US Army Corps
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CASE STUDY #6

Alternative Dispute
Resolution Series

CORPS OF ENGINEERS USES MEDIATION TO SETTLE HYDROPOWER DISPUTE

September 1991

IWR Case Study 91-ADR-CS-6

The Corps Commitment to Alternative Dispute Resolution (ADR):

This case study is one in a series of case studies describing applications of Alternative Dispute Resolution (ADR). The case study is part of a Corps program to encourage its managers to develop and utilize new ways of resolving disputes. ADR techniques may be used to prevent disputes, resolve them at earlier stages, or settle them prior to formal litigation. ADR is a new field, and additional techniques are being developed all the time. These case studies are a means of providing Corps managers with examples of how other managers have employed ADR techniques. The information in this case study is designed to stimulate innovation by Corps managers in the use of ADR techniques.

These case studies are produced under the proponency of the U.S. Army Corps of Engineers, Office of Chief Counsel, Lester Edelman, Chief Counsel; and the guidance of the U.S. Army Corps of Engineers Institute for Water Resources, Fort Belvoir, VA, Dr. Jerome Delli Priscoli, Program Manager.

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Introduction

Conflicts over the operation of dams and reservoirs, and their impacts on downstream land use and ecology, have increased dramatically over the last few years. Facility operators, such as the Corps of Engineers, often find themselves in the middle between conservation, flood control, recreation, landowner and hydropower interests, with entrenched positions and antagonistic relations. Such was the case with parties concerned about the operation of Harry S Truman Dam and Reservoir, the largest flood control structure in Missouri, with a storage capacity of more than five million acre feet of water. This important reservoir is only slightly smaller than the adjoining Lake of the Ozarks, one of the premier recreation areas in the midwest.

In the fall of 1988, the Corps of Engineers initiated a mediation effort involving the operation of Harry S Truman Dam and Reservoir which led to the resolution of serious longstanding issues in dispute. This case study analyzes the process and other factors which led to the successful outcome. The article is written from the perspective of the mediator, Christopher Moore, a Partner at CDR Associates in Boulder, Colorado. In preparing this case study, the mediator consulted most of the key parties to gain their perceptions and understanding of the events which led to the settlement. However, the mediator bears sole responsibility for the interpretation of the mediation that is presented here.

The analysis will cover the following topics: The developmental history of the dispute and the determination of its "ripeness" for some form of alternative dispute resolution mechanism; the selection of mediation as an appropriate procedure to address the conflict; the identification, selection and entry of the mediator; pre-mediation work conducted by the intermediary with the parties to design the intervention strategy and condition them to work together; a description of the process and meetings; post-mediation negotiations; and a discussion of why the parties settled.

Background to the Dispute

The Harry S Truman Project (HST) had its roots in plans developed in the late 1930's, to build three flood control reservoirs on the Osage River which would alleviate flood conditions on the lower Missouri and Mississippi Rivers. World War II delayed construction of the project. Shortly after the war, a Corps of Engineers report recommended expansion of the project to nine reservoirs. The need for a flood control project was confirmed by a major flood along the Osage River in 1951. The project was authorized as a single purpose flood control structure by the Flood Control Act of 1954, under the name Kaysinger Bluff Dam and Reservoir.

By the late fifties and early sixties, it was clear that there were difficulties in achieving a positive cost/benefit ratio for the project on the exclusive basis of flood control and recreation. In addition, many local residents wanted a larger facility which would result in greater recreation opportunities. To offset these concerns, plans were modified in 1962 and again in 1966, to include three—and ultimately six—hydropower generation units and to enlarge the size of the lake. A pumpback feature which would allow facility operators to pump water previously released from the reservoir into the Lake of the Ozarks back into the Kaysinger Bluff Dam, for re-release at a later time when there was a new demand for power. The impacts of releases from multiple generation units and the pumpback feature would later become the most controversial components of the proposed facility.

Operations for the facility were projected at 600 hours of generation from June 1 to September 30, as necessary, with up to eight hours of pumping each week night and up to 40 hours of pumping during the weekend. Generation was to occur with all six units for seven and one-half hours each weekday during the summer months. It was also projected that the level of Lake of the Ozarks could rise and fall significantly in the areas of the lake near HST when six units were in operation; that water fluctuations would result in some inundation of land, and might cause risks to recreation and overbank erosion in the Warsaw area during full power generation. In 1970, the name of the project was changed to Harry S Truman Dam and Reservoir.

Construction began in 1964, but the Vietnam War, reductions in appropriations and public opposition slowed completion of the dam. Almost from its inception, the proposed construction of the large dam and reservoir project met resistance from environmentalists, downstream property owners, and recreationists. Of particular concern were proposed levels of operation, the number of generation units, and the pumpback feature.

