. Each Dam owner is responsible for the safety of its Dam.

8.2. Ethiopia shall ensure that dam safety measures of the GERD are kept up to date and shared with and discussed by the TCC.

8.3. Ethiopia shall share with the other Parties information and documents necessary for the safety of downstream communities and reservoirs.

8.4. Ethiopia shall complete vegetation clearance in accordance with the stages of reservoir filling and the applicable environmental management plans.

8.5. Whenever a Party becomes aware of any water quantity or quality problems arising from the GERD constituting an Emergency that requires an immediate response, it shall notify and consult directly with the MC without delay in order to discuss and put in place appropriate remedial action.

8.6. Nothing in the preceding paragraph shall be deemed to delay the obligation of a Party within whose territory an Emergency arising from the GERD occurs or on who’s territory the impact of the Emergency occurs or is anticipated to occur to immediately take all
practicable measures to prevent, mitigate, and eliminate the harmful effects of the Emergency.

8.7. Not to endanger the safety of the Roseires dam, the daily change of the release from the GERD should be smaller than the maximum recorded before the GERD, i.e., smaller than 200 Mm3/day.

Article 9
Environmental and Social Impact Assessments
The Parties shall carry out the relevant transboundary environmental and social impact assessments, and address the recommendations of these studies following their approval by the MC.

Article 10
Dispute Resolution
10.1. Any dispute between any of the Parties arising out of the interpretation or application of these Guidelines and Rules shall be resolved amicably through consultations or negotiations between the concerned Parties.

10.2. Any Party may submit a dispute on the interpretation and/or implementation of these Guidelines and Rules for consideration by the TCC. The notification will be made in writing and sent to the contact person in the TCC that each Party will designate. The notification will indicate the nature of the dispute and the remedies sought by the aggrieved party. No dispute resolution process will be strictly limited to those areas identified in the notification.

10.3. The TCC shall conduct consultation and resolve the difference within thirty (30) days from the filing of the difference, which the TCC may extend through consensus.

10.4. Where the Parties fail to resolve the dispute in accordance with the foregoing sub-article, the dispute may be submitted to the MC for consideration and decision. The TCC will inform the MC whether the dispute in question is resolved in part or if the MC will need to review the dispute in its entirety.

10.5. The MC shall conduct consultation and resolve the difference within sixty (60) days from the filing of the difference, which the MC may extend through consensus.

10.6. If, sixty (60) days after the dispute has been initiated, the Parties fail to resolve the dispute through consultations, negotiations, the TCC, or MC in accordance with the foregoing provisions the Parties may jointly refer the matter for consideration to the Heads of State/Government of the Parties shall pass final decision through consensus.

Article 11
Review and Amendment
Ethiopia Draft
Confidential (10 June 2020)

11.1. This Agreement and all annexes therein shall be revised every five years after the first filling of the GERD taking into account changes such as upstream abstraction, upstream regulation, changes in hydrology, climate change, combination of these changes and other unforeseen circumstances.

11.2. This Guideline and rules may be amended upon the request of any of the Parties.

11.3. Any amendment to this Guideline and Rules shall be made in writing through mutual consent of all Parties and shall enter into force in accordance with provisions of Article 12.2.

11.4. The Parties undertake to conclude a comprehensive basin-wide water sharing agreement in a period of 10 years from the entry into force of this Guidelines and rules in accordance with the Agreement on the Nile River Basin Cooperative Framework.

Article 12

Final Provisions

12.1. The ministers responsible for water affairs of the Parties, being duly authorized by their respective Governments, have affixed their signatures onto and concluded this Guideline and Rules.

12.2. This Guideline and Rules shall enter into force upon the exchange of the last instrument among the Parties noting the completion of their Constitutional procedures and expressing their approval of and evidencing their consent to be bound by this Guideline and Rules, which shall be communicated through diplomatic channels.

12.3. Failure to reach agreement on recommended updates as per Article 11.1 shall entail termination of the Guidelines and Rules.

Done in [place] on [date] 2020 in three original in the English language.

