#### UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of	)
State of California Department of Water Resources	) ) )
New Major License	)
Oroville Division, State Water Facilities	)
"Oroville Facilities"	)

April 19, 2017

Project No. 2100

# REQUEST FOR CLARIFICATION AND PUBLIC PROCESS BY FRIENDS OF THE RIVER, SIERRA CLUB SOUTH YUBA RIVER CITIZENS LEAGUE, CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, AND AMERICAN WHITEWATER

## SUMMARY OF THE REQUEST

The 2017 Oroville Dam spillway incident is one of the most noteworthy dam safety crises involving a Commission-licensed dam in the Commission's history. The near-failure of the auxiliary spillway caused the evacuation of 188,000 people in the Feather River Basin and impacted the lives of people in the surrounding area who received the evacuees. Decisions to make the dam safe and fully operational will affect the lives of future generations who live in these areas. It is also of interest to wide areas of California: Oroville Dam is often characterized as the keystone of the State Water Project.

We request clarification of the regulatory processes (licensing or dam-safety) under which the Department and the Commission will address the physical deficiencies now evident at Oroville Dam. We further request clarification of the role intervenors in the licensing proceeding and the affected public can have in that process.

We are concerned, based on fragmentary information, that the Department and the Commission may not construct a complete auxiliary spillway. Failure to construct a complete auxiliary spillway would impair the ability of the project to fully perform its assigned floodwater management role and would risk inadequately protecting downstream communities. This decision would not be in the public interest and would be inconsistent with Commission responsibilities. If true, we request meaningful opportunities for the intervenors and the public to seek a different decision.

In furtherance of this request, we ask the Commission and the Department to make available to the maximum extent possible information they are using to make decisions on the scope and specifications of spillway remediation. We ask the Commission and the Department to rethink the current Division of Dam Safety and Inspections reconstruction process and to find a meaningful process by which licensing intervenors and the affected and *informed* public can contribute to the decision-making process. We offer the suggestion that the Department and the Commission hold a series of technical workshops to make information available and to allow a dialog between decision-makers and the interested public.

### BACKGROUND

Friends of the River (FOR), Sierra Club, and the South Yuba River Citizens League (SYRCL) jointly intervened on October 17, 2005, in the above-captioned licensing proceeding.<sup>1</sup> The primary issue FOR, Sierra Club and SYRCL identified in their joint intervention was the need for the Commission to order measures to address the physical deficiencies at the Oroville Dam complex needed to accomplishing the operational requirements to conduct (when necessary) floodwater-management surcharge operations over the dam's auxiliary spillway. The California Sportfishing Protection Alliance (CSPA) intervened in the proceeding concurrent to its comments on the Draft Environmental Impact Statement on December 19, 2006. In its comments, CSPA supported FOR's arguments in relation to flood-related facilities modifications.<sup>2</sup> American Whitewater (AW) intervened in the proceeding on March 31, 2006. In its intervention, AW cited to the FOR *et al.* intervention and recommended that the licensee respond to and that the Commission analyze concerns relating to the ungated spillway at Oroville Dam.<sup>3</sup>

There have been major changes to project lands and works at the Oroville Dam complex as a result of the failure of the main service spillway and near failure of the auxiliary spillway early this year. More major changes are contemplated. On February 13, 2017, the Commission's Division of Safety of Dams and Inspections headquarters office (Dam Safety) required the Department of Water Resources (Department or DWR) to select a Board of Consultants (BOC) to, among other things, conduct a forensic investigation of the Oroville Dam spillway incident and to advise the Department on reconstruction efforts.<sup>4</sup> This forensic investigation and

<sup>&</sup>lt;sup>1</sup> Motion to Intervene of Friends of the River, Sierra Club, South Yuba River Citizen's League, Project No. 2100-052 (filed Oct. 17, 2005), eLibrary no. 20051017- 5033 (FOR *et al.* Intervention).

<sup>&</sup>lt;sup>2</sup> Comments and Motion to Intervene, Draft Environmental Impact for the Oroville Facilities (filed December 19, 2006), eLibrary no. 20061219-5001, p. 3.

<sup>&</sup>lt;sup>3</sup> Motion to Intervene of American Rivers, American Whitewater and Chico Paddleheads (filed march 31, 2017), eLibrary no. 20060331-5090, p.5.