An Environmental Impact Statement (EIS) was completed for the project in 1976; and in April of that year a lawsuit was filed by the Environmental Defense Fund, Missouri Chapter of the Wildlife Society and several Missouri citizens. The suit sought to declare the final EIS inadequate, reverse the COE's decision to proceed, and enjoin the Agency from further construction. In November of 1973, the court decided in favor of the Corps, and construction was continued. The Osage River channel was closed in 1977, the spillway was closed in 1979, and the first hydropower generation unit came on line in 1981.

In response to public concerns raised before and after the lawsuit, the Corps initiated a study of potential downstream impacts. The report was completed in 1980 and resulted in the relocation of Warsaw, Missouri's water access and harbor facilities.

The study explored among other issues, potential impacts on property that might result from releases, effects of water velocities on fishing, boating and other water-based recreational pursuits, and bank erosion.

In late 1981, Senator Danforth wrote to the Chief of Engineers with ten questions related to the hydro generation portion of the project. At a subsequent meeting between the Senator and the Corps, the Agency attempted to address some of these concerns. The Corps stressed that it was committed to work toward full power generation capacity at HST,

but would do so gradually by initiating a series of increases in operation and production, and by carefully evaluating any impacts between each phase.

By 1982, Southwestern Power Administration (SWPA), the federal marketer for the power generated at HST, indicated that in order to determine the reliability of the facility and its generation capacity, the pumps needed to be tested. SWPA also indicated that one of its customers, Associated Electrical Coops Inc. (AECI), needed to have on line capacity by June of 1982. Subsequently, the Corps initiated the testing of the pumpback feature.

Pumpback was tried on an experimental basis, but the results were less than satisfactory. While the requisite power was generated and the necessary volume of water was moved from the lower to the upper reservoir, over 2,000 pounds of fish were drawn into the pumps and killed in three unit hours of pumping.

The concerned conservation parties—the Missouri Department of Natural Resources, the Department of Conservation and environmental public interest groups—were outraged at the results of the test, and demanded that the feature be scrapped. Conservationists were joined by downstream property owners who were angry over the rise and fall of the Lake of the Ozarks due to periodic releases, the development of mud flats along the shoreline and concerned that releases were resulting in significant bank erosion. Recreationists, too, were concerned about the velocity of releases and the potential risk to people fishing or boating immediately below the dam.

The State agencies concerned with conservation and the public mobilized against the use of the pumpback feature and against any increase in the number of hydro units which could be operated. They lobbied, held meetings, and put pressure on elected officials to back their stance. To increase their leverage on the Corps and the hydropower interests, the opponents of the facility involved the Governor and members of the Congressional delegations from the State of Missouri.

In August of 1982, Governor Bond and the State's Attorney General sent a letter to the Chief of Engineers proposing a six-point plan to protect the interests of the State and its citizens. The plan proposed "restricting power generation discharges for Truman Dam to 50 percent of maximum installed capacity for a period of 10 years, except as necessary to pass high natural flows," and opposing the future use of the pumpback feature. In an October memorandum, the Corps responded to the State's concerns. The Agency indicated a continued commitment to a phased operation toward full authorized capacity, agreed for the time being to operate the facility at a low output, and suspended the use of the pumpback feature until such time as further studies of potential impacts and mitigation measures could be completed. The Governor responded that the Corps' proposal could serve as a basis for future discussions on operations of the facility.

In 1983, General Sisinyak of the Missouri River Division met with the Governor and proposed the creation of a coordination team composed of representatives from the Office of the Governor, and concerned state and Federal agencies, and public interest groups. The Coordination Team was to, "Provide a forum for identifying and communicating to the involved governmental agencies, adverse impacts for Harry S Truman hydropower

operations, and seek solutions through direct communication with those agencies. Members would be concerned with (1) identification of adverse impacts of the Harry S Truman hydropower project, and (2) identification of alternatives which would reduce impacts to a tolerable level, or provide a means of adequately protecting persons and resources from the injuries such impacts could cause."

The Coordination Committee was created in the summer of 1983 and met 12 times between that date and October of 1985. Its work was supplemented by a series of independent research projects initiated by the Corps, on fish reaction to protection devices and the effects of varying water velocities, and studies on the downstream impacts of releases. It was hoped by all concerned parties that the results of the studies would resolve some of the outstanding issues, but this was not the case. Members of the environmental community contested the results.

In June of 1983, a citizens petition campaign was begun to urge the state to set a standard of operations for HST and to block any increases in power production. Ultimately this petition, with approximately five thousand signatures, was presented to the Missouri Congressional Delegation. The delegation responded to the citizens by requesting the Corps to find a mutually acceptable independent organization to review its studies. The Corps agreed, and the University of Missouri was awarded a contract to conduct the review. The report of the independent review was completed in October of 1984, and it identified a series of potential negative impacts and recommended some mitigation measures.

In January of 1987, Governor Ashcroft released a state position paper which proposed new operations guidelines for HST. The document outlined both the State's view of the current problems and proposed new action for the Coordinating Committee.