For the Government of the Arab Republic of Egypt
For the Government of the Federal Democratic Republic of Ethiopia
For the Republic of Sudan

Dr. Mohammed Abdel Atty
Dr. Seleshi Bekele
Prof. Yassir Abas
ANNEX - I

Stage Based Filling Plan of the Grand Ethiopian Renaissance Dam

<table>
<thead>
<tr>
<th>Stages</th>
<th>Target levels in GERD, (m.a.s.l)</th>
<th>Incremental retained water at the end of June, (BCM)</th>
<th>Cumulative retained water at the end of June, (BCM)</th>
</tr>
</thead>
</table>
Ethiopia Draft  
Confidential (10 June 2020)

<table>
<thead>
<tr>
<th></th>
<th>565</th>
<th>4.9</th>
<th>595</th>
<th>13.5</th>
<th>18.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>608</td>
<td>10.5</td>
<td></td>
<td>28.9</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>617</td>
<td>10.4</td>
<td></td>
<td>39.3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>625</td>
<td>10.0</td>
<td></td>
<td>49.3</td>
<td></td>
</tr>
</tbody>
</table>

640 m.a.s.l is the full supply level of GERD, with 74BCM storage capacity

ANNEX –II

Drought management rule during filling

<table>
<thead>
<tr>
<th>Stages at End of June (m.a.s.l.)</th>
<th>Inflow below the drought threshold Q95 (35BCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>625</td>
<td>625, 625</td>
</tr>
<tr>
<td>623</td>
<td>623, 623</td>
</tr>
<tr>
<td>620</td>
<td>620, 620</td>
</tr>
<tr>
<td>618</td>
<td>618, 618</td>
</tr>
<tr>
<td>615</td>
<td>615, 614</td>
</tr>
<tr>
<td>612</td>
<td>612, 612</td>
</tr>
<tr>
<td>610</td>
<td>610, 610</td>
</tr>
</tbody>
</table>

ANNEX –III

Drought management rule during operation*

<table>
<thead>
<tr>
<th>Stages at End of June (m.a.s.l.)</th>
<th>Inflow below the drought threshold Q92 (37BCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>625</td>
<td>625, 625</td>
</tr>
<tr>
<td>623</td>
<td>623, 623</td>
</tr>
<tr>
<td>620</td>
<td>620, 620</td>
</tr>
<tr>
<td>618</td>
<td>618, 618</td>
</tr>
<tr>
<td>615</td>
<td>615, 614</td>
</tr>
<tr>
<td>612</td>
<td>612, 612</td>
</tr>
<tr>
<td>610</td>
<td>610, 610</td>
</tr>
</tbody>
</table>

*The numerical values in this table are provisional for duration of this first agreement and shall be revised whenever there is a change due to upstream abstraction, upstream regulation, changes in hydrology, climate change, combination of these changes and other unforeseen circumstances.
**Guidelines and Rules for the First Filling and Annual Operation of the Grand Ethiopian Renaissance Dam**

The governments of the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia, and the Republic of the Sudan (hereinafter jointly referred to as "the Parties" and separately as "the Party"),

*Reaffirming* the Agreement on Declaration of Principles (hereinafter DoP) between The Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia, and The Republic of the Sudan on the Grand Ethiopian Renaissance Dam project signed on 23 March 2015 which provides for the general principles that guide and facilitate the process of concluding the present Guidelines and Rules for the first filling and annual operation of the Grand Ethiopian Renaissance Dam (hereinafter referred to as the "Guidelines and Rules"),

*Have agreed* as follows

**Article 1**

**Definitions**

Unless the context provides otherwise, the following terms shall, for purposes of this Guidelines and Rules, retain the definitions ascribed to them hereunder.