<sup>&</sup>lt;sup>4</sup> Letter to William B. Croyle, Acting Director, DWR, from the FERC Division of Safety of Dams and Inspections, regarding Emergency Repair and Board of consultants for Oroville Dam Spillway, Project 2100, February 13, 2017.

reconstruction design effort materially intersect and affect the purposes for our participation in this licensing proceeding. We therefore seek clarification on (1) the degree to which the issues relating to the floodwater management implications of inadequate spillways and dam safety that we raised in our various interventions have been subsumed in the Commission's Dam Safety division process for Oroville Dam, (2) whether and how the major reconstruction efforts will be incorporated in the relicensing, and (3) what role intervenors in the licensing proceeding may have in the FERC Dam Safety or licensing process that bear on matters for which we sought intervention.

It should be understood that we support expeditious reconstruction and construction to address the deficiencies of the project, as we did in our filings with the Commission during relicensing. However, we also ask the Commission and the Department to provide the public the opportunity to meaningfully understand and participate in this process. We believe that public understanding and participation are in the Commission's interest and the public interest.

### BRIEF SUMMARY OF LICENSING PROCEEDINGS RELEVANT TO THE 2017 OROVILLE DAM INCIDENT

The FOR *et al.* intervention notes the following:

Consistent with the Commission's responsibilities under 7(a) of the Wild & Scenic Rivers Act, 10(a) & 15[a](2)[A] of the Federal Power Act, the Commission's *Engineering Guidelines*, and the Commission's regulations (18CFR 4.51(g)(2)) requiring relicensing applicants to "demonstrate that existing structures are safe and adequate to fulfill their stated functions," issue a licensing order requiring the licensee to armor or otherwise reconstruct the ungated spillway and to make any other needed modifications so that the licensee can safely and confidently conduct required surcharge operations consistent with the Corps of Engineers Oroville Dam Reservoir Regulation Manual.<sup>5</sup>

FOR *et al.* asked the Commission to take up this matter in the licensing proceeding, or by a separate order (presumably by the Commission's Dam Safety division) if the licensing proceeding did not prove more expeditious.

The FOR et al. intervention also noted the following:

The discharge area below the emergency spillway is not armored, and extensive erosion would take place if the emergency spillway were used. The spillway road and possibly high voltage transmission towers would be impacted. (p. II-1) Because the area downstream from the emergency spillway crest is an unlined hillside, significant erosion of the hillside would occur. (p. II-5) "The hillside between the

<sup>&</sup>lt;sup>5</sup> FOR et al. Intervention, p. 13.

emergency spillway and the Feather River would be subject to severe erosion when water flows over the spillway. Depending on the rate of flow, the erodable area .could range from 50 to 70 acres. The amount of soil, rock, and debris that would fall into the Feather River could be very large, depending on the depth of erosion. There could be damages to downstream structures, including the Thermalito Diversion Dam and Powerplant, Fish Barrier Dam, and highway bridges. If there is river channel blockage below the spillway, there could be impacts on operation of Hyatt Powerplant.

FOR *et al.* argued that these consequences of the use of the emergency/auxiliary spillway including the potential loss of crest control—were properly before the Commission because of its duty to ensure that project works be safe and adequate to fulfil their missions and because of the operational consequences that follow if they are not safe and adequate and, indeed, have followed.<sup>6</sup>

Sutter County, the City of Yuba, and Levee District 1 (Sutter County *et al.*) also intervened raising similar issues and concerns. They, in part, asked the Commission for the following:

A relicensing order should be issued, consistent with the Commission's duty under section 10(a) of the Federal Power Act, which directs the licensee to investigate the adequacy and structural integrity of Oroville Dam's ungated auxiliary spillway that may currently pose a risk to the Project facilities and downstream levees in Sutter County in the event extreme flood releases are required, as recently experienced in flood release events of 1986 and 1997, and to take all necessary actions to correct any identified deficiencies, in this regard.<sup>7</sup>

Over the course of the proceeding, the Department responded with a number of arguments:

- [I]t is neither necessary nor appropriate to address specific issues related to dam safety in the relicensing context.
- DWR is in full compliance with FERC's dam safety regulations and the State of California's dam safety program, and nothing in the record supports Friends of the Rivers' speculation regarding the potential for flood impacts in the event of dam failure.
- [T]he Oroville Dam, including its appurtenant facilities, has repeatedly been found safe and adequate for its intended purposes, which include emergency spillway operations.