Unfortunately neither the Coordination Committee nor the studies were able to lay to rest the controversy regarding the level of operation of the Harry S Truman Dam and Reservoir. The Committee was plagued by problems of in-fighting, disagreements over the validity of studies, and unclear membership. After several years of meetings the principal parties agreed that while the Committee had been successful in some areas, it had been unable to resolve the critical issues regarding the operation of the facility.

In June of 1987, a new District Engineer, Colonel John Atkinson arrived in the Kansas City District. Atkinson did not have a history with the antagonistic parties, saw his mission as getting the Truman case settled and was dedicated to developing a new consensus-building approach to resolve outstanding operations issues.

Attempting to balance authorization requirements and address environmental concerns, Atkinson issued orders which allowed for an extended duration five-unit test and required "projections" of the impacts should the sixth unit be operated. All six units had been constructed, but the last units had not been tested or operated. He also delayed the use of the pumpback feature until such time as adequate control measures could be developed which would minimize fish kill. The test began in December of 1987, and was to run for three to six months. Atkinson's operating instructions, which were vigorously objected to by the concerned parties, ultimately became the catalyst for more formalized negotiations.

While the hydropower interests and Corps wanted the test, the State of Missouri and opponents of the dam's operation did not. An armada of boats from the Corps, state, media and some protestors were present on the two days of the test and intensively monitored downstream conditions and each other. Within 30 days, Senator Danforth wrote to the Secretary of the Army, and requested that the tests cease. After operating the test for one month and six days, the Corps complied, and initiated a "temporary suspension" with a freeze back to four units of generation.

Controversy regarding the operation of Harry S Truman Dam and Reservoir did not remain at the local and state levels. While the majority of power generated by the facility was marketed and sold to consumers in Missouri, it ultimately influenced the power rates in adjacent states. Congressional delegations from Kansas and Louisiana, consumer states, became concerned that one state did not have the authority to regulate a Federal facility which had impacts on consumers of other states. They began to put pressure on the Corps and the Missouri delegation to reconsider restrictions of the levels of operation of the facility.

At the time the tests were suspended, all parties agreed that there was a stalemate on the issues. The State had taken a position that three generation units were acceptable; four were generally unacceptable, but might be acceptable under very restrictive conditions, and that five units were totally unacceptable. The State Attorney General believed that the State had a fairly strong case to restrict Truman's operation, despite the fact that the State had lost a previous lawsuit over similar issues involving the operation of Stockton Dam and Reservoir. Some State officials believed that a lawsuit might be the appropriate way to resolve the issues, and remove the dispute from the political limelight that was being generated by the publicity campaigns of both the power interests and conservationists. This appeared to be an important consideration in the coming election year.

The hydropower interests, SWPA and AECI, were furious that public interest groups and State agencies were blocking the operation of an authorized project. They contended that the project had been approved at six units with pumpback, and that it should be operated as planned. They also maintained that six units of generation were needed to meet their power obligations, assure maintenance of electrical power rates, and to assure generation predictability. In addition, the hydropower interests argued that velocities below Truman Dam were within acceptable levels maintained by the Corps at other facilities, that there had been no significant impacts on bank erosion beyond what would normally be expected due to wave action, routine runoff and periodic flooding, and that property values had not been adversely affected. To counter the activities of the conservationists, the hydropower interests developed a large scale information campaign with news editorials and publications to inform the public about their view and to put pressure on elected officials to support full operation of HST.

By the Spring of 1988, each of the parties had initiated considerable effort to gain political leverage that would force the issue in their favor, but all had failed to do so. The Corps of Engineers and the Governor of the State of Missouri were in the middle between two extremely hostile constituencies, each with critical concerns. Adverse publicity was not helping any of the parties to resolve the dispute, and in fact was making the situation worse.

Atkinson concluded that the situation was now ripe for settlement and that a new approach was needed. The Corps had the legal authority to make final operations decisions, but Atkinson thought a superior solution would be one agreed upon by the concerned parties. The "ripeness" of the dispute was indicated by four essential variables. First, all of the parties had concluded that time was not working in their favor and that there was a desirability of some type of accord. More time without a settlement meant ongoing financial, public relations and political costs which were not acceptable. Second, each of the parties was strong enough to permit a compromise. Each could probably sell a compromise solution to its constituents. Third, there were options available which might meet each of the parties' interests. A formula with trade-offs, could probably be developed. And finally, the parties were frustrated by prior procedures used to resolve the dispute and were probably open to trying a new process if it promised to have potential to resolve the issue in dispute.[1]

Atkinson and his staff monitored the tempo of the state and power interests' activities as they tried to control public opinion regarding the issues. After six weeks he scheduled a "summit" meeting, inviting from the state: the Director of the Department of Natural Resources; the Director of the Department of Conservation; and from the power interests—the Regional Administrator of the Southwest Power Administration; the Chairman of the Board of AECI; and the Executive President (CEO) of AECI. In March 1988 all the principal invitees arrived with some being accompanied by key staff, who would later be deeply involved in the outcome. An agenda focusing on the operating details of the four generating units, which would continue to operate during the "temporary suspension." The meeting quickly focused on the frustrations each were experiencing over the situation. Atkinson, sensing a rare "window of opportunity" admitted that the five-unit test was conceived and ordered to break the "standoff" that each party had molded for the group. As the room fell silent Mr. O. B. Clark, Chairman of the Board of AECI, opened the door by suggesting that AECI would be willing to reconsider their long-standing position and seek a compromise. The others quickly agreed that if one party was willing to compromise—so could they!