1.1. “Annual Operation” means operation of the Grand Ethiopian Renaissance Dam (hereinafter referred to as “GERD”) after the completion of the First Filling specified in this Agreement;

1.2. “BCM” means Billion Cubic Meters;

1.3. “Dam owner” means the Federal Democratic Republic of Ethiopia

1.4. “Dam Safety Measures” mean the appropriate measures and instruments developed for the safety of GERD operations including: (a) operations and maintenance manuals; (b) risk evaluation and management analysis; (c) surveillance and monitoring plans; (d) emergency preparedness plans; and (e) periodic dam safety reviews by experts.

1.5. “Emergency” means a situation that causes, or poses an imminent threat of causing, serious harm to any of the Parties that result suddenly from natural causes or human conduct.

1.6. “First Filling” means the initial impoundment of water by GERD in various stages until the level reaches 625 m.a.s.l by the end of a hydrological year;

1.7. “Grand Ethiopian Renaissance Dam” or “GERD” means the roller-compacted concrete gravity dam, the concrete faced rock fill saddle dam with gated spillway and other appurtenance structures on the Blue Nile River in Ethiopia;

1.8. “GERD Level” means the level of the GERD reservoir at the end of any given Hydrological Year.

1.9. “Hydrological Year” the period from July 01 to June 30 of the following year;
1.10. “Flow” means the quantity of water entering the GERD Reservoir in a given hydrological year;

1.11. “m.a.s.l” means meters above mean sea level;

1.12. “Quantile” means the probability of annual Flow at GERD as ranked from the largest to the smallest value - wherein each corresponding annual Flow value is equaled or exceeded.

Article 2

General Principles

The application of this Guidelines and Rules shall be governed by the principles of equitable and reasonable utilization of transboundary watercourses and the obligation not to cause significant harm and cooperation.

Article 3

Objective

The objective of this Guidelines and Rules is to establish the guidelines and rules for the first filling and annual operation of the GERD within the framework of the DoP.

Article 4

Scope of the Guidelines and Rules

4.1. The scope of this Guidelines and Rules shall be limited only to establishing procedures governing the filling and annual operation of the GERD without prejudice to future developments.

4.2. This Guidelines and Rules shall not be taken or interpreted as in any form establishing the allocation of waters of the Blue Nile among the Parties or as determination of the threshold of significant harm.

4.3. This Guidelines and Rules shall not be taken as recognition by Ethiopia of any pre-existing water allocation arrangement between Egypt and Sudan.

Article 5

Filling of the GERD

5.1. Filling of the GERD shall be carried out in stages and may be accelerated or decelerated in accordance with the hydrological condition and following the rules, and the filling schedules set out in Annexes A, B and C.

5.2. Filling of the GERD shall be carried out during the wet season generally from July to August and may continue in September depending on hydrological conditions.

5.3. The GERD will have a Minimum Environmental Release of 300 m³/s.
5.4. If, in any hydrological year, the Flow at the GERD is less than Q92 (37 BCM) then the release from the GERD will take place pursuant to the rules set out in Annex C.

5.5. If, the average flow at the GERD over the preceding 4 hydrological years is less than Q92 (37 BCM), then in addition to the annual release indicated in Annex C, the TCC shall discuss and agree on joint drought management options including if the GERD Level is above 610 m.a.s.l.

5.6. If, due to hydrological conditions or considerations relating to hydropower production and demand, Ethiopia deems it necessary to undertake minor adjustments in the rules or values set out in Annexes A, B and C, Ethiopia may do so, and immediately inform the TCC.

Article 6

**Annual operation of the GERD**

6.1. In normal hydrological conditions the GERD will operate mainly between 625 m.a.s.l. and 640 m.a.s.l.

6.2. The GERD will operate with a Minimum Environmental Release of 300 m$^3$/s.

6.3. If, in any hydrological year, the Flow at the GERD is less than Q92 (37 BCM) then the release from the GERD will take place pursuant to the rules set out in Annex C.

6.4. If, the average flow at the GERD over the preceding 4 hydrological years is less than Q92 (37 BCM), in addition to the annual release indicated in Annex C, the TCC shall discuss and agree on shared drought management options including additional releases if the GERD Level is above 610 m.a.s.l.