<sup>&</sup>lt;sup>6</sup> FOR *et al.* Intervention, pp 13–14.

<sup>&</sup>lt;sup>7</sup> Amended Motion to Intervene of the County of Sutter, the City of Yuba City, and Levee District No. 1 of Sutter County, p. 8, March 4, 2006.

- The last five years of the [the Department's] Division of Safety of Dams' inspection reports all state: "From the known information and the visual inspection, the dam, reservoir, and the appurtenances are judged satisfactory for continued use."
- DWR recently reviewed the geologic conditions at the emergency spillway and concluded that the spillway is a safe and stable structure founded on solid bedrock that will not erode.
- The [Department's] Project Geology Section determined that there are only one to four feet of erodible top soil in the downstream area, and that erosion would not compromise the stability of the emergency spillway.<sup>8</sup>

The Commission's response was to ask the San Francisco regional office (SFRO) of its Division of Safety of Dams to review the issues raised by Friends of the River *et al.* While SFRO did not appear to comprehend the range of circumstances in which the physical deficiencies at the dam complex would be relevant, including their real-world effect on operations,<sup>9</sup> the SFRO did assure FERC's Division of Hydropower Licensing that "during a rare event [with] the emergency spillway flowing at its design capacity, spillway operations would not affect reservoir control…"<sup>10</sup>

The State Water Contractors and the Metropolitan Water District of Southern California (the latter, MWD) had objections similar to those of the Department, apparently taking the position that the demonstration that existing project works are safe and adequate to fulfil their stated

<sup>10</sup> Onderdonk Memo, p. 2.

<sup>&</sup>lt;sup>8</sup> Response of the California Department of Water Resources to Recommendations, Terms and Conditions, Prescriptions, and Settlement Comments, pp. 96–97, May 26, 2006, eLibrary no. 20060526-5039. (DWR Response)

<sup>&</sup>lt;sup>9</sup> The SFRO limited its analysis to the PMF/spillway design flood (characterizing it as a 350,000 cfs discharge). The SFRO failed to note that use of the auxiliary spillway in a standard project flood (SPF) is required in the Army Corps of Engineers (ACE) Oroville Dam Reservoir Regulation Manual, a discharge that would result in a reservoir surcharge of 9.7 feet (charts 16 and 32). The SFRO failed to note that "interim" (in place since Oroville Dam operations began a half a century ago) operations requirements by the Corps would require DWR to limit downstream releases to protect downstream levees by surcharging the reservoir if required. The SFRO failed to consider the operational consequences of operator reluctance to damage the hillside and cause problems with project works and project lands even for events smaller than the SPF. The SFRO failed to consider that the auxiliary spillway might be needed because of operational problems with the main service spillway as just happened in the 2017 Oroville Dam incident. The SFRO accepted DWR's Project Geology Section analysis that the limited erosion that might be expected from the use of the auxiliary spillway would not "compromise the integrity of the emergency [auxiliary] spillway. There was no evidence the SFRO conducted an independent investigation. See memo from John Onderdonk, Senior Civil Engineer, San Francisco Regional Office, Division of Dam Safety and Inspections Emergency Spillway Safety Questions related to Intervention Motion, Proj. No. 2100, Letter to John Mudre, FERC Division of Hydropower Licensing, July 27, 2006. (Onderdonk Memo), eLibrary no. 20060801-0158.

missions (and redressing their deficiencies) was a "flood control" mission outside of the Commission's jurisdiction:

As has been explained by DWR, the Commission lacks flood control jurisdiction over the Oroville Facilities because Congress authorized federal funding for the construction of Oroville Dam in exchange for the use of storage allocated for flood control.<sup>11</sup>

That argument, understandably, did not appear to be accepted by the FERC SFRO or the Commission licensing staff. Presumably they believe that the competence of FERC-licensed project works to fulfil their stated mission is squarely within the Commission's jurisdiction.<sup>12</sup> The Contractors and MWD did outline an important reason for their participation in the licensing proceedings.