A second meeting quickly followed to reconfirm the consensus and to develop a strategy for organization and approach. While there was some agreement regarding the issues to be discussed, there was not an agreement on the procedure to be used to reach an agreement. Finally Bill Dieffenbach, of the Missouri Department of Conservation, suggested a small negotiating group with negotiators from each party authorized to make decisions and commit their constituents. Negotiators would be representatives from the power interests, the State and the Corps. The State would send two negotiators, the industry two, and the Corps would send one. The State and the power interests would try to negotiate an operating plan which would be mutually acceptable, and which would be within the Corps' mandate for operations. The Corps agreed to this procedure, but reiterated that the Agency had final authority to make the decision on how the facility was to be operated. The Corps indicated that it was willing to consider any reasonable recommendation from the concerned parties. "The Corps could <u>not</u> give the project to the state to run," said Atkinson, but, "The Corps would not try to influence the outcome of the negotiations unless the parties agreed to something that the Corps couldn't live with." These terms were mutually agreeable to the parties as a basis for starting negotiations. The parties appointed Ron Kucera from the

Missouri DNR, Bill Dieffenbach from the Missouri Department of Conservation, Francis Gajan from SWPA, and Gerry Diddle from AECI to be their designated negotiators.

Selection of Mediation as the Preferred Resolution Process, and the Selection of the Mediator

Given past antagonistic relations between the parties and their inability to reach substantive agreements, Atkinson was skeptical about the viability of the parties working out an agreement on their own. He also recognized that the parties would not trust him or the Corps to play an intermediary role to "facilitate" the negotiations.

Atkinson thought that some form of third party assistance with negotiations would greatly enhance the probability of a successful outcome. He met with the key leaders and proposed either a retreat, a team building workshop or mediation.

The parties ultimately decided to try mediation, the assistance of a neutral and impartial third party who aids parties in conflict to negotiate an acceptable resolution of issues in dispute.

Mediation was selected because unassisted direct negotiations had failed to produce the desired results, there was a high level of polarization on the issues, and a more directive and structured process for problem solving was needed. The parties also believed that they needed an external neutral convener and process manager because none of them trusted the others to convene or conduct the meetings.

Because of the Corps' experience in initiating alternative dispute resolution procedures, the parties authorized Atkinson to find an acceptable mediator. Atkinson contacted Dr. Jerome Delli Priscoli, a Senior Policy Analyst at the Institute for Water Resources and one of the major proponents of the use of ADR by the Corps, and asked for a recommendation for a third party. The Institute maintains a roster of facilitators and mediators and was pleased to assist the District in finding an intervenor. The Institute suggested Dr. Christopher Moore, a Partner in CDR Associates in Boulder, Colorado. Moore was familiar with the Corps and water management issues and was a nationally respected mediator who had handled numerous multi-party and technically complex public and environmental disputes. The Institute contacted the mediator for the District, and within two weeks, the first negotiation session was scheduled.

Pre-Mediation Preparation

Prior to a joint meeting with the parties, Moore decided to schedule individual interviews. Because of the geographic dispersion of the parties, some of the interviews were conducted over the telephone while others were in person. Interviews lasted between one and one and one-half hours in duration, and were designed to establish rapport between the mediator and the parties, identify issues which the parties wanted to discuss, uncover hidden interests, explore the dynamics of the conflict, identify forces which would work toward or against settlement, and identify any ideas which the parties might have about the resolution process. The mediator also talked with each party about how they could present their concerns to

other parties in a constructive way, and prepared them to participate productively in the first joint meeting.

With the information garnered from the interviews, the mediator determined that the goals of the first joint session would be to build a working relationship between the parties which would encourage trust and respect, and identify the key issues and interests that the parties wanted to discuss. He also scheduled time to identify agreements in principle which might form the framework for a more comprehensive settlement.

Given the parties' history, it was clear that trust and respect would not happen overnight. Procedures to build a working relationship between the parties were initiated both prior to and within the mediation session itself. Atkinson believed that the negotiations should happen at a "retreat" setting where the negotiators would not be interrupted and could accomplish their task. He also believed that an informal environment should be established at the beginning of the negotiations so that the parties could get to know each other as people rather than representatives of opposing interests. Government regulations precluded Atkinson from paying for the participants' meals and lodgings, but he could make the reservations. Atkinson arranged for all of the parties to meet for dinner the night before the negotiations were to begin. A good meal at an ethnic restaurant and several hours of informal conversation allowed the parties and the mediator to begin to build working relationships. Accommodations were reserved at a local military base, with each participant paying their own way. The Colonel's style, and the care which he took to look after the parties' creature comforts, contributed significantly to a relaxed atmosphere and a positive task-oriented focus.