6.5. If, due to hydrological conditions or considerations relating to hydropower production and demand, Ethiopia deems it necessary to undertake minor adjustments in the rules or values set out in Annex C, Ethiopia may do so, and immediately inform the TCC.

6.6. At the beginning of the Hydrologic year the preliminary rule for release shall be determined and communicated to the countries. By the end of rainy season (Oct) the release may be adjusted based on observed conditions at GERD.

6.7. Refilling of the GERD to Normal Operation shall follow the provisions of Article 4 above.

Article 7

**Coordination Mechanism**

7.1. The Parties shall establish a coordination mechanism composed of a Ministerial Committee (hereinafter referred to as “the MC”) and a Technical Coordination Committee (hereinafter referred to as “the TCC”).
7.2. The MC shall be comprised of each Party’s Minister in charge of water affairs; the TCC shall be comprised of representatives assigned by ministries in charge of water affairs of the Parties.

7.3. The MC will:
   
   7.3.1. provide guidance and facilitate cooperation and coordination on matters related to implementation of these Guidelines and Rules;
   
   7.3.2. develop its own rules of procedure.

7.4. The TCC will be responsible for:
   
   7.4.1. facilitating cooperation on issues related to implementation of the Guidelines and Rules;
   
   7.4.2. resolving issues of technical nature that may arise in the implementation of this Guidelines and Rules in accordance with Article 10;
   
   7.4.3. facilitating the reciprocal exchange of data as provided under this Guidelines and Rules are resolving issues encountered in data exchange;
   
   7.4.4. undertaking any other activities as may be agreed upon by the MC, and,
   
   7.4.5. developing its rules of procedure for approval by the MC;

7.5. The Parties will discuss and adopt rules and procedures governing the meetings of the MC and the TCC. The MC and TCC shall make their decisions by consensus.

7.6. The TCC shall:
   
   7.6.1. hold its first meeting in Addis Ababa not later than 45 days following the entry into force of this Guidelines and Rules during which it shall prepare its rules of procedure for approval by the MC;
   
   7.6.2. hold its subsequent meetings on a rotational basis;
   
   7.6.3. meet every year on a quarterly basis, at the beginning of the hydrological year, during the final week of September, at the beginning of the calendar year, and during the final week of March of every year, and as otherwise agreed by the TCC in accordance with its rule and procedures.

**Article 8**

**Data Exchange**

8.1. The Parties will reciprocally exchange aggregated monthly data on:
   
   8.1.1. flow into the GERD and downstream reservoirs;
   
   8.1.2. water level at the GERD and downstream reservoirs;
   
   8.1.3. water release from the GERD and downstream reservoirs;
8.1.4. meteorological data at GERD and downstream reservoirs

8.2. The Water Ministers will designate focal points, who are also members of the TCC, that exchange data in accordance with the procedures provided herein.

8.3. Daily time step data on the following shall be exchanged reciprocally between Ethiopia and Sudan:

8.3.1. Water level at the GERD reservoir and the Roseires reservoir;
8.3.2. Water release from the GERD reservoir and the Roseires reservoir.

Article 9

**Dam Safety and Emergency Situations**

9.1. Each Party is responsible for the safety of its Dam.

9.2. Each Party shall ensure that dam safety measures of the GERD are kept up to date and shared with and discussed by the TCC.

9.3. The Parties shall exchange information and documents necessary for the safety of downstream communities and reservoirs.

9.4. Ethiopia shall complete vegetation clearance in accordance with the stages of reservoir filling and the applicable environmental management plans.

9.5. Whenever a Party becomes aware of any water quantity or quality problems arising from the GERD constituting an Emergency that requires an immediate response, it shall notify and consult directly with the MC without delay in order to discuss and put in place appropriate remedial action.

9.6. Nothing in the preceding paragraph shall be deemed to delay the obligation of a Party within whose territory an Emergency arising from the GERD occurs or on who's territory the impact of the Emergency occurs or is anticipated to occur to immediately take all practicable measures to prevent, mitigate, and eliminate the harmful effects of the Emergency.