Further, under its contracts with DWR, a substantial portion of the costs associated with the facilities, operations and maintenance of the Project are borne by SWC members. Accordingly, as the umbrella organization and representative for these 27 agencies, the SWC has a direct and substantial interest in the outcome of any and all matters associated with the Project.<sup>13</sup>

FERC's Office of Energy Projects (OEP) issued a Final EIS for the relicensing of the Oroville Facilities on May 27, 2007. It did not include any changes to the auxiliary spillway, apparently because OEP accepted the SFRO's conclusions that the spillway could be used without failing in a Probable Maximum Flood (PMF). It did note the following:

Ensuring the safety of Commission-licensed hydroelectric projects is an on-going process with evaluations by Commission-approved independent consultants for high hazard dams such as Oroville every 5 years.<sup>14</sup>

<sup>&</sup>lt;sup>11</sup> Motion of the State Water Contractors and the Metropolitan Water District of Southern California to File Reply Comments, p. 2, February 2, 2007. eLibrary no. 20070202-5068

<sup>&</sup>lt;sup>12</sup> Army Corps of Engineers Reservoir Regulation Manuals specify minimum required floodwater management *operations* of Section 7 reservoirs such as at Oroville Dam. This should not be a matter of dispute. Likewise, it should be undisputed that *project works* are under the jurisdiction of the Commission. In addition to the Section 10(a) "best adapted project" mission given the Commission in the Federal Power Act, Section 10(b) of the Act makes it clear that "no substantial alteration or addition not in compliance with the approved plans shall be made to any dam or other project works…without the approval of the Commission." Section 15(a)(2)(B) of the Federal Power Act requires the Commission to consider [t]he plans of the applicant to manage, operate, and maintain the project safely" in relicensing. These statutory obligations are reflected in the Commission's *Engineering Guidelines* and its regulations.

<sup>&</sup>lt;sup>13</sup> Motion to Intervene of the State Water Contractors, Project 2100-52, p. 2, February 3, 2006, eLibrary no. 20060203-5038

<sup>&</sup>lt;sup>14</sup> Federal Energy Regulatory Commission *Final Environmental Impact Statement for the Oroville Facilities Project* Docket No. P-2100-052, p. C-10, May 18, 2007, eLibrary no. 20070518-4001. (FERC Oroville Facilities FEIS or FEIS.)

It also noted that dam-safety matters do not provide opportunities for involvement by members of the public:

Work on dam safety issues is critical energy infrastructure information (CEII) that, as you point out, is not available to the public.<sup>15</sup>

Interestingly, the FEIS does accept our characterization of ACE requirements to make floodcontrol releases (rather than levee-breaking dam-safety releases) over the auxiliary spillway in surcharge circumstances. This means, operationally, that FERC concurs that the project has up to a 750,000 acre-foot traditional flood reservation and 150,000 acre feet of surcharge space in which to regulate outflows to within the downstream floodway. (The surcharge reservation, of course, is usable only when necessary conditions are present and require it. We argued that such a spillway should not fail or cause significant damage to project lands and facilities, along with the associated disruption of project operations, and was best described as an auxiliary spillway, consistent with FERC's *Engineering Guidelines*. We also argued that the present spillway was inadequate for this.).<sup>16</sup>

The Oroville FEIS did note that the SFRO conclusion memo was available in the FERC record and had apparently become FERC's conclusion as well.<sup>17</sup> See footnote 9, *supra*, for a brief

Friends of the River, Sierra Club, and the Citizens League note that the draft EIS states that Lake Oroville be operated to maintain up to 750,000 acre-feet of storage space to capture significant inflows for flood control (section 3.3.2.2). However, these three groups comment that this does not properly capture DWR's flood-control space obligations and fails to recognize that operational floodwater management operations require a 900,000 acre-feet flood-space reservation to accomplish regulation of project-design outflows to no more than the project-design objective release.

Response: The license application states that the [flood reservation] storage capacity is 750,000 acre-feet. We revised the text in section 3.3.2.2 of the final EIS to include the surcharge storage for a total of 900,000 acre-feet.