First Joint Meeting

The first joint meeting was held July 25 and 26, 1988, with the first evening being devoted to the parties getting to know each other, and the second day to negotiations. The tasks of the first working session consisted of structuring the agenda and discussion of topics of concern. After brief introductions in which the negotiators talked about who they were, who they represented, and why it was important and appropriate for them to be involved in negotiations over the operations of Truman Dam, the mediator briefly reviewed some general behavioral guidelines which he believed would help the parties to have productive discussions. These included: focusing on the issues, not the personalities of the people involved; agreement on the confidentiality of the negotiations; the means of record keeping, and the authority of the parties at the table to negotiate on behalf of their agencies or organizations.

A procedural issue developed as to whether Mike Wolfender, a Corps employee, should sit at the table as a technical support person or negotiator; or should be kept in the background and called upon on an as-needed basis. Wolfender retired to the ante-room while these discussions were held. Atkinson said that he thought it would be helpful to involve a technical person with extensive historical and technical knowledge of the project thus providing continuity of facts. The other parties said that if they had known that this level of staff was needed, they might have brought several people of their own. It was finally

agreed that Wolfender would join the discussions as a technical resource person, but that the Colonel would be the Corps' authorized representative.

Moore then described some of the themes and topics which he had heard raised in individual interviews, and proposed an agenda in which each party had a period of uninterrupted time to elaborate on the themes, identify the issues about which they wanted to talk, and specify the interests which they believed had to be addressed or met in a satisfactory settlement. The parties were asked to address the following question: "What are the important elements which should be considered in establishing an acceptable short and long-term operating plan for the Harry S Truman Dam and Reservoir?" Moore specifically asked the parties not to present positions or solutions to their issues at this time but to focus on educating each other about what was important to talk about and the interests to be addressed.

Most of the morning was spent with each party outlining their concerns. Although there were five discrete parties at the table and thus five individual presentations, the two industry representatives functioned somewhat as a team as did the two state management agency representatives. It should be noted that the "team members" views did not always perfectly coincide, and that the structure of allowing each individual to speak allowed this diversity of views to emerge. It should be noted that later in the negotiations, each party began functioning more as individuals and as cooperative problem solvers than as members of a negotiating team. But in the beginning, each of the parties tried to present a common front with the party most closely allied to them.

In the initial discussions, the Corps started off with a brief description of their mandate to operate the facility, an elaboration of why they wanted to have a cooperative negotiated settlement and an explanation of why it was in the Corps' and the parties' interests to reach a negotiated settlement. Atkinson explained that the negotiated settlement might better meet the needs and interests, would be more predictable than the results of the ongoing fight, and would be significantly less expensive in terms of time and money. He also outlined the Corps authority and mandate to make the final decision and operate the dam. He stressed that if the parties could reach an agreement that was within acceptable parameters, that the Corps could operate the dam according to the terms of the agreement.

The conservation interests went next and were followed by the hydropower interests. The parties identified the following issues and interests: water velocities and potential impacts, maintenance of water elevations and measures to reduce impacts of fluctuations, avoidance of flood impacts (private land, vegetation, wildlife), minimizing bank erosion, protection of fisheries (spawning periods and in relation to pumpback), assuring water safety for recreationists, mutually acceptable data collection procedures, jointly acceptable standards and criteria for evaluating test data and impacts, maximizing return on public investment in the facility, procedures to handle pumpback problems, means to develop predictable project capacity and criteria for increasing generation capacity.

After each presentation, Moore summarized, asked for questions of clarification and provided the presenting party with an opportunity to elaborate on points previously raised. By the end of the morning, all of the parties had identified their most important issues and

outlined key interests to be met. The most noticeable aspects of the morning sessions were that genuine communications had occurred and that each of the parties began to understand the interests of the other parties and the constraints within which each operated. The parties adjourned for lunch which was an opportunity for "in-team bargaining" and casual non-task oriented conversation.

In the afternoon, the mediator shifted the negotiators to a search for general principles or criteria which might structure the terms of the negotiated settlement. He also assisted them to identify elements of the current operational plan which were jointly acceptable and which could be included as part of an operating plan. The negotiators used an agreement-in-principle approach in which they first sought broad levels of agreement, and then increasingly narrowed and defined the terms of settlement. Some of the agreements reached during this first meeting included: Use of all six turbines as required for flood control operations, use of water in the power pool between various levels, protection of stream flow during fish spawning periods, the use of "ramping" or gradual releases to minimize impacts on water velocity and level fluctuations, operations procedures in the event of power emergencies, and some conditions for the use of four generation units on a short-term basis.