9.7. For the safety of the Roseires dam, the daily change of the release from the GERD should be smaller than the maximum recorded before the GERD, i.e., smaller than 400 Mm3/day.

Article 10

**Environmental and Social Impact Assessments**

The Parties shall carry out the relevant transboundary environmental and social impact assessments, and address the recommendations of these studies following their approval by the MC.

Article 11

**Dispute Resolution**
11.1. Any dispute between any of the Parties arising out of the interpretation or application of these Guidelines and Rules shall be resolved amicably through consultations or negotiations between the concerned Parties.

11.2. Any Party may submit a dispute on the interpretation and/or implementation of these Guidelines and Rules for consideration by the TCC. The notification will be made in writing and sent to the contact person in the TCC that each Party will designate. The notification will indicate the nature of the dispute and the remedies sought by the aggrieved party. No dispute resolution process will be strictly limited to those areas identified in the notification.

11.3. The TCC shall conduct consultation and resolve the difference within thirty (30) days from the filing of the difference, which the TCC may extend through consensus.

11.4. Where the Parties fail to resolve the dispute in accordance with the foregoing sub-article, the dispute may be submitted to the MC for consideration and decision. The TCC will inform the MC whether the dispute in question is resolved in part or if the MC will need to review the dispute in its entirety.

11.5. The MC shall conduct consultation and resolve the difference within sixty (60) days from the filing of the difference, which the MC may extend through consensus.

11.6. If, sixty (60) days after the dispute has been initiated, the Parties fail to resolve the dispute through consultations, negotiations, the TCC, or MC in accordance with the foregoing provisions the Parties may jointly refer the matter for consideration to the Heads of State/Government of the Parties shall pass final decision through consensus.

Article 12

Review and Amendment

12.1. This Agreement and all annexes therein shall be revised every five years after the first filing of the GERD taking into account changes such as upstream abstraction, upstream regulation, changes in hydrology, climate change, combination of these changes and other unforeseen circumstances.

12.2. This Guideline and rules may be amended upon the request of any of the Parties.

12.3. Any amendment to this Guideline and Rules shall be made in writing through mutual consent of all Parties and shall enter into force in accordance with provisions of Article 12.2.

12.4. The Parties undertake to conclude a comprehensive basin-wide water sharing agreement in a period of 10 years from the entry into force of this Guidelines and rules in accordance with the Agreement on the Nile River Basin Cooperative Framework.

Article 13

Final Provisions
13.1. The ministers responsible for water affairs of the Parties, being duly authorized by their respective Governments, have affixed their signatures onto and concluded this Guideline and Rules.

13.2. This Guideline and Rules shall enter into force upon the exchange of the last instrument among the Parties noting the completion of their Constitutional procedures and expressing their approval of and evidencing their consent to be bound by this Guideline and Rules, which shall be communicated through diplomatic channels. The Parties undertake to complete their constitutional procedures within three months of the signature of this Agreement.

13.3. Failure to reach agreement on recommended updates as per Article 12.1 shall entail termination of the Guidelines and Rules.

Done in [place] on [date] 2020 in three original in the English language.

For the Government of the Arab Republic of Egypt
For the Government of the Federal Democratic Republic of Ethiopia
For the Republic of Sudan

Dr. Mohammed Abdel Atty
Minister of Water, Irrigation and Electricity

Dr. Seleshi Bekele
Minister of Water, Irrigation, and Energy

Prof. Yassir Abas
Minister of Water, Irrigation and Energy
Annex A

Grand Ethiopian Renaissance Dam

Stage I Filling

<table>
<thead>
<tr>
<th>Stage I Filling (to 595 m.a.s.l. level of GERD)</th>
<th>Incremental Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrological Year 1</td>
<td>4.9 BCM</td>
</tr>
<tr>
<td>Hydrological Year 2</td>
<td>13.5 BCM (18.4 BCM total)</td>
</tr>
</tbody>
</table>

| Definition of Drought                         | 31 BCM                |
| Release Rule                                  | Lower of 31 BCM or Flow |
| Postponement of Stage I                       | If Flow is less than 31 BCM, Hydrological Year 2 of Stage I will be postponed to the following Hydrological Year |