See also FOR *et al.* Intervention. The operational requirement to use surcharge space for a portion of the auxiliary spillway to confine the combined service and auxiliary releases to within the design of the downstream flood way was disputed by DWR. (See DWR Response, pp. 95–96). This response is, perhaps, understandable since the ACE Reservoir Regulation Manual devotes little space to the "interim" operations that have governed the project for a half a century and for the foreseeable future. While the then-chief of the Water Control Branch of the Sacramento District of the Corps of Engineers confirmed the FOR *et al.*/FERC FEIS understanding of "interim" operations, the manual is clearly in need of an update.

 $^{17}$  "A memorandum dated July 27, 2006, that summarizes our responses to several of the parties" concerns about the safety of the Oroville dam is available to the public via eLibrary under docket P-2100.

<sup>&</sup>lt;sup>15</sup> FERC Oroville Facilities FEIS, p. C-10.

<sup>&</sup>lt;sup>16</sup> The FERC Oroville Facilities FEIS states the following on p. C-19:

description of the limitations of the memo (setting aside the fact that the 2017 Oroville spillway incident demonstrated that its major conclusions were incorrect).

The State Water Quality Control Board, issued water quality certification for the project on December 15, 2010.<sup>18</sup> The Board did not take up the request of FOR *et al.* that it address water qualities problems associated with the use of a hillside to conduct surcharge operations.<sup>19</sup> A Biological Opinion was issues for the project on December 5, 2016.

The license has not yet been issued.

### **REFLECTIONS ON THE OROVILLE SPILLWAYS INCIDENT**

The incident demonstrated that large portions of the hillside could be mobilized by cross-country flows well below the design capacity of the spillways. Erosion depths alongside the service spillway were an order or two of magnitude larger than DWR and SFRO's estimates for the hillside erosion potential. These flows undermined the foundation of the lower main spillway, collapsing the spillway sections resting on these foundations. Hillside debris formed a dam that prevented the use of the powerhouse because of high tailwater conditions in the afterbay/forebay formed by Thermolito Diversion Dam (part of the Oroville Complex) downstream. Transmission lines from the powerhouse were de-energized (and some removed by helicopter) because of feared backstepping/head-cutting erosion from the main spillway break and use of the emergency spillway that could undermine transmission towers. Without being able to serve load, powerhouse releases were no longer possible, and subsequent releases were confined to the broken spillway until the hillside deposits from the afterbay had been cleared sufficiently to reduce tailwater conditions.

The reluctance to use the broken main spillway and cause more damage to project lands and facilities, plus the loss of powerhouse releases, caused the reservoir to surcharge, resulting, according to press accounts, in a peak overflow of the auxiliary spillway of somewhat more than a foot of water and a peak overflow of approximately 10,000 cfs. The overflow lasted about a half a day.

Contrary to DWR and SFRO assurances, the top of the hillside downstream of the auxiliary spillway proved to be highly erodable, even at these low flows. DWR saw what appeared to be backstepping/head-cutting erosion there and projected failure of the auxiliary spillway/ foundation within one hour. It was estimated that hilltop would lose crest control of at least 30

This memorandum, from the Commission's Division of Dam Safety and Inspections, concludes that the spillway is properly characterized as an emergency spillway and is structurally adequate." FERC Oroville Facilities FEIS, p. C-10.

<sup>18</sup> State of California State Water Resources Control Board Order WQ 2010-0016, Dec. 15, 2007.

<sup>19</sup> Joint comments of Friends of the River, Sierra Club, and South Yuba River Citizens League on Oroville Facilities Relicensing, FERC Project 2100, draft EIR, August 20, 2007. vertical feet of the reservoir in a catastrophic manner. DWR called for an immediate evacuation of 188,000 people in the Feather River Basin, and the evacuation was carried out. Fortunately, increased service spillway releases dropped reservoir levels below the auxiliary spillway lip and eventually down to at or below the required flood space reservation. No loss of crest control occurred, but it had been close.

The incident gained worldwide attention.

### INTERESTS OF THE INTERVENORS

FOR *et al.* believed that the Oroville Dam complex, as designed and constructed, could not properly accomplish its mission safely and without considerable damage to project lands and facilities and risk to downstream communities. The undersigned intervenors believe that these deficiencies should be cured expeditiously. We also believe that addressing physical deficiencies of a project undergoing a relicensing is a proper and necessary Commission activity unless it is being addressed in another more expeditious Commission proceeding or process. We believe that these processes should be transparent and allow for public participation.