Toward the end of the day, the parties began to reach issues about which they were either not authorized to settle, or which they did not wish to resolve at this time. It was agreed that each party would go back to his agency or organization and seek further counsel before initiating negotiations on the remaining topics at the next joint session.

The final stage of the first meeting was an agreement on the next date for negotiations, a very difficult task given the very full schedules of the participants, and an evaluation of the meeting. The next meeting was scheduled for September 23, which would allow enough time for negotiators to consult with their colleagues and constituents.

The verbal evaluations by the participants of the first session were very positive. People felt that they had been heard, their interests were considered, some progress had been made in structuring the general terms of the agreement and that several issues had been addressed and resolved.

Between the first and second meetings, Moore drafted a Memorandum of Understanding which detailed the agreements reached to date and the remaining issues to be addressed. He also contacted each of the parties to assess the progress of the negotiations and to elicit suggestions on the process and topics for the next round of negotiations.

Second Joint Session

The second session was held several weeks later at a Corps owned recreation facility. The meeting was spent refining the work of the previous session. Each of the parties reported back on the deliberations within their organizations and suggested modifications, refinements or clarifications to the agreements which were reached at the previous meeting. Additional data was provided by the State on stream flow requirements during the fish spawning periods, and agreements were finalized on when and how much water needed to be released to assure fish reproduction in the Lake of the Ozarks.

Agreements were also reached on operation of the flood pool above 717 feet, between 717 and 712.5 feet, between 706 and 706.9 feet; and the use of four units of generation from the power pool—704-706 feet.

The key remaining issues at this meeting were the use of flood pool water between 707 and 712.5 feet, the number of units of generation which could be used at these levels, procedures to handle the pumpback problem and ways to collect and evaluate data on potential impacts of increased hydro generation operations.

The key, and most troubling issue at this time, related to the conditions under which additional units could be brought on line and utilized to generate marketable and predictable power. At this time, it appeared that the State would reluctantly accept four units, but no additional ones. Several options to address this impasse were developed by the negotiators, and they agreed to consult with their respective agencies or organizations as to the feasibility or acceptability of these solutions.

The tone at the end of this meeting was quite upbeat. The parties felt that each was bargaining in good faith and that significant progress had been made. While there were significant outstanding issues, the parties strongly believed that they were on the way to a rapid settlement. But this was not to be the case.

Third Joint Session

The third negotiation session was held October 24, 1988 at the same Corps facility and began on a fairly positive note. The discussion focused on continued clarification of components of the Draft Memorandum of Understanding developed by the negotiating group at their meetings of July 26 and September 23.

The parties reached agreements, contingent upon the approval of the final package, on the following items: 1) operation of the flood pool; 2) ramping of releases; 3) operation of the reservoir during recreation months (Memorial Day through Labor Day); 4) operations during fish spawning periods in the spring; and, 5) under conditions defined as power emergencies.

However, the above agreements began to be strained when it was evident that the State was unprepared under any circumstances,to allow five-unit generation from the power pool or the flood pool between 706 and 712.5 feet. The State negotiators strongly stated that they had not been authorized by the Governor to go beyond what had previously been negotiated. They indicated that they had not received any new directives from the Governor that he was willing to accept any operation of more than four units.

The hydropower representatives argued that at a previous meeting between their organizations and the Governor, that the latter had indicated that some five-unit generation was permissible. Colonel Atkinson too, believed that the Governor had indicated that some five-unit generation was possible under conditions to be negotiated.

The impasse on this issue began to damage the cooperative tone of the meeting. The hydropower negotiators intimated that previous agreements were in jeopardy if there could

not be some agreement on five-unit generation, and the State negotiators began to dig in their heels and said that they would not be pushed into an unreasonable settlement. The parties began to revert back to their earlier strained patterns of interaction.

The mediator and the parties became concerned about the slide toward disagreement. Moore made three interventions to reverse the trend. First, he summarized all of the areas of agreement and identified that the parties had made significant progress on other difficult issues. Second, he made a procedural suggestion that all parties take a break, reconsider the proposals on the table and consult with their respective superiors as to whether they had any additional flexibility in their bargaining positions. Third, he reiterated the benefits that all parties would gain from a settlement and the costs of an impasse.

Given that the Governor could not be contacted during the negotiation session, the State representatives agreed to schedule a later meeting with him to clarify their mandate and authority. Colonel Atkinson also agreed to meet with the Governor, appraise him of the progress which had been made to date and determine if there was any additional bargaining flexibility. The hydropower interests also agreed to return to their organizations and explore whether they too, had any additional settlement options. The parties agreed to reconvene if and when it appeared that there was room to move forward on discussions of increased generation.