Annex B

The Grand Ethiopian Renaissance Dam

Stage Based Filling Plan

<table>
<thead>
<tr>
<th>Stage</th>
<th>Target Levels of Stages in GERD (m)</th>
<th>Incremental Retained Water at the End of June (BCM)</th>
<th>Cumulative Retained Water at the End of June (BCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>565</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>2</td>
<td>595</td>
<td>13.5</td>
<td>18.4</td>
</tr>
<tr>
<td>3</td>
<td>608</td>
<td>10.5</td>
<td>28.9</td>
</tr>
<tr>
<td>4</td>
<td>617</td>
<td>10.4</td>
<td>39.3</td>
</tr>
<tr>
<td>5</td>
<td>625</td>
<td>10.0</td>
<td>49.3</td>
</tr>
</tbody>
</table>

640 m.a.s.l is the full supply level of GERD, with 74BCM storage capacity
ANNEX -C

Rules for Operation during drought*

<table>
<thead>
<tr>
<th>Stage at End of June (m a.s.l.)</th>
<th>Inflow below the drought threshold Q92 (37BCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>625 625 624 624 623 623 622 622 621 621 620 620 619 619 618 618</td>
</tr>
<tr>
<td>36</td>
<td>623 625 623 622 622 622 621 621 620 620 619 619 618 618 617 617</td>
</tr>
<tr>
<td>35</td>
<td>620 620 615 615 615 615 615 615 615 615 615 615 615 615 615 615</td>
</tr>
<tr>
<td>34</td>
<td>618 618 618 617 617 617 616 616 616 616 615 615 615 615 615 615</td>
</tr>
<tr>
<td>33</td>
<td>615 615 614 614 614 614 614 614 614 614 613 613 613 613 613 613</td>
</tr>
<tr>
<td>32</td>
<td>613 613 613 612 612 612 612 612 612 612 612 612 612 612 612 612</td>
</tr>
<tr>
<td>31</td>
<td>610 610 610 610 610 610 610 610 610 610 610 610 610 610 610 610</td>
</tr>
<tr>
<td>30</td>
<td>608 608 608 608 608 608 608 608 608 608 608 608 608 608 608 608</td>
</tr>
<tr>
<td>29</td>
<td>606 606 606 606 606 606 606 606 606 606 606 606 606 606 606 606</td>
</tr>
<tr>
<td>28</td>
<td>604 604 604 604 604 604 604 604 604 604 604 604 604 604 604 604</td>
</tr>
<tr>
<td>27</td>
<td>602 602 602 602 602 602 602 602 602 602 602 602 602 602 602 602</td>
</tr>
<tr>
<td>26</td>
<td>600 600 600 600 600 600 600 600 600 600 600 600 600 600 600 600</td>
</tr>
<tr>
<td>25</td>
<td>598 598 598 598 598 598 598 598 598 598 598 598 598 598 598 598</td>
</tr>
<tr>
<td>24</td>
<td>596 596 596 596 596 596 596 596 596 596 596 596 596 596 596 596</td>
</tr>
<tr>
<td>23</td>
<td>594 594 594 594 594 594 594 594 594 594 594 594 594 594 594 594</td>
</tr>
<tr>
<td>22</td>
<td>592 592 592 592 592 592 592 592 592 592 592 592 592 592 592 592</td>
</tr>
<tr>
<td>21</td>
<td>590 590 590 590 590 590 590 590 590 590 590 590 590 590 590 590</td>
</tr>
<tr>
<td>20</td>
<td>588 588 588 588 588 588 588 588 588 588 588 588 588 588 588 588</td>
</tr>
</tbody>
</table>

*The numerical values in this table are provisional for duration of this first agreement and should be revised to reflect changes in upstream regulation, changes in hydrology, climate change, combination of these changes and other unforeseen factors.