FOR *et al.* argued, in particular, that use of the emergency/auxiliary spillway to any significant degree would cause significant erosion to the unarmored hillside, causing considerable havoc to project operations and risk of loss or reservoir crest control. FOR *et al.* further argued that there are adverse operational and emergency-management consequences to not having the infrastructure to carry out the full range of operational responsibilities.

And FOR *et al.* argued that the auxiliary spillway, which was just a spillway lip, needed a proper spillway. It should be obvious, even before the forensic analysis, that the Oroville Dam spillways incident demonstrated that these concerns were not misplaced. It also, in all probability, revealed other deficiencies that should be addressed.<sup>20</sup>

Although FOR *et al.* had brought the problems with the auxiliary spillway to the attention of the Commission, FOR and other intervenors learned only through a press conference video that DWR plans to build a downstream cutoff wall on the top of the hillside and lay a concrete apron between the spillway lip and the cutoff wall. If engineered well, this approach could prevent the kind and scale of backstepping/headcutting erosion that threatened the loss of crest control there in the recent spillway incident. This was a welcome development.

However, there was no press follow-up on whether DWR and the Commission Division of Dam Safety and Inspections were considering or had rejected a full auxiliary spillway that could prevent major erosion of the hillside below the planned hilltop apron.

<sup>&</sup>lt;sup>20</sup> For example, the Department of Water Resources April 13, 2017, press conference announced the imminent connection of additional power lines to the Oroville powerhouse switchyard—providing an alternate path to its load centers and providing greater assurances that the powerhouse could make releases to control reservoir levels.

### **CONCERNS OF THE INTERVENORS**

The Division of Safety of Dams and Inspection's February 13, 2017 order does not envision any role for any members of the public, including intervenors in the licensing proceeding, to participate or know about reconstruction efforts. That is troubling to us, and it is troubling to many of the 188,000 people who suddenly found themselves profoundly affected by failure of the Department and the Division of Safety of Dams and Inspection to properly appreciate the dangers associated with the use of the auxiliary spillway.

This lack of a meaningful information-sharing or consultative role is a problem for both the Department and the Commission. This is one of the more meaningful dam-safety incidents in a FERC-licensed dam in the United States. The major issues involve bedrock (competent or otherwise), roller compacted concrete, and slabs of concrete lying on top of them in a largely DWR-controlled steep hillside. They are and will be viewable in Google Earth. These rocks and concrete are not now nor are they likely to be as reconstruction proceeds a terrorist target.

They do mean something to the residents of the Feather River Basin. The quality and breadth of reconstruction does matter.

One of the infrastructure issues in the relicensing revolved around whether use events of the auxiliary spillway were so rare that a complete spillway was not justified. We do know that the SFRO, when considering the status of the auxiliary spillway, characterized the use of the spillway as a "rare event," "rare floods," "rare event of a discharge," and "rare event of an emergency spillway discharge," and discussed the consequences of use of the spillway in terms of a PMF, an event with a very rare statistical probability (usually with computed annual probabilities smaller than one in a thousand, sometimes much higher). DWR has said in press conferences that it does not intend to use the spillway again—which is nice rhetoric, but...

We have no way of knowing if DWR, the BOC, or the Division of Safety of Dams and Inspections have reflected on the fact that in the first half century of operation, DWR expected to use the spillway twice (in 1997, calling on the City of Oroville to stand by to evacuate, and in 2017, evacuating most of the communities in the Feather River Basin when the spillway was used). In neither case did the event inflows approach the reservoir design flood, let alone the Standard Project Flood or the PMF. Thus, in real-world operational experience, the use or threatened use of the auxiliary spillway can hardly be described as rare—at least in comparison to computed probabilities of traditional floodwater-management reservoir design floods or spillway design floods.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> As used here, reservoir design floods refer to the volume of floodwaters per unit time that a reservoir and dam can accommodate safely within the reservoir and downstream floodwater management system. Spillway design floods refer to the volume per unit time that can be accommodated within the spillways of a dam. Three-day volumes are commonly used here. Annual exceedance probabilities are in the range of one over hundreds to thousands of years.