At the conclusion of this meeting, the participants were frustrated by the lack of progress and closure on significant issues. It was the judgement of the mediator, that all of the parties needed to seriously, and more realistically, re-assess their non-negotiable positions in the light of the progress made to date and procedural options for the settlement of the remaining contested issues. Moore believed that all of the parties were engaged in some posturing at this meeting, which was based upon unrealistic assessments as to the strengths and merits of their cases. It was hoped that a re-examination of the options away from the pressure of face-to-face negotiations, might lead each party to a more flexible position regarding the acceptability of some of the options on the table.

To stimulate and facilitate the post-session assessment process, the mediator prepared an eleven-page "single-text" negotiating document which detailed some of the options under consideration, the arguments in favor of each option, and proposed a structure for possible settlement. The document also identified potential costs to each of the parties of not pursuing the negotiated agreement. This document was sent out to all of the parties several days after their third meeting.

Interim Meetings Between the Parties

Moore was convinced that a settlement was possible. The general framework for agreement was there, there were a significant number of agreements on many of the most contentious issues, and the cost of not settling would be significant if the parties jettisoned the progress which they had made. At this time the cause of the impasse was not clear. Was it mis-communication between the Governor and his staff regarding the degree of flexibility the State had on five-unit generation? Misperception on the part of the hydropower interests or the Corps regarding the limits of the State's flexibility? The wrong time to settle? (It was

the month before elections). Inadequate settlement options? Reluctance to agree to politically unpalatable solutions? An unreasonable intransigence on the part of the hydropower interests to accept a lower level of generation because of potential adverse environmental, socio-economic or recreational impacts?

The mediator hoped that the single text negotiation document would outline enough acceptable options or prime the parties' thinking about solutions, that they would stay engaged with the process and not bolt to another resolution forum, i.e., litigation or a return to the media campaign. As it turned out, the document helped serve this function. The hydropower interests read the single text negotiating document with great interest and began to use it to explore some other options and issues which might be considered as part of a settlement package. Gajan re-wrote the text, added some new issues and options and circulated it among the parties for their consideration and comments. The State followed their suit, added comments and revisions.

Atkinson, too, believed that the mediation process had also created enough momentum, commitment to settlement, positive working relations and "esprit de corps" that the parties would have to come back to the bargaining table and settle. He also believed that the Governor, in a previous meeting with him, had indicated greater flexibility than was being discussed at the bargaining table; and he determined to find out if his perceptions were accurate.

Atkinson set up a meeting with the Governor to discern if the State had any flexibility in its position. At a post-mediation interview with Moore, Atkinson said that he told the Governor that, "We are almost there, but if five-unit operation is out of question, then we aren't any further along than we were the year before." He also raised the issue of costs to all the parties if the deadlock could not be broken. Atkinson asked the Governor to be open to operating additional hydro units because there would probably be a future need and because he believed that adequate procedures for operation could be negotiated which would protect the State's conservation interests. After hearing what Atkinson had to say, the Governor indicated that he would request that his representatives return to the table and consider whether some arrangement could be worked out which would allow for at least some five-unit generation.

Atkinson also talked with O. B. Clark, Chairman of the Board of AECI, and the Administrator of SWP to explore the options which were currently on the table and assessed the degree of flexibility that the hydropower interests had. Clark indicated that the hydropower interest might be willing to forego future requests to move to six-unit generation if they could get a firm commitment on some five-unit generation. Atkinson knew that this might be acceptable to the State since one of the State's concerns was the fear of constant requests on the part of hydropower interests for ever-increasing numbers of generation units. Atkinson thought that if all the parties could agree on a firm number of operating units, limit requests for future units, and develop conditions for some five-unit operation; then an agreement was possible.

The Final Meeting, Reaching Agreement and Ratification

Atkinson decided to convene one final meeting between the negotiators to discuss the options on the table, and alternatives contained in the single text negotiating document developed by Moore and the parties. While he was not positive that the parties would be able to reach agreement, he believed that the significant momentum and substantive progress obtained through Moore's assistance, plus the flexibility indicated in private conversations with the parties, would encourage a settlement. He also decided not to bring back the mediator because he felt that the meeting would either "work, or not work." The mediation had produced the climate and options for settlement. The parties would now have to decide if they wanted to settle. "If they didn't want to settle, the presence or lack of the mediator wouldn't make much difference," said Atkinson.

Atkinson convened the meeting in March 1989 and asked the parties to present their thinking about the conversations and deliberations which had transpired since the last meeting. He referred them to the options developed in the single text negotiation document. Apparently the negotiation tool spurred a lot of thinking because Atkinson said, "We now had more outstanding issues, questions and options than we did with our earlier draft!" (the Memorandum of Understanding which had been considered at the October meeting). As a means of working through the issues, the group used procedures introduced by the mediator at previous meetings. They put all issues on a flipchart, talked through each and clearly identified the ones that they agreed upon. One of the agreements was a three-month window when five hydropower units could be operated. This agreement was the final keystone in the settlement package which could then be recommended by the negotiators to their various agencies and organizations.

The Corps prepared the final settlement document and circulated it to the parties for review and ratification. O. B. Clark approved for AECI, and SWPA subsequently followed suit after making some final revisions. The Governor added some language to the preamble and then ratified the document.