These facts should call for a more conservative spillway design, one that does not cause significant damage to project lands and consequences to project operations or threaten premature use of levee-breaking dam releases. However, it is unclear how intervenors in the licensing proceeding or other vitally interested parties can bring this to the focused attention of the Commission and be sure that relevant arguments are not being misunderstood or ignored.

This is particularly a problem because currently all of the communications among the BOC, DWR, and Commission staff are apparently designated Critical Energy Infrastructure Information (CEII) and are thus not available to the public. Intervenors in the licensing, including those who raised concerns about spillway infrastructure, are not allowed to see or participate in CEII matters in ways that are part of a public discussion.

While we appreciate the need for and support the expeditious reconstruction of the service spillway and correction of the demonstrable crest-control problems at the auxiliary spillway, the question of whether, in what manner, and when a full auxiliary spillway can be constructed is not one that should be deferred or transferred to others who lack the means to resolve the spillway deficiencies. This question has been and perhaps still is controversial, and it should be a Commission responsibility to have that debate in public as much as possible.

Four of the intervenor drafters of this communication are members of the Hydropower Reform Coalition (HRC). In its communications with the Commission last year on proposed CEII regulations, HRC wrote the following:

The HRC believes that informed public participation and citizen oversight of power producers have an important role to play in the protection of energy infrastructure as it relates to maintenance and normal operations for both power and non-power purposes. We also believe that public participation and citizen oversight are important democratic values and elements of public safety.<sup>22</sup>

The director of the Department of Water Resources, at his April 13, 2017 press conference, told the assembled press that the Department was trying to redact CEII from information from various dam-safety and BOC reports. Whether that material will be useful is yet to be determined.

### **REQUEST OF THE INTERVENORS**

In our various interventions in the relicensing of the Oroville Facilities, the undersigned and other intervenors raised concerns about inadequate spillways and dam safety. As stated at the front of this letter, we seek the following clarifications.(1) Has the Commission subsumed all

<sup>&</sup>lt;sup>22</sup> HRC Comments on Proposed Rulemaking – Regulations Implementing FAST Act Section Docket No. 61003 – Critical Electric Infrastructure Security and Amending Critical Energy Infrastructure Information, August 18, 2016. (FERC Docket No. RM16-15-000), eLibrary no. 20160818-5218.

issues relating to the floodwater management implications of inadequate spillways and dam safety at Oroville Dam under a process directed by the Commission's Dam Safety division? (2) Will the Commission incorporate major reconstruction efforts into the relicensing proceeding for the Oroville Facilities, and if so, how? (3) What role do intervenors in the licensing proceeding have in any and all processes that bear on spillway adequacy, dam safety and reconstruction at Oroville Dam? We request that the Commission make these clarifications expeditiously.<sup>23</sup>

More broadly, we request that the Department and the Commission undertake actions that ensure that the public can have full confidence that Oroville Dam will be made safe and well suited to its mission. This means that Department and Commission decision-making need to be transparent and allow for public participation, whether this is to be a dam-safety process or a licensing proceeding/process, or both.

As we were preparing this letter, the Department announced on April 17, 2017 that it would hold a series of public meetings in the coming weeks to "update communities in the region about the ongoing Oroville spillway recovery effort."<sup>24</sup> Also on April 17, 2017, the Department announced it has awarded a contract for work on the dam this summer, which noted: "Details of the three bids will not be made public, as they contain design information that is considered Critical Energy/Electric Infrastructure Information by federal regulators and could cause a security risk if released."<sup>25</sup> Public outreach is welcome. However, because much of the relevant information appears destined to remain out of public view, we are concerned that the planned public meetings may not sufficiently respond to the need.

The Department and the Commission need to work together to make public any materials currently classified as CEII if those materials are unlikely to be aid and abet terrorist use. The Department and the Commission also need to ensure that future materials are publicly available to the maximum extent reasonably possible.

In addition, the Department and the Commission need to create a process that allows the public to gain access to relevant information and to offer informed opinions on reconstruction and new construction at Oroville Dam. Given the need for expeditious decision-making and execution of this effort, we suggest that the Department and FERC begin by convening, as soon as possible, an appropriate series of technical workshops led by the Department, the Commission, the BOC, and any scientific panels or consultants.