The Corps took the document and met with the Assistant Secretary of the Army for Civil Works, the Corps Director of Civil Works, (who later was the new Chief of Engineers) and staff representatives from the Missouri and Kansas Congressional Delegation. The Corps explained the substantive outcome of the negotiations, why the parties supported the agreement, and the process which was used to arrive at a final settlement.

The district also held a public meeting in Warsaw, Missouri on December 1, 1989, to allow for public comment on the proposed settlement. Ironically, this public meeting was almost two years since the controversial test which led to the initiation of formal mediation and negotiations. Interestingly, only three members of the public attended the meeting to hear about and comment on the proposed procedure for operating the Harry S Truman Dam and Reservoir. The settlement appeared to have made the operations controversy into a non-issue.

The document detailing the proposed operations was sent to the Assistant Secretary of the Army, Mr. Robert Page, and was approved by him on February 28, 1990. Unfortunately,

delays in ratification resulted in the loss of the three-month window of five-unit generation, but the power interests were pleased that they would have secure generation and marketing capacity in the future.

Summary and Final Conclusions

The Truman Dam and Reservoir case illustrates the successful use of mediation to resolve complex issues related to the operation of a U.S. government flood control and hydropower facility. This mediation effort successfully resolved and terminated a long-standing conflict between hydropower interests and the State of Missouri, and enabled the parties to jointly build a settlement which was mutually acceptable and met a significant number of their interests. Mediation was found to be a viable mechanism which assisted the parties to wall-off history and build a working relationship, overcome personality barriers to settlement, identify issues in dispute, clarify interests which needed to be addressed, build agreements in principle, and generate acceptable settlement options.[2]

While some mediators work with parties from the beginning of the dispute to the end—from the identification of the parties, to the convening of the meetings, to the signing of the final written settlement—this case illustrates the use of the mediator as a catalyst. The "catalytic" mediator assists parties to overcome relationship, procedural, and substantive barriers which block productive negotiations, but does not necessarily stay in person with the parties to the conclusion of the negotiations. The mediator enables the parties to develop a successful negotiation process and spirit which they can then use in an unassisted manner to reach agreement on their own.

The Truman Dam and Reservoir mediation also illustrates the "orchestrator" style of mediation, as opposed to the "deal making" process.[3] The orchestrator helps the parties to design their own process and develop the terms for their own settlement. The deal maker builds the settlement for the parties. It is the bias of this mediator that the former is by far the preferable approach if the contending parties can separate the people and personalities from the problem, have some process skills and have a range of viable settlement options to work with. These conditions were met in the Truman Dam case.

The Truman Dam case also illustrates a new form of public involvement in agency decision making. While the Corps had and maintained final decision-making authority over how government facilities were to be operated, it involved concerned parties in decision making by defining acceptable parameters within which the decision had to be made and inviting their involvement in the construction of a jointly acceptable solution. Participation in negotiations enabled the parties to develop a settlement which they all could live with and avoid expensive time delays and litigation.

This case also illustrates the value of a close working relationship between the mediator and the Corps District Engineer. This is especially important when the Corps is in a position of being an "indirect" party or quasi-intermediary in a dispute between competing publics. Atkinson's leadership in initiating the mediation effort, his support of the consensus-building process and energy for pushing the negotiations through to their conclusion were invaluable to settlement of the dispute. Atkinson's behind the scenes work with the parties helped

develop the flexibility that was needed to reach a settlement. Moore designed the process and advised Atkinson in how he could work more effectively with the parties. This case illustrates the value of having a mediator as a coach and educator to the disputants.

The mediator's neutrality and process skills also enabled the parties to establish a successful negotiating relationship and bargaining procedure. The use of relationship-building procedures at the beginning of the process, non-adversarial issue and interest identification techniques, and initiation of creative option generation procedures such as the single-text negotiating document enabled the parties to build both a negotiation process, and settlement which was truly their own.

This case, the first operations dispute which the Corps has referred to mediation, is a good example of how third party process assistance can assist the agency and concerned parties to resolve complex environmental and engineering problems. It is expected that this case will serve as a model for other similar mediation efforts in the future.

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1. *Haas, Richard, Conflicts Unending. New Haven, CT: Yale University Press, 1990.*

2. *Moore, Christopher W., The Mediation Process: Practical Strategies for Resolving Conflict. San Francisco, CA: Jossey Bass, 1986.*

3. *Kolb, Deborah, The Mediators. Cambridge, MA: MIT Press, 1983.*

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This case study analyzes the process and other factors which led to the successful outcome. The article is written from the perspective of the mediator, Christopher Moore, a Partner at cDR Associates in Boulder, Colorado. In preparing this case study the mediator consutled most of the key parties to gain their perceptions and understanding of the events which led to the settlement. However, the mediator bears sole responsiblity for the interpretation of the mediation that is presented here.

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