<sup>24</sup> http://www.water.ca.gov/news/newsreleases/2017/041717\_orovillepublicmeetings.pdf

<sup>&</sup>lt;sup>23</sup> We are not alone in seeking this clarification. On April 19, 2017, nine members of Congress requested that the General Accounting Office initiate an investigation of FERC's dam safety procedures generally and in the context of licensing procedures, asking specifically: "What are the respective roles and responsibilities of the licensee, the state, and FERC in the evaluation of the structural integrity and anticipated performance of a dam and its related facilities during the licensing and re-licensing process?" See <a href="http://democrats-">http://democrats-</a>

energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/GAO.2017.04.1 8%20Request%20Letter%20FERC%20Dam.EE\_.pdf

<sup>&</sup>lt;sup>25</sup> http://www.water.ca.gov/news/newsreleases/2017/041717 oro contract award.pdf

We recognize that reconstruction and remediation of the physical deficiencies of Oroville Dam must be expeditious. We all want the Department and the Commission to be successful and to have the support of the public. To do this will require the Commission and its licensee to do something different, to step out of accustomed boxes. Licensing proceedings tend to be long and legalistic. Processes undertaken by the Division of Dam Safety and Inspections don't involve meaningful public access or ability to contribute. Neither is a good model here.

The February, 2017 Oroville Dam spillway incident was extraordinary event that touched the lives of hundreds of thousands of people. It demands an extraordinary effort by the Commission and its licensees to create a response that is equally extraordinary and something to be proud of. Let's do that.

Respectfully submitted,

FRIENDS OF THE RIVER

By \_\_\_\_\_/s/\_\_\_\_ Ronald M. Stork Senior Policy Advocate Friends of the River 1418 20th Street Sacramento, CA 95811 rstork@friendsoftheriver.org

### SIERRA CLUB

By\_\_\_\_\_/s/\_\_\_\_\_

Allan Eberhart Sierra Club California Conservation Committee & Mother Lode Chapter, Sierra Club 24084 Clayton Road Grass Valley, CA 95949-8155 vallialli@wildblue.net

#### SOUTH YUBA RIVER CITIZENS LEAGUE

By \_\_\_\_\_/s/\_\_\_\_\_

Caleb Dardick Executive Director South Yuba River Citizens League 313 Railroad Ave. #101 Nevada City, CA 95959 caleb@syrcl.org

### CALIFORNIA SPORTFISHING PROTECTION ALLIANCE

Chris Shutes FERC Projects Director California Sportfishing Protection Alliance 1608 Francisco St. Berkeley, CA 94703 <u>blancapaloma@msn.com</u>

### AMERCIAN WHITEWATER

By \_\_\_\_\_/s/\_\_\_\_\_

Dave Steindorf Special Projects Director American Whitewater 4 Baroni Drive Chico, CA 95928 dave@americanwhitewater.org

cc:

Acting Director Bill Croyle Department of Water Resources 1416 Ninth Street Sacramento CA 95814 c/o: Janiene.Friend@water.ca.gov Ted Craddock, Project Manager Oroville Emergency Recovery - Spillways Executive Division Department of Water Resources P.0. Box 942836 Sacramento. CA 94236-0001 c/o ted.craddock@water.ca.gov

Sharon Tapia, Chief Division of Safety of Dams Department of Water Resources 2200 X Street, Room 200 Sacramento, California 95818

Mr. David E. Capka, P.E. Director, Division of Dam Safety and Inspections Federal Energy Regulatory Commission 888 First Street, N.E., Routing Code: PJ-123 Washington, D.C. 20426

Mr. Frank L Blackett Regional Engineer Federal Energy Regulatory Commission 100 First Street, Suite 2300 San Francisco, California 94105-3084

## **CERTIFICATE OF SERVICE**

I hereby certify that I have e-filed this document in the Commission's e-library for Project 2100-000, and have this day served this document on each person designated on the official service list compiled by the Secretary in this proceeding, via e-mail or surface mail as directed on the service list.

Dated this 19th day of April 2017.

/s/

Ronald M. Stork Friends of the River 1418 20<sup>th</sup> Street Sacramento, CA 